South Korea Nuclear Chronology

This chronology is no longer being updated. For current developments, please see the South Korea Nuclear Overview.

This annotated chronology is based on the data sources that follow each entry. Public sources often provide conflicting information on classified military programs. In some cases we are unable to resolve these discrepancies, in others we have deliberately refrained from doing so to highlight the potential influence of false or misleading information as it appeared over time. In many cases, we are unable to independently verify claims. Hence in reviewing this chronology, readers should take into account the credibility of the sources employed here.

Inclusion in this chronology does not necessarily indicate that a particular development is of direct or indirect proliferation significance. Some entries provide international or domestic context for technological development and national policymaking. Moreover, some entries may refer to developments with positive consequences for nonproliferation.

2003

15 December 2003
South Korean President Roh Moo Hyun accepts the resignation of Minister of Industry, Commerce and Energy Yun Chin Shik. Roh appoints Lee Hŭi Pŏm, president of Seoul National University of Technology, as the new minister.

12 December 2003
South Korean Minister of Industry, Commerce and Energy Yun Chin Shik announces his intention to resign. Yun says he feels responsible for the government's failed plan to construct a nuclear waste facility in Puan-kun.

11 December 2003
According to the Joongang Ilbo, US intelligence detected signs of vapor from a facility at the Yŏngbyŏn nuclear complex in North Korea four times in the month of December. In addition, a truck was seen traveling to and from a nuclear facility there. US and South Korean officials are currently analyzing the intelligence, but according to a South Korean officials, it is more likely "trial operations" to maintain the facility.

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10 December 2003

South Korean Minister of Commerce, Industry and Energy Yun Chin Shik says the government will seek new applications for a nuclear waste facility. This decision will override the government's original plan to construct a facility on Wi-do, an island within Puan-kun. According to Yun, "when Wi-do was earlier selected as the site for the nuclear waste facility, the opinions of Puan-kun residents were not faithfully reflected." In addition, Yun says some local governments have already expressed interest and willingness to host South Korea's first nuclear waste facility. The South Korean government plans to officially publicize and announce a schedule for new applications by the end of this year.


10 December 2003

President George W. Bush rejects North Korea's offer to freeze its nuclear weapons program if the US agrees to take its name off the list of terrorist sponsoring nations and provides economic and energy aid. In addition, North Korea says it will participate in a second round of six-party talks only if these demands are met. According to President Bush, the goal of the US is not to freeze the program, but rather to "dismantle a nuclear weapons program in a verifiable and irreversible way." South Korean officials say this recent proposal is not a response to the joint proposal written by the US, South Korea and Japan because it has not yet been relayed to North Korea.


9 December 2003

South Korean Vice Minister of Foreign Affairs and Trade Lee Su Hyŏk says if the next round of six-party talks is not held by next week, it will be delayed until early next year. In addition, South Korean officials say the next round of talks will take place after North Korea accepts the proposal offered by the US, Japan and South Korea to resolve the nuclear crisis.


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7 December 2003
South Korean Vice Minister of Foreign Affairs and Trade Lee Su Hyŏk announces that South Korea, the US and Japan have written a joint proposal that will be delivered to North Korea through China. The proposal contains a general set of principles including "coordinated steps" by all parties to resolve the nuclear crisis in which the US, South Korea, China, Japan and Russia will offer a security guarantee in return for North Korea's verifiable dismantlement of its nuclear facilities.

7 December 2003
A South Korean government official says the Korean Peninsula Energy Development Organization (KEDO) will hold talks with North Korea over how to preserve equipment and facilities during the one year suspension of light water reactor construction. The meeting is expected to be held for two days and will be the first contact between KEDO and North Korea since the nuclear crisis erupted in October 2002.

4 December 2003
The US, South Korea and Japan meet behind closed doors to coordinate policies and strategies to resolve North Korea's nuclear crisis. Participants of this informal meeting include South Korean Deputy Foreign Minister Lee Su Hyŏk, US Assistant Secretary of State James Kelly and the Japanese Foreign Ministry's Director General of Asian and Oceanic Affairs Mitoji Yabunaka.

4 December 2003
South Korea's Minister of Unification Chŏng Se Hyŏn urges both the US and North Korea to soften their positions and demands over a solution to North Korea's nuclear problem. In addition, the Minister says there is still the possibility of holding the second round of six-party talks by the end of December. This comment comes after the US recently rejected a Chinese draft proposal that provides North Korea with a security guarantee in exchange for a declaration from Pyongyang that it would abandon its nuclear weapons program.

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1 December 2003
South Korea and Russia agree to pressure North Korea to participate in another round of six-party talks to resolve the nuclear crises. According to the South Korean ambassador to Russia, the goal of both countries is to lay the foundation to "proceed with the six-party talks in a smooth manner."

28 November 2003
South Korea's Ministry of Commerce, Industry and Energy (MOCIE) announces that South Korean firms have a strong chance to participate in the construction of nuclear power plants in Vietnam. Vietnam plans to construct two 1,000MW(e) nuclear power plants with construction set to start in 2007. South Korean firms plan to form a consortium to bid for the $4 billion project.

27 November 2003
According to the Kyoto News Service, the US, South Korea and Japan have drafted an agreement to present to North Korea over its nuclear weapons program at the second round of six-party talks. The draft includes a security agreement from the five countries involved, calls for North Korea to completely abandon its nuclear weapons program, efforts by the five countries to resolve North Korea’s other problems such as its missile development program and the abduction of Japanese citizens, and efforts by all parties to avoid measures to aggravate the situation. According to a South Korean government official, the three countries will fine tune the draft with China’s input.

25 November 2003
South Korea’s Office of Planning for the Light Water Reactor Project in North Korea announces the discovery of a dead South Korean guard at the construction site. The guard's body is found in a pond at the construction site and there are no witnesses to the death. However, South Korean officials believe the guard may have accidentally fallen.

25 November 2003
A spokesman for South Korean President Roh Moo Hyun says the president is willing and ready to discuss the construction of a nuclear waste facility with Puan-kun residents. In addition, the spokesman says that the government will allow residents to make a decision on the construction of the facility and that the government has no plans to go ahead with this project without the approval of residents.

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25 November 2003
The Yŏnggwang-3 nuclear power reactor is shut down due to a malfunction in the power supply system. According to the Ministry of Science and Technology (MOST), there are no radiation leaks outside of the facility. Officials from the Korea Institute of Nuclear Safety visit the facility to investigate the accident.

22 November 2003
Shortly after the Korean Peninsula Energy Development Organization (KEDO) announces it decision to suspend the light water reactor project in North Korea for one year, the South Korean government says it will hold talks with KEDO's executive board members about retaining construction and key facilities at the construction site. According to South Korean government officials, South Korea plans to make efforts to resume the project, but this will probably only be possible if North Korea's nuclear crisis is resolved peacefully through the of six-party talks.

21 November 2003
The Korean Peninsula Energy Development Organization (KEDO) officially announces its decision to suspend the construction of two light water reactors in North Korea. The executive members of KEDO decide to suspend the project for one year beginning 1 December 2003.

19 November 2003
Puan-kun residents protest in front of the kun [county] office against the local government's decision to allow South Korea's first nuclear waste facility to be constructed on Wi-do, an island in Puan-kun. Some of the protestors clash violently with local police while others block a section of the west coast highway.

18 November 2003
South Korea and China hold a meeting to discuss cooperation in the peaceful uses of nuclear energy. The meeting

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concludes with the two sides agreeing to the establishment of a joint nuclear hybrid research center at Chinghua University in early 2004.


13 November 2003
South Korea and Kazakhstan agree to cooperate in the peaceful uses of nuclear energy and the next generation of information and scientific technology.


6 November 2003
North Korea responds to the Korean Peninsula Energy Development Organization’s (KEDO) decision to suspend the construction of two light water reactors by threatening to prevent KEDO from taking "equipment, facilities, materials and technical documents" out of the country. According to the South Korean government, this statement is another tactic to gain negotiating leverage at the next round of six-party talks.


5 November 2003
The Korean Peninsula Energy Development Organization (KEDO) decides to temporarily suspend the construction of two light water reactors in North Korea for one year. The final fate of the project is expected to be made on 21 November during KEDO’s executive board meeting. According to South Korea's Minister of Foreign Affairs and Trade Yun Yŏng Kwan, the decision to temporarily suspend the project is made with the intention that it will eventually restart.


3-4 November 2003
An official KEDO executive board meeting is held in New York. In the meeting, the executive board member countries are expected to finalize a one-year suspension of the light water reactor project.


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2-4 November 2003
The South Korean government hosts a symposium on the safety and development of nuclear waste facilities. Experts from South Korea and foreign countries attend the symposium to discuss the safety of nuclear waste facilities, the development of neighboring areas, the impact of waste facilities on the local economy, and the health risks of radiation. The symposium also includes a discussion session between nuclear experts and residents of Puan-kun, which is where South Korea will construct its first nuclear waste facility.

Early November 2003
Korea Hydro and Nuclear Power Company (KHNP) officials say the firm has scheduled upgrades for nearly all of South Korea’s nuclear power plants over the next five years. According to KHNP officials, upgrades include replacing the steam generators at Ulchin-1 and -2 nuclear power reactors by approximately 2009, and the pressure and feeder tubes in Wŏlsŏng-1. KHNP also plans to upgrade safety programs at Kori-4, Yŏnggwang-2 and Ulchin-1 nuclear power reactors by improving the instrumentation and control systems.

24 October 2003
South Korean President Roh Moo Hyun says the US and other countries are willing to offer North Korea a security guarantee if Pyongyang first makes progress towards dismantling its nuclear weapons program. Roh explains that US President George W. Bush said that the US is willing to provide a multilateral security guarantee to North Korea.

23 October 2003
South Korea and Russia agree to cooperate in the field of commercial uses of low and high powered nuclear reactors, sea water desalination using nuclear energy, and the use of nuclear technology in exploring space for peaceful purposes. In addition, the two countries agree to jointly conduct research on third generation nuclear reactors and discuss supplying South Korea with Russian uranium materials.

21 October 2003
South Korean President Roh Moo Hyun and Russian President Vladimir Putin agree to jointly pressure North Korea to participate in another round of six-party talks to resolve the nuclear issue. In addition, the two sides reconfirm their commitments to resolving North Korea’s nuclear issue through peaceful means and for the denuclearization of the Korean peninsula.

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17 October 2003
South Korean government officials call North Korea's comment on testing nuclear weapons a "negotiation ploy" to gain more leverage at the next round of six-party talks. These comments come after North Korea issues a statement through its Ministry of Foreign Affairs that it would "open its nuclear deterrent to the public as a physical force."

14-17 October 2003
The 12th inter-Korean ministerial talks are held in Pyongyang. The two sides fail to make progress on the nuclear issue with North Korea standing firm on its position that the US is to blame for raising tensions. South Korea attempts to pressure the North to restart negotiations through another round of six-party talks, but North Korea declines to make such a statement. The two Koreas discuss the possibility of continuing family reunions, the construction of the Kaesong Industrial Park, and agree to reconvene in February 2004 for the 13th round of inter-Korean talks.

10 October 2003
Ulcin-4 nuclear power reactor is shut down due to a malfunction in the generation system that caused the reactor to automatically cease operations. According to Ulchin nuclear power officials, there are no reports of serious damage and the reactor should resume operations shortly.

9 October 2003
South Korean Minister of Unification Chông Se Hyôn says that the second round of six-party talks will probably be delayed until late November or early December. According to Chông, the delay is due to the sudden
announcement from North Korea last week that Pyongyang completed reprocessing 8,000 fuel rods.

2 October 2003
According to an unnamed South Korean government official, North Korea's reprocessing claim is probably untrue and is only a tactic to gain negotiating leverage. In addition, the government official says if North Korea did in fact finish reprocessing, there would be scientific indications that South Korea has not yet discovered.

2 October 2003
The South Korean government expresses regret over North Korea's recent claim that it has completed reprocessing its 8,000 fuel rods. According to the spokesman for the Ministry of Foreign Affairs and Trade, this announcement "can not only impede a peaceful resolution of the North Korean nuclear issue and inter-Korean relations, but can also impair the dialogue atmosphere secured through six-party talks." However, according to a government official, South Korea's National Security Council has not verified the validity of North Korea's reprocessing claim.

October 2003
South Korea's envoy to South Africa Han Hwa Kil tells Namibian Foreign Minister, Hidipo Hamutenya that South Korea is interested in purchasing uranium ore to power Seoul's nuclear power reactors. Han assures Hamutenya that South Korea will not sell the uranium to North Korea.

29-30 September 2003
The US, South Korea and Japan hold informal talks to coordinate their policies on North Korea for the next round of six-party talks. Officials from the three countries discuss a "comprehensive and phase-in" proposal to present to North Korea to end the nuclear crisis.

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Late September 2003
According to a Nuclear Fuel report, South Korean officials say they hope the new bilateral agreement with the US signed on 15 September 2003 on the research and development of proliferation resistant fuel cycle technologies will advance the possibilities of including South Korea's 150-MW(e) Korea Advanced Liquid Metal Reactor (KALIMER) project in the US Department of Energy's Generation IV International Forum advanced reactor program.

26 September 2003
South Korean Minister of Foreign Affairs and Trade Yun Yŏng Kwan calls on North Korea to verifiably abandon its nuclear weapons program at a UN General Assembly meeting. Yun says the nuclear crisis must be resolved peacefully and through negotiations, and once North Korea abandons its program, South Korea will take steps towards increasing inter-Korean economic cooperation.

25 September 2003
South Korean Minister of Foreign Affairs and Trade Yun Yŏng Kwan tells US Secretary of State Colin Powell that it is important for the parties involved in the six-party talks to show a "flexible" attitude towards resolving North Korea's nuclear problem. Yun makes this comment to Powell in the sidelines of a UN General Assembly meeting.

24 September 2003
South Korean lawmakers accuse the Korea Hydro and Nuclear Power Company (KHNP) of covering up documents disclosing the disadvantages of constructing a nuclear waste facility on Wi-do. The accusations come during the National Assembly's annual hearing on KHNP that focus on the selection process of the nuclear waste facility. According to the lawmakers, KHNP requested the Korea Advanced Institute of Science and Technology (KAIST) and the Samil Accounting Corporation conduct a joint study on the economic efficiency and safety of constructing a waste facility on Wi-do. The study results showed that it would cost an additional $564 million to construct a facility in the design proposed by the government and KHNP on the island. KHNP officials say they did not make this report public as it contained too many negative points for constructing a facility there.

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22 September 2003
The Ministry of Foreign Affairs and Trade announces that South Korea has been newly elected to the International Atomic Energy Agency’s board of governors. South Korean Ambassador to Austria Cho Chang Bŏm will serve on the board for the next two years.

17 September 2003
Minister of Commerce, Industry and Energy Yun Chin Shik announces that the South Korean government is considering the construction of a presidential villa on Wi-do to show support for the construction of the first nuclear waste facility on the island. According to Yun, the Korea Hydro and Nuclear Power Company is expected to complete construction of the villa by 2008.

16 September 2003
South Korea’s Ministry of Foreign Affairs and Trade announces that South Korea, Japan and the US will hold informal talks to discuss their policies towards North Korea in Tokyo in 29-30 September. Deputy Foreign Minister Lee Su Hyŏk says the three sides will evaluate the outcome of the first round of six-party talks and discuss ways to coordinate policies towards North Korea for the next round of talks.

15 September 2003
South Korea and the US sign a bilateral agreement on the research and development of advanced proliferation resistant fuel cycle technologies for the next five years. [Note: Nuclear Fuel reports that South Korean say in late September that South Korea is mainly interested in pyroprocessing technology. Under the new bilateral agreement, the Korea Atomic Energy Research Institute (KAERI) agrees not to process nuclear material; the handling of fissile material can only be done only in the US.]

15 September 2003
A South Korean government official says South Korean and Japanese officials will meet this week to discuss the fate of KEDO’s light water reactor construction for North Korea. According to the official, South Korea and Japan will discuss the possibility of suspending the project for one year. In addition, the official says both sides do not want to completely abandon the project. [Note: According to a Yonhap News Agency report, an unidentified South Korean government official says key members of KEDO will meet in October 2003 to discuss the fate of the

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15 September 2003
Korea Hydro and Nuclear Power Company (KHNP) announce that Kori-1 and Wolsong-2 nuclear power reactors have resumed operations. According to KHNP, Kori-2, -3 and -4 will resume operations after the Ministry of Science and Technology issues approval.

14 September 2003
Korea Hydro and Nuclear Power Company officials announce that five nuclear power plants, Kori-1 through -4 and Wolsong-2 are expected to resume operations on 15 September. The five nuclear power plants suspended operations on 13 September due to typhoon "Maemi" that swept through South Korea.

8 September 2003
Kim Chong Kyu, the chief of Puan-kun, is assaulted by local residents who oppose the local government's decision to host South Korea's first nuclear waste facility. The incident occurs during a meeting between Kim and local residents in which residents call on Kim to resign for requesting a nuclear waste facility to be constructed in Puan-kun.

4 September 2003
According to Minister of Unification Chŏng Se Hyŏn, the South Korean government hopes the light water construction project in North Korea would continue. Chŏng says South Korea has already invested over $930 million and canceling the project would result in a loss of $1.4 billion. In addition, Chŏng says Japan agrees that the light water reactor project should continue. Chŏng speculates that the fate of the project would depend on the outcome of the next round of the six-party talks. The US has expressed reservations about the rational for continuing the project since North Korea has admitted to possessing a clandestine nuclear weapons development program. However, according to Chŏng the US has not made any public statements or official decisions on this project.
—"South Korea Opposed to Scrapping Reactor Project in North Korea," Agence France Presse, 4 September 2003,
4 September 2003
South Korean Minister of Unification Chŏng Se Hyŏn says North Korea’s recent threats about increasing its "nuclear deterrent force" are nothing more than "pressure tactics" and should not be taken literally. According to Chŏng, North Korea will participate in another round of talks because it wants the opportunity to present its views and position on the nuclear issue. In addition, Chŏng says North Korea’s recent remarks are another way to stress its position and avoid any misinterpretations of its true intentions by the other parties.

3 September 2003
US Secretary of State Colin Powell says the US has no intentions of attacking North Korea and hopes to find a diplomatic solution to the nuclear crisis. In addition, Powell insists that North Korea made provocative statements about its intentions to test a nuclear bomb during the six-party talks despite denials from Russian and Chinese officials. Powell also states that the US will not be threatened or pressured to make concessions by North Korea’s provocative statements about its nuclear weapons program. Powell makes these comments after meeting for an hour with South Korea’s Foreign Minister. During the meeting the two countries review the six-party talks and discuss future steps. The US and South Korea agree to work closely together to resolve the nuclear issue peacefully through further six-party talks.

3 September 2003
South Korean President Roh Moo Hyun expresses appreciation and requests further help from China in resolving the North Korean nuclear crisis. Roh makes these remarks during a meeting with Chinese officials in Seoul. Chinese officials stress the importance of continuing the six-party talks and ask South Korea to play an active role.

3 September 2003
Delegates of the Association of Asian Parliaments for Peace (AAPP) adopt a document calling for the peaceful resolution of the North Korean nuclear crisis through continued six-nation talks. The AAPP adopts this during a three-day meeting in Manila.

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3 September 2003
According to the Chosun Shinbo, a pro-North Korean newspaper in Japan, North Korea will most likely make a final decision to further develop nuclear weapons since its confirmation that the US has not dropped its hostile policy. In addition, the report states that North Korea is likely to announce itself as a nuclear power and test nuclear weapons.

2 September 2003
North Korea accuses South Korean warships of violating the Northern Limit Line (NLL) in the Yellow Sea. According to North Korea's Central Broadcasting Station, South Korean warships crossed the NLL five times between 12:05AM to 10 AM. However, the South Korean Joint Chief's of Staff denies these allegations.

2 September 2003
Lee Sun Chin, director of the Office of Policy Planning and International Organizations in the South Korean Ministry of Foreign Affairs and Trade, says South Korea will join about 100 other countries in calling for an early ratification of the Comprehensive Test Ban Treaty (CTBT). Lee will attend a three-day conference in Vienna to discuss ways to speed up the ratification process of the CTBT.

1 September 2003
South Korea’s Ministry of National Defense announces that the South Korean government will take control of the nuclear weapons detection facility that has been under the jurisdiction of US Forces Korea. The monitoring facility was built by the US in the 1970’s to detect nuclear tests in North Korea, China and the Soviet Union. According to the Defense Ministry, discussions are being held on the procedures for the transfer of control over the monitoring station.

1 September 2003
South Korean National Security Advisor Ra Chong Il says the parties involved in the recent six-party talks in Beijing will soon begin another round of negotiations on North Korea’s nuclear weapons program. In addition, Ra notes...
that the first round of talks was useful and that the parties must now narrow down their different positions.

1 September 2003
South Korean Vice Minister of Foreign Affairs and Trade Lee Su Hyŏk says in an interview that North Korea will agree to a second round of nuclear talks despite their recent threats. According to Lee, North Korea would have "expressed it a different way" if they were serious about boycotting all forms of talks on the nuclear issue. In addition, Lee says that during the six-party talks, all countries except North Korea agreed to hold the second round in late October or in November. South Korea's Ministry of Foreign Affairs and Trade also submits a report to the National Assembly about the US position in the six-party talks. According to the report, the US offered to consider North Korea's security concerns in the next round of talks, and presented an outline of a program for North Korea to dismantle its nuclear weapons program in return for US countermeasures.

1 September 2003
South Korea and Russia both call for participants in the six-party talks to engage in "active diplomacy" to resolve the misunderstandings and varying positions on the North Korean nuclear crisis. On the other hand, China's Vice Foreign Minister Wang Yi blames US policy towards North Korea as the biggest obstacle to resolving the nuclear issue. Wang suggests the US clarify its position and provide North Korea with a verbal security guarantee during the next round of talks. In addition, Wang says North Korea wants to resolve the crisis peacefully and to continue with the talks.

31 August 2003
South Korean Minister of Foreign Affairs and Trade Yun Yŏng Kwan tells North Korea not to take any steps to aggravate the current situation regarding its nuclear weapons program. Yun warns North Korea that any provocative action will lead to further isolation and distrust among the members of the six-party talks.

30 August 2003
South Korean government officials express satisfaction over the recent six-party talks in Beijing on North Korea's nuclear weapons program. According to National Security Advisor Ra Chong Il, North Korea's announcement that it has no intentions of developing nuclear weapons and desires a nuclear free Korean peninsula is "remarkable progress." In addition, various government officials are hopeful that a second round of talks will commence soon.

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although an exact date was not determined during the first round of talks.

30 August 2003
The US, South Korea and Japan agree to halt the construction of two light water reactors for North Korea under the 1994 Agreed Framework. Reports say the project will be frozen as early as mid September when the Korean Peninsula Energy Development Organization (KEDO) convenes for a board meeting, and will most likely suspend construction for one year. The board is expected to completely freeze the project if North Korea continues to develop nuclear weapons.

29 August 2003
The South Korean Ministry of Unification denies Japanese reports that the Korean Peninsula Energy Development (KEDO) has decided to suspend the construction of two light water reactors for one year. According to a Ministry of Unification press release, KEDO members held a meeting, but did not make any decision on the fate of the project or the date of the next board meeting.

29 August 2003
South Korea’s Minister of Unification says the future of the light water reactor project for North Korea depends on the outcome of the six-party talks in Beijing. According to the Minister, if the talks are successful in addressing North Korea’s nuclear weapons program, the project, which is already delayed, "would pick up its pace." [Note: The Minister of Unification makes this comment prior to the conclusion of the six-party talks in Beijing.]

27 August 2003
The six-party talks to resolve the North Korean nuclear crisis open in Beijing. Representatives from each country express the willingness to cooperate in resolving the nuclear issue. North Korea reiterates its demands for a nonaggression treaty, blaming this need on the US’s hostile policy. In addition, the North Korean delegate, Deputy Foreign Minister Kim Yong II, says North Korea will not allow nuclear inspections and will not abandon its nuclear capabilities unless the US changes its hard line policies. According to the Joongang Ilbo, Kim presents a four stage plan to resolve the nuclear crisis. The first step involves North Korea announcing its intention to abandon its nuclear weapons program after the US resumes heavy oil shipments. In the second stage, North Korea will allow for inspections of its nuclear facilities after the US signs a nonaggression treaty. The third step calls for the settlement of issues related to North Korea's missile development after North Korea normalizes relations with the

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US and Japan. In the final stage, North Korea will abandon its nuclear weapons program after the light water reactors are completed. During his keynote speech, Assistant Secretary of State for East Asian and Pacific Affairs James Kelly calls for the immediate and verifiable dismantlement of North Korea's nuclear weapons program. Kelly adds that the US will address North Korea's security concerns and provide economic aid if North Korea takes the first step towards nuclear disarmament. In addition, Kelly says that the US has no intentions of invading or creating a regime change in North Korea. South Korea presents a plan to provide economic and humanitarian aid and increase economic cooperation if North Korea agrees to resolve the nuclear problem. Japan offers to resume talks for the normalization of relations between the two countries, and economic aid if North Korea resolves the nuclear, missile, and abducted Japanese issues. Both Russia and China call for the US and North Korea to address each other's concerns and stresses the importance of the international nonproliferation regime. After each country presents its position on the nuclear issue, North Korea and the US hold informal talks for thirty minutes. The content of their discussion is not made public. North and South Korean officials also meet unofficially for 30 minutes in the evening. According to the South Korean foreign ministry, North Korea did not fully understand parts of the US keynote speech and requested assistance from South Korea officials. The two Koreas agree that the unofficial bilateral talks are useful and decide to hold additional talks if necessary. At the conclusion of the talks, the parties fail to adopt a joint resolution and to designate a date for the second round of talks. [NOTE: According to an ITAR-TASS report, North Korea's Deputy Foreign Minister Kim Yong Il announces that North Korea does not possess nuclear weapons but threatens to "create a more powerful deterrence potential" if the US does not agree to a nonaggression treaty. However, according to a Korea Times report, South Korea's delegate to the talks Wi Sung Rac says North Korea made no comments referring to its possession of nuclear weapons.]


26 August 2003

According to a Washington Times report, US officials say the Korean Peninsula Energy Development Organization (KEDO) is ready to completely abandon the construction of two light water reactors for North Korea. The report cites an anonymous US source that says the Bush administration wants to completely end the project, while South Korea and Japan want a one-year suspension of work. The report further states that KEDO members are expected to make an official decision to suspend construction during its board meeting in October.

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21 August 2003
During his first public appearance since leaving office, former South Korean President Kim Dae Jung calls on North Korea to abandon its nuclear weapons program, and for the US to reciprocate by providing a security guarantee. Kim stresses how increased tensions can lead to another war on the Korean Peninsula and says many Koreans are concerned about the hard-line position of some US officials towards North Korea.

20 August 2003
South Korean Minister of Foreign Affairs and Trade Yun Yong Kwan reconfirms that the US will hold informal, bilateral talks with North Korea during the upcoming six-party talks. In addition, Yun says that the six-party talks are just the first step in what will be a long process to resolve North Korea’s nuclear issues, and warns not to expect an immediate solution.

18 August 2003
American and South Korean troops begin the annual twelve-day Ulchi Focus Lens exercises that focus on computerized war simulations with North Korea. North Korea criticizes the exercises, calling it a "pre-emptive attack" against their country.

18 August 2003
North Korean fishing boats cross about 200 meters into waters belonging to South Korea. The South Korean navy responds by firing five warning shots and the North Korean ship returns to its territory within five minutes. No further hostile exchanges between the two countries occur and South Korea officials say they will study whether this violation was intentional.

18 August 2003
Continental Electronics, a subsidiary of the US firm Integrated Defense Technologies, Inc., announces it has won a $2.6 million contract to build a specialized radio frequency amplifier for the Korea Atomic Energy Research Institute (KAERI). The amplifier will be used to generate power for the Korea Superconducting Tokamak Advanced

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Research Ion Cyclotron Heating System (KSTAR ICH).

17 August 2003
Puan-kun residents stage a protest along a major highway against the South Korean government's decision to build the country's first nuclear waste facility on Wi-do, an islet in Puan-kun. According to residents, the local government (kun) magistrate did not receive their consent prior to submitting its application to become a nuclear waste site.
—Kim Kwang O, "Puanjumin Ddo Kosokdo Ch'aryangshiwi... 100 Yŏdae Sŏhae-Honamsŏnsŏ Sŏhaeng'unjŏn,"

16 August 2003
South Korean President Roh Moo Hyun says South Korea and its neighbors will provide North Korea with "massive economic assistance" if it agrees to abandon its nuclear weapons program. During a speech marking the 58th anniversary of Korea's liberation from Japanese colonial rule, Roh adds that South Korea will increase economic cooperation through joint projects and that North Korea should not miss this opportunity.

15 August 2003
The Ministry of Science and Technology (MOST) announces it will seek greater cooperation with the US and China in atomic energy during side meetings with both countries at the International Atomic Energy Agency's annual conference in September. MOST hopes to discuss cooperation in hydrogen production as a next generation energy source, and atomic energy construction projects with China. MOST officials also hope to gain US support for South Korea's participation in the International Thermonuclear Experimental Reactor project.

14 August 2003
South Korea's Deputy Foreign Minister Lee Su Hyŏk announces that South Korea, Japan and the US will approach the upcoming six-party talks with separate offers to North Korea rather than a joint offer. However, Lee points out that the three countries have agreed on the goal and overall strategy of the upcoming talks. In addition, Lee says that the US will not provide North Korea with a legally binding non-aggression treaty because the nuclear crisis involves other countries in the region,

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14 August 2003
The Chinese and South Korean governments officially confirm that the six-party talks on the North Korean nuclear crisis will be held in Beijing 27-29 August. The participants will include North and South Korea, China, the US, Japan and Russia.

24 July 2003
The Ministry of Commerce, Industry and Energy officially announces Wi-do in Puan-kun as the site for South Korea's first nuclear waste facility. The construction of the facility is expected to begin in October 2006.

23 July 2003
The Ministry of Commerce, Industry and Energy postpones its decision to announce Wi-do as South Korea's first nuclear waste site due to protests by local residents, and environmentalists. However, government officials still hope to designate the island as a nuclear waste site by the end of the month.

22 July 2003
Residents of Puan-kun and environmentalists protest the construction of a nuclear waste facility. Puan-kun is the only local government to apply for a permit to construct a nuclear waste facility.

21 July 2003
South Korean President, Roh Moo Hyun rejects recent allegations that North Korea secretly built another plutonium processing facility. The allegations were reported in a New York Times article that cited American and Asian sources with access to recent intelligence on the possibility of North Korea having another facility.

Related content is available on the website for the Nuclear Threat Initiative, www.nti.org.
21 July 2003
South Korea and the US announce they will hold an annual combined military drill as a rehearsal for a northern invasion on 18-29 August.

21 July 2003
South Korea and Romania sign a memorandum of understanding (MOU) on strengthening bilateral cooperation in an ongoing feasibility study on Romania’s Cernavoda Nuclear Power Plant III, and to allow South Korean companies to participate in its construction. The construction of the Cernavoda III was suspended in 1991 due to financial problems, but it is expected to resume and be completed by 2009. In addition, the MOU calls for South Korea to provide construction and technology consulting and manpower training for the Cernavoda Nuclear Power Plants I and II.

21 July 2003
Romania’s Ministry of Education, Research and Youth issues a press release about its plan to visit South Korea at the invitation of the Korea Hydro and Nuclear Power Company (KHNP) on 19-27 July. The purpose of the visit is to strengthen South Korean and Romanian cooperation in the field of nuclear power. According to the press release, the two countries will sign a cooperation agreement on the peaceful uses of nuclear energy that will allow South Korean companies to invest in nuclear projects in Romania.

20 July 2003
The South Korean government says it cannot confirm a New York Times article claiming North Korea has built a second plutonium processing facility. According to South Korean sources, the US and South Korea have never discussed these facilities during official talks. In addition, the Ministry of Foreign Affairs and Trade states that the article contains unverified information and will not likely affect the ongoing efforts to end the nuclear crisis through peaceful dialogue.

18 July 2003
The Ministry of National Defense says North Korea has operationally deployed an additional Nodong missile battalion. Furthermore, the ministry states that North Korea has moved its 170 and 240 millimeter long-range guns closer to the Demilitarized Zone, and increased its supply of small submarines and tanks.
—Yu Yong Won, "Puk, Nodongmisail 1 Kaedaedae Chunggang/Sajonggori 1300km... Ilbon Chonnyok Wihyŏp,"

16 July 2003
Puan-kun residents and officials threaten to withdrawal their bid to house a nuclear waste facility if the Seoul Administrative Court does not repeal its decision to halt a tideland reclamation project in the region. The 12-year project is 80 percent completed and cost approximately 1.5 trillion won. Local residents and officials have already brought the case to an appellate court that will make a final decision in 2 weeks.

15 July 2003
The Ministry of Commerce, Industry and Energy (MOCIE) announces that Puan-kun is the only local government to submit an application for the construction of a nuclear waste site. The kun government selected Wi-do, the largest island in the area with a population of 1,200. MOCIE will conduct geological tests over the next year and if the area is deemed appropriate for a nuclear waste facility, construction will begin in 2005. If the government decides to build a nuclear waste facility on Wi-do, the island will receive $500 million as compensation for possible dangers, two new golf practice ranges, and the construction of an additional campus of the state-run Chŏnbuk National University. According to Puan-kun officials, about 90 percent of the local residents approved the nuclear waste site facility.

11 July 2003
South Korean Foreign Minister Yun Yong Kwan, referring to North Korea's refusal to participate in multilateral talks on resolving the current nuclear standoff, tells that National Assembly that "if the North continues to refuse to abandon its nuclear program and does not agree to negotiations, it will affect the way the (South Korean) government pursues the 'peace and prosperity policy' or the contents of the policy itself."

10-12 July 2003
Representatives of North and South Korea meet in Seoul for the eleventh Inter-Korean Ministerial Meeting. The North and South Korean delegations are headed by Kim Ryŏng Sŏng and Chŏng Se Hyŏn respectively. In his opening speech, Kim blames the United States for the current nuclear standoff and says that North Korea is prepared for both dialogue and war. The South Korean delegation urges North Korea to accept a multilateral forum for discussing the issue with the United States, but the North Korean delegation remains recalcitrant, insisting that bilateral US-North Korean talks are the only way of resolving the standoff and thus must precede any

**Related content is available on the website for the Nuclear Threat Initiative, www.nti.org.**
multilateral talks.

10 July 2003
The Ministry of Commerce, Industry and Energy (MOCIE) says that South Korean export companies have been indifferent to the "Catch All" system enforced at the beginning of the year. The Catch All system bans the export of specific types of biochemical, semiconductor and machine tool products that can be used to manufacture weapons of mass destruction. Under the system, South Korean export companies are to request approval from MOCIE if there are suspicions that the end users are developing weapons of mass destruction. According to MOCIE there have been massive exports of Korean chemicals, semiconductors and machinery, yet they have not received a single request for approval. MOCIE plans to improve the effectiveness of the system by establishing a strategic material control center and a strategic material management information system. In addition, the Ministry provided information about the Catch All system to 50 of South Korea’s largest export companies on 8 July 2003.

9 July 2003
During a closed door meeting with the National Assembly’s Intelligence Committee, the director announces that North Korea conducted 70 high explosive tests linked to nuclear weapons development in Yongdŏk-dong, Kusŏng, North P’yŏn’an Province, from 1997 to September 2002. Members of the Grand National Party (GNP) question the government’s decision to move ahead with the Sunshine Policy knowing that North Korea was developing nuclear weapons. Members of the GNP criticize the former Kim Dae Jung administration and call the recent high explosive tests, “clear evidence that Seoul’s financial assistance to Pyongyang is directly linked to its development of nuclear arms.”

6 July 2003
A South Korean military official’s report about North Korea’s nuclear weapons program using enriched uranium is published in a Joint Chiefs of Staff (JSA) magazine. According to the official, North Korea may have recruited scientists to develop a uranium based nuclear weapons after its plutonium based program was suspended under the 1994 Agreed Framework. In addition, the official claims that North Korea may be developing a gun type rather than an implosion type weapons with technical assistance from Pakistan.

Related content is available on the website for the Nuclear Threat Initiative, www.nti.org.

2-3 July 2003

Representatives from the United States, Japan and South Korea meet in Washington to discuss how to diplomatically resolve the standoff over North Korea’s nuclear weapons program. All three delegations agree to call on North Korea to resolve the nuclear standoff through five-party talks that would include representatives from the United States and North Korea as well as from China, Japan and South Korea. According to sources close to the talks, the three sides agree to discuss suspending the KEDO light water reactor project if negotiations with North Korea do not produce any results by the end of August. [Note 1: US officials reportedly want to make a decision on the suspension or cancellation of the KEDO project before Congress begins debate in early September on the budget for fiscal year 2004; Note 2: In his telephone call to Russian President Vladimir Putin on 2 July US President George W. Bush reportedly proposed six-way talks with the participation of Russia. However, it is not clear whether or not the option of six-party talks were discussed at the July 2-3 meeting among the three countries.]


2 July 2003

The South Korean government presents a three-stage road map to solve the North Korean nuclear crisis that will be proposed to the US and Japan during minister level talks on 3 July 2003. The road map's first stage calls for North Korea to abandon its nuclear weapons program and return to the Nuclear Nonproliferation Treaty in exchange for a certain level of security guarantee from the US. The second stage entails the abandonment of North Korea's clandestine uranium enrichment program, and the nuclear facilities in Yŏngbyŏn in exchange for continued heavy oil shipments from the US. The final stage involves North Korea completely renouncing all nuclear programs in exchange for a nonaggression treaty with the US and guaranteed economic support.


Related content is available on the website for the Nuclear Threat Initiative, www.nti.org.
2 July 2003
The project members of the International Thermonuclear Experimental Research Reactor (ITER) officially accept South Korea’s request for participation in the project.

1 July 2003
A South Korean government official says the government cannot confirm a New York Times report that the CIA allegedly detected an additional test site where North Korea is developing small nuclear warheads. The Ministry of Foreign Affairs and Trade also decline to confirm the report.

Late June 2003
Charles Kartman, executive director of the Korean Peninsula Energy Development Organization (KEDO), travels to Japan and South Korea to discuss the future of KEDO. On 27 June, Kartman meets with Japanese Foreign Minister Yoriko Kawaguchi and Katsunari Suzuki, the Japanese official in charge of KEDO issues. Kawaguchi reportedly warns Kartman that suspension of the KEDO project at this time could seriously hinder the proposed upcoming multilateral talks. On 30 June, Kartman meets with South Korean Foreign Minister Yun Yŏng Kwan and warns that the future of KEDO depends on the amount of progress made in talks with North Korea regarding its nuclear weapons program. [Note: During a meeting of the Trilateral Coordination and Oversight Group held in Hawaii from 12 to 13 June, the United States representative suggested abandoning the KEDO project in August if no progress had been made in urging North Korea to abandon its nuclear weapons program.]

26 June 2003
The Ministry of Commerce, Industry and Energy (MOCIE) says that a site for a nuclear waste facility will be chosen according to votes of residents by the end of July 2003. The Ministry will accept voluntary applications until 15 July 2003. According to the Ministry, areas where more than five percent of residents approve of a waste site will be asked to hold another vote at the end of August, and areas where 50 percent or more of the residents approve will automatically be considered as a possible site.

23 June 2003
A South Korean government official says Seoul wants to continue the construction of the two light water reactors for North Korea despite its nuclear weapons program. According to the official, KEDO members are discussing the

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20 June 2003
The Ministry of Science and Technology (MOST) says that the Vice Minister will discuss with the US ways to cooperate in science and technology during a seven day meeting in early August 2003. The Vice Minister is expected to discuss South Korea’s participation in the International Thermonuclear Experimental Reactor project (ITER), nuclear hydrogen production, robotics, and space development technology.

14 June 2003
The Ministry of Foreign Affairs and Trade issues a press release stating that the talks with the US and Japan over North Korea's illegal activities is not connected to the North Korean nuclear issue. According to the Ministry, South Korea did not discuss ways to impose sanctions against North Korea.

13 June 2003
According to diplomatic sources, the US, Japan and South Korea are considering delaying orders for major parts needed to construct two light water reactors for North Korea. However, the Korean Peninsula Energy Development Organization (KEDO) will continue to work on the peripheral structures that will house the reactors. In addition, the US and Japan may consider completely abandoning the KEDO project.

12-13 June 2003
Representatives from the United Stated, Japan and South Korea meet in Hawaii for a meeting of the Trilateral Coordination and Oversight Group aimed at coordinating policies on North Korea. In a joint statement issued at the conclusion of the talks, the delegations state that while North Korea's nuclear weapons program will not be tolerated, the conflict should be resolved peacefully and diplomatically through five-party talks that include Japan, South Korea and China. At the talks, the US delegation reportedly suggests halting the project to build two light water nuclear reactors in August and beginning talks to dissolve KEDO, the consortium in charge of the light water reactor project.

12 June 2003
The Ministry of Science and Technology (MOST) announces it will finalize an "atomic energy technology map" by April 2004 that describes atomic energy related technologies to be developed by South Korea. A council comprised of both the atomic and non-atomic energy sectors has recently been formed to launch the projects. The projects include technologies for clean energy supplies, radio therapeutics, radiobiology, high-end industrial technologies that are directly linked to atomic energy, core technologies whose intellectual property will be shared, and technological methods to help the public understand nuclear fusion and atomic energy.

11 June 2003
The South Korean government announces plans to increase defense spending 28.3% from the 2003 fiscal year budget. The 2004 budget is $18.6 billion and includes the acquisition of new equipment such as missiles, surveillance planes, a military satellite, an Aegis warship and the possibility of the US Patriot missile. The government decides to increase defense spending to counter the growing North Korean threat.

8 June 2003
The South Korean government says it has come up with a fund of more than 2 trillion won to develop a site for a nuclear waste facility. This fund will cover the cost to construct the waste facilities, the relocation of the head office of the Korea Hydro and Nuclear Power Company to the region that will house the facility, and an industrial and residential complex in the area.

6 June 2003
Japan’s Minister of Science and Technology says he has received a notice from South Korea that it is interested in joining the International Thermonuclear Experimental Reactor Project (ITER).

5 June 2003
Prime Minister Ko Kŏn tells the National Assembly that South Korea has no intention to develop nuclear weapons to counter North Korea's nuclear threat. The Prime Minister's statement comes after Representative Song Sŏk Ch'an of the Millennium Democratic Party states that South Korea should possess nuclear weapons to secure...
peace on the Korean Peninsula.

4-5 June 2003
Five senior executives of the Korea Electric Power Corporation (KEPCO) submit their resignations. According to the Ministry of Commerce, Industry and Energy, the resignations are related to a recent bribery case in which 10 KEPCO officials received bribes from suppliers. In addition, the president of the Korea Hydro and Nuclear Power Company submits his resignation due to personal reasons.

3 June 2003
Hyundai Engineering and Construction (HEC) announces that a consortium with Daelim Industrial and SK Construction has won a contract with the Korea Hydro and Nuclear Power Company to construct two nuclear power plants in Pusan. The contract is worth $580 million and is the largest amount for a nuclear power plant ever awarded in South Korea. Construction for the two 1,000 MW(e) plants is expected to begin later this year.

June 2003
South Korea and Vietnam hold a week-long meeting to discuss energy and mineral resources, and ways to ensure the success of a nuclear power plant project in Vietnam. Vietnamese officials request South Korea to hold training sessions on nuclear power plant management and allow Vietnamese workers and engineers to visit South Korean nuclear power plants.

24-28 May 2003
The 25th Regional Cooperative Agreement for Research, Development and Training Related to Nuclear Science and Technology conference is held in Sri Lanka. South Korea is among the 17 countries participating and serves as the chair of the conference. The participants review current and future projects with the goal of improving the use of nuclear technology for agriculture, health, industrial, environmental and medical purposes.

20 May 2003
The fifth round of inter-Korean economic cooperation talks are held in Pyongyang. South Korean Vice Finance and Economy Minister Kim Kwang Rim tells the North Korean delegation that if North Korea continues to raise tension on the peninsula with its nuclear weapons program, South Korea will not be able to promote inter-Korean business projects. In response, Park Ch’ang Ryŏn, head of the North Korean delegation, warns that South Korea will suffer

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an "unspeakable catastrophe" if it continues to support US efforts to force North Korea to abandon its nuclear weapons program.


19-23 May 2003
The annual meeting of the Nuclear Suppliers Group (NSG) is held in Pusan. The meeting ends with a press statement calling for increased efforts to prevent North Korea from acquiring nuclear material and technologies.


16 May 2003
The Ulchin-1 and -2 nuclear power reactors are temporarily shut down due to a suspected shortage in some of its 96 generator coils. According to authorities, the incident is tentatively classified as a zero level breakdown according to the safety criteria of the International Atomic Energy Agency. The Ministry of Science and Technology says its scheduled overhaul for February 2004 will be pushed up and both Ulchin reactors will undergo overhauls in July 2003 in order to prevent possible disruptions of power supplies.


12-16 May 2003
The 16-member Technical Working Group on Fast Reactors (TWG-FR) of the International Atomic Energy Agency (IAEA) holds its annual meeting in Taejŏn. The group agrees that restarting Japan’s Monju prototype reactor will be crucial for fast reactor development worldwide.


14 May 2003
US President George W. Bush and South Korean President Roh Moo Hyun meet in Washington. After the meeting the two leaders issue a joint statement in which they state that they "will not tolerate" nuclear weapons in North Korea and will continue to work toward "the complete, verifiable and irreversible elimination of North Korea’s nuclear weapons program through peaceful means based on international cooperation."


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14 May 2003
South Korean Unification Ministry spokesman Kim Chŏng No says that despite Pyongyang’s admission that it possesses nuclear weapons and has begun reprocessing spent nuclear fuel rods, the construction of the two KEDO light-water nuclear reactors continues. According to Kim, 605 South Koreans, 353 Uzbeks and 99 North Koreans are currently working on the reactors. Kim also announces that as of April 2003, South Korea has spent $850 million on the project.

7 May 2003
South Korean Foreign Minister Yun Yŏng Kwan says, "Only the verifiable and irreversible scrapping of North Korea's nuclear programs can lead to security guarantees and economic aid for the North." Yun adds, "The United States and the international community will not reward North Korea for its bad behavior."

30 April-2 May 2003
The 17th DUPIC (Direct Use of Spent PWR Fuel in Candus) Project Review Meeting is held in South Korea. Participants discuss the next DUPIC research and development plan, and safeguards.

29 April 2003
North and South Korea conclude the 10th ministerial talks with an agreement to work towards a peaceful resolution of the nuclear crisis. The two Koreas issue a six-point joint statement stating that "North and South Korea will thoroughly consult each other's position on the nuclear issue on the Korea peninsula and will continue cooperation to resolve the issue peacefully through dialogue." In addition, the joint statement left room for the possibility of South Korea's participation in future multilateral talks with the US regarding the nuclear issue.

29 April 2003
The Ministry of Commerce, Industry and Energy (MOCIE) announces it will accept applications from areas interested in housing a nuclear waste site until 15 June 2003. The selected site will receive $246 million and will be given priority in the selection of a nuclear accelerator lab. In addition, MOCIE says it will remove all areas that are opposed to the construction of a nuclear waste site from its list. The government has selected four sites as its first
choice and hopes to receive applications from them. The Korea Hydro and Nuclear Power Company (KHNP) and the Nuclear Environment Technology Institute are responsible for selecting a site and hope to construct a low-level radioactive waste repository by 2008. KHNP officials want the selection process to be democratic and transparent and a site will only be selected if 50% of the local residents approve.


27-30 April 2003
North and South Korea hold the tenth round of ministerial-level talks in Pyongyang. The North and South Korean delegations are respectively headed by Senior Cabinet Councilor Kim Ryŏng Sŏng and Chŏng Se Hyŏn, South Korean unification minister. During the talks, the South Korean delegation demands that North Korea abandon its nuclear weapons program, but the North Korean delegation reportedly dismisses the demand, refusing to clarify statements at talks with the United States and China in Beijing, and claiming that its nuclear program is an issue to be discussed only in bilateral US-North Korean talks. The two Koreas conclude the talks with an agreement to work toward a peaceful resolution to the nuclear crisis. The two Koreas issue a six-point joint statement stating that "North and South Korea will thoroughly consult each other's position on the nuclear issue on the Korea peninsula and will continue cooperation to resolve the issue peacefully through dialogue." In addition, the joint statement left room for the possibility of South Korea's participation in future multilateral talks with the US regarding the nuclear issue.


23-24 April 2003
China, the United States and North Korea hold trilateral talks in Beijing aimed at resolving the standoff over North Korea's nuclear program. The Chinese, US and North Korean delegations are headed respectively by Fu Ying, director general of the Asian Affairs Bureau of the Foreign Ministry, James Kelly, assistant secretary of state for

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East Asia and Pacific Affairs, and Li Gun, deputy director general of the American Affairs Bureau of the Foreign Ministry. During the first day of talks, Li reportedly claims that North Korea has almost completed reprocessing 8,000 spent nuclear fuel rods. Li also reportedly tells Kelly on the sidelines of the talks that North Korea already possesses nuclear weapons and threatens to conduct a nuclear test or export nuclear material. According to the Washington Times, Li tells Kelly, "We can't dismantle them. It's up to you whether we do a physical demonstration or transfer them." However, according to other accounts of Li's statement, Li did not explicitly threaten that North Korea would conduct a nuclear test or sell nuclear material, stating vaguely that North Korea might take "physical actions." At the talks, the North Korean delegation also presents a proposal for resolving the nuclear standoff by which the United States would offer diplomatic recognition and provide security assurances and economic assistance in return for North Korea's pledge to dismantle its nuclear weapons program. The North Korean proposal also reportedly calls for US-North Korean bilateral talks to be followed shortly by multilateral talks including China, Japan and South Korean. The talks, originally scheduled for 23-25 April end a day early. [Note: The exact meaning of Li's claim that North Korea has almost completed reprocessing 8,000 nuclear fuel rods is not clear since sources present at the talks contend that Li used the same ambiguous language as the 18 April Foreign Ministry statement that sparked diplomatic tension due to an apparent mistranslation by KCNA.]


22 April 2003
South Korean Defense Minister Cho Yŏng Kil tells the National Assembly he believes that even though North Korea has completed preparations to reprocess 8,000 spent nuclear fuel rods, it has not actually started reprocessing.


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19 April 2003
Kim Ryŏng Sŏng, chief North Korean delegate to the inter-Korean ministerial talks, sends a message to South Korean Unification Minister Chŏng Se Hyŏn proposing that the next round of talks be held on 27-29 April in Pyongyang. On 21 April, South Korea agrees to participate in the delayed talks. [Note: The tenth round of ministerial talks were originally scheduled for 7-10 April, but North Korea failed to respond to South Korea's requests for preliminary talks and never invited the South Korean delegation to Pyongyang, the scheduled venue.]

10 April 2003
South Korean Foreign Minister Yun Yŏng Kwan meets with Chinese Foreign Minister Li Zhaoxing in Beijing. The two agree to work together to persuade North Korea to participate in a multilateral dialogue in order to resolve issues related to its nuclear weapons program.

1-2 April 2003
The Ministry of Science and Technology (MOST) and the International Atomic Energy Agency (IAEA) hold a nuclear security experts meeting in Taejŏn. The meeting discusses ways to enhance the safety and security of nuclear material and facilities.

1 April 2003
South Korean government officials deny that the Minister of Foreign Affairs and Trade proposed the idea of supplying natural gas to North Korea during his visit to the US and Japan last week. The official also notes that National Security Advisor Ra Chong Il suggested the idea of constructing gas pipelines from Russia to North Korea to ease tensions, but this idea has not been discussed with other countries. According to an interview with the Financial Times, Ra says that the plan will be publicized shortly and South Korea will ask North Korea to halt its nuclear weapons program in return for the natural gas.

31 March 2003
South Korea signs a nuclear security agreement with the International Atomic Energy Agency (IAEA) to improve the

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protection of nuclear substances and facilities in Korea as well as around the world. Under the agreement, both sides will exchange information and safeguard its intellectual property rights. In addition, South Korea and the IAEA will conduct joint operations of security enhancement projects.


28 March 2003

US Secretary of State Colin Powell informs South Korean Foreign Minister Yun Yŏng Kwan that China has proposed three-way talks between the United States, China and North Korea in order to discuss ways of resolving rising tensions on the Korean Peninsula. Yun, considering the "seriousness of the situation," accepts the three-party talks that exclude South Korea with the understanding that South Korea would participate in subsequent rounds of talks. [Note: The three-party talks are held in Beijing on 23-24 April.]


24 March 2003

South Korea and Vietnam discuss bilateral cooperation in nuclear power technology. According to the Ministry of Science and Technology (MOST), the two countries will examine whether the Korean Standard Nuclear Power Plant is appropriate for Vietnam. In addition, South Korea experts are expected to instruct the Vietnamese in nuclear power plant technology and will hold an official meeting regarding these issues later this year.


24 March 2003

The Korea Atomic Energy Research Institute (KAERI), the Korea Institute of Science and Technology (KIST), the Korea Institute of Energy Research (KIER) and other government funded research institutes agree to develop hydrogen fuel as a next generation energy source as part of the Gen IV reactor development project led by the US. Since 2002, KAERI has been conducting feasibility studies on high temperature source development for efficient hydrogen production and will begin developing a high temperature reactor this year. The goal of this project is to develop automotive hydrogen fuel through the development of a high temperature gas cooled reactor. KIER has been working on an efficient hydrogen fuel production process to be tested by the end of 2005. KIST has begun working on the use of hydrogen fuel and equipment development. The three organizations are expected to participate in a sodium cooled fast reactor and a project to develop a ultra high temperature gas cooled reactor for the production of hydrogen. The project is to begin next year as part of the Gen IV reactor development initiative.

—Oak Hui Pom, Chonja Sinmun, 24 March 2003, in "Hydrogen Fuel Research Actively Underway at Government-
18 March 2003
According to a South Korean Defense Ministry official, the US and South Korea will reveal plans to relocate the US’s Army’s Second Infantry Division south of the Han River in the latter half of 2003. This move would put the Second Infantry Division out of range of North Korean long-range artillery. In addition, the official says this proposed plan will be announced in September and will also include a schedule for the reduction of about 7,000 US troops from South Korea.

18 March 2003
South Korean President Roh Moo Hyun calls for multilateral talks to resolve the current standoff over North Korea’s suspected nuclear weapons program. Speaking at the commencement ceremony of the Korea Air Force Academy, Roh says, "Not only dialogue with the North and cooperation with the United States and Japan, but also a cooperative framework involving China, Russia and the European Union should be activated. [Note: This is the first time that President Roh has explicitly called for multilateral talks to resolve issues related to North Korea’s nuclear program.]

15 March 2003
South Korean President Roh and US President Bush agree on South Korea’s participation in the construction of the International Thermonuclear Experimental Reactor (ITER). The ITER project aims to produce clean, safe, renewable and commercially available fusion energy. Current members of the project include the US, Japan, Canada, the European Union, Russia and China, which have been negotiating the project since last year. The construction of the ITER is expected to begin in 2006 and be operational by 2014.

13 March 2003
The South Korean government issues a formal statement denying a South Korean news report that the US suggested options for carrying out a surprise bombing raid of the Yŏngbyŏn nuclear facilities in North Korea. According to the internet newspaper OhmyNews, a South Korean official was quoted as saying, "I was astonished that it sounded like a sort of proposal. I told him instantly that it was a very dangerous idea and I could not agree with it" when US officials provided ways to carry out an air strike. [Note: Deputy Prime Minister for Finance and Economy Kim Jin P’yo later clarifies the report stating that OhmyNews incorrectly quoted a US State Department official when actually the president of the Korea Economic Institute mentioned to Kim that there had discussions

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within the US about an air strike. However, Kim argues that an air strike on the Yŏngbyŏn nuclear facilities is not the US government's official position and that OhmyNews should correct the report.


6 March 2003
US Secretary of Defense Donald Rumsfeld says that the United States is currently considering moving US forces stationed in South Korea away from the DMZ. Speaking at a Pentagon town hall meeting, Rumsfeld says, "We still have a lot of forces in Korea arranged very far forward, where it's intrusive in their lives, and where they really aren't very flexible or usable for other things." Rumsfeld adds that while the United States remains committed to maintaining peace on the Korean Peninsula, South Korea "has all the capability in the world of providing the kind of up-front deterrent that is needed."


4 March-2 April 2003
US and South Korean military forces conduct the annual Foal Eagle combined military exercises simulating a repelling of a North Korean invasion. On 19 March, American and South Korean forces begin the Reception, Staging, Onward Movement and Integration (RSOI) combined military exercises integrating the RSOI with the second half of the Foal Eagle exercises. The United States deploys the aircraft carrier Carl Vinson and six F-117 stealth bombers to participate in the RSOI exercises. [Note: North Korea repeatedly condemns the military exercises as a rehearsal for a preemptive nuclear attack and subsequent invasion of North Korea.]


28 February 2003
The South Korean Ministry of Foreign Affairs and Trade issues a statement expressing "deep concern and regret" that North Korea decided to reactivate its 5MW(e) nuclear reactor. The statement "urges North Korea to comply with South Korean efforts, as well as those of the international community to find a peaceful resolution to the nuclear problem."

—Seo Hyun Jin, "Seoul Regrets News of Reactivation," Korea Herald, 28 February 2003, in Lexis-Nexis, web.lexis-
28 February 2003
A South Korean government official tells the Yonhap News Agency that the South Korean government, after having studied intelligence provided by the United States, has confirmed that North Korea has reactivated the 5MW(e) nuclear reactor located in the Yŏngbyŏn Nuclear Complex. In 1994, North Korea agreed to freeze operations at the reactor as part of the Agreed Framework. Despite North Korea's latest violation of the agreement, the government official says that South Korea will not halt construction of two light-water nuclear reactors in North Korea.

Late February 2003
A representative of Atomic Energy of Canada, Limited (AECL) denies recent reports that a contract for the construction of Romania's Cernavoda-3 nuclear power plant will be signed soon. According to the representative, many reports have been published recently that misinterpreted the facts. In addition, the AECL representative says that negotiations for the contract will not happen until next year. AECL and the Korea Hydro and Nuclear Power Company (KHNP) have jointly bid for the construction of Cernavoda-3.

20 February 2003
Ra Chŏng Il, national security advisor for South Korean President-elect Roh Moo Hyun, secretly meets with North Korean high-ranking officials in Beijing, China. [Note: On March 5, he admits that he had met with North Korean high-ranking officials, but reveals neither whom he met nor what he discussed in Beijing. He says, "Given the unique nature of the North-South relationship, it is not appropriate to open to the public the content of the meeting with North Korean officials." Ra has been suspected to have met with Chŏn Kŭm Ch'ŏl, vice chairman of North Korea's Korean Asia-Pacific Peace Committee, and to have initiated the contact in Beijing to propose an inter-Korean summit. However, he denies these suspicions.]

20 February 2003
A North Korean MiG-19 fighter jet crosses the Northern Limit Line (NLL) in the Yellow Sea and temporarily flies eight miles into South Korean airspace. The incursion lasted only two minutes, as the North Korean jet retreated to North Korean airspace after several South Korean jets were scrambled to intercept it. South Korean Defense Ministry spokesman Brigadier General Hwang Yŏng Su states that the incursion, the first North Korean penetration of South Korean airspace since 1983, could have resulted in "very serious consequences in the current situation on the Korean Peninsula. [Note: North Korea has repeatedly stated that it does not recognize the NLL, thus instigating
several naval clashes in South Korean waters, including a confrontation in June 2002 that resulted in the deaths of six South Korean sailors and an unknown number of North Korean sailors.


19 February 2003
In a report to the National Assembly's Intelligence Committee, Shin Kŏn, chief of South Korea's National Intelligence Service, says that although North Korea has prepared to reactivate its 5MW(e) reactor located in the Yŏngbyŏn Nuclear Complex, the reactor has not yet been reactivated.


17 February 2003
The Ministry of Science and Technology (MOST) says South Korea is close to winning a nuclear power plant project in Romania. Officials from the Korea Hydro and Nuclear Power Corporation visited Romania in January 2003 to participate in a research project and feasibility study. MOST hopes to sign a formal contract in March or April since both countries have already reviewed a draft for the agreement of the project. Korea Hydro and Nuclear Power Company and AECL of Canada have already agreed to jointly bid for the nuclear project in Romania.


13 February 2003
US Secretary of Defense Donald Rumsfeld, in testimony before the Senate Armed Services Committee, says that North Korea poses a larger threat as a proliferator of nuclear weapons than as an aggressor in Northeast Asia. Rumsfeld also says that the United States is working with South Korea to redeploy US forces further south on the peninsula away from Seoul and the demilitarized zone. Rumsfeld says that he would like to see US forces "more oriented toward an air hub and a sea hub with the ability to reinforce so that there is still a strong deterrent, and possibly with our improved capabilities of moving people, some of those forces come back home.

11-14 February 2003

Representatives from North and South Korea meet for the fourth round of inter-Korean economic talks. During the talks the South Korean delegation stresses that economic cooperation between the two countries is hindered mainly by suspicions of a North Korean nuclear weapons program. The North Korean delegation refuses to comment on its nuclear program, stating only that it is a matter to be resolved through direct talks with the United States.


6 February 2003

Operations at the Yŏnggwang-1 nuclear power reactor are temporarily suspended due to a damaged hydrogen coolant sealing device. The Ministry of Science and Technology (MOST) says it ordered the plant to suspend operations after the amount of hydrogen leakage reached 42 square meters. The accident is categorized as zero grade according to International Atomic Energy Agency’s standards.


5 February 2003

Russia’s Atomic Energy Minister admits for the first time that Russia has been supplying South Korea with uranium for nuclear power plant fuel. The Minister notes that neither Russia nor the International Atomic Energy Agency (IAEA) has any information or proof that South Korea may be creating nuclear facilities for military purposes. In addition, the Minister states that given South Korea’s capabilities and nuclear technology it would be able to develop a nuclear bomb within two years.


4 February 2003

The South Korean government designates four possible sites for the construction of two nuclear waste facilities. The Ministry of Commerce, Industry and Energy (MOCIE) and the Korea Hydro and Nuclear Power Company announces Uguk-ri and Sanpo-ri both in North Kyŏngsang province, and Sŏngsan-ri and Kwangsŏng-ri in South Chŏlla Province as the possible sites. The final selection of the two sites is expected to be made in March 2004.


2-9 February 2003

Chŏng Tae Ch’ŏl, South Korean President-elect Roh Moo Hyun’s special envoy, travels to the United States and Japan to meet with top government officials and to convey President-Elect Roh’s intention to resolve the nuclear crisis on the Korean Peninsula peacefully while strengthening the US-South Korean and South Korean-Japanese relations.

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alliances. During 3-5 February, Chŏng is in Washington, D.C. and meets with Secretary of Defense Donald Rumsfeld and Secretary of State Colin Powell. While meeting with Rumsfeld, Chŏng reportedly conveys President-elect Roh’s desire to make the South Korean-US alliance a "true partnership." While meeting with Vice President Dick Cheney, Chŏng and Cheney agreed to establish a bilateral forum in which the United States and South Korea could discuss important issues of mutual concern such as North Korean nuclear program. While in Tokyo, Chŏng meets with Prime Minister Junichiro Koizumi and the two agree to remain committed to resolving issues related to North Korea’s nuclear program peacefully.


Early February 2003

According to South Korean and Japanese government officials, KEDO executive board members unofficially agree to slow down the project to construct two light-water reactors in North Korea by postponing the purchase of necessary construction equipment. The executive board, consisting of the United States, Japan, South Korea and the European Union, also reportedly agreed to halt air services between South Korea and the construction site in North Korea, and to freeze a training program for South Korean engineers in South Korea.


27-29 January 2003

Im Tong Wŏn, special envoy of South Korean President Kim Dae Jung, travels to Pyongyang in an attempt to diffuse mounting tensions on the Korean Peninsula. North Korean officials reportedly tell Im that North Korea does not possess a uranium-enrichment program. [Note: North and South Korea had reportedly agreed that Im would meet with North Korean leader Kim Jong Il, but after waiting for three days, North Korean officials inform Im that Kim will not be able to meet with him.]

27 January 2003
Delegates of the North and South Korean militaries meet in Panmunjom for working level talks. The two sides agree to provide military assurances to each other while making preparations for the construction of a temporary road that would traverse the demilitarized zone and connect North and South Korea.

23 January 2003
Romania’s Ministry of Waters and Environment Protection announces that the Korea Hydro and Nuclear Power Company (KHNP) may participate in the construction of the third unit of the Cernavoda Nuclear Power Plant. According to the Ministry, representatives of KHNP visited the headquarters of the national Commission for Oversight of Nuclear Activities and they expressed interest in the Cernavoda project.

22-24 January 2003
North and South Korea hold the ninth round of inter-Korean ministerial talks in Seoul. The five-member North Korean delegation is headed by senior cabinet member Kim Yong Song, and the South Korean delegation is headed by Unification Minister Chong Se Hyon. In his keynote speech at the opening of the talks, Kim states that North Korea’s nuclear program is only for generating electricity, and accuses the United States of politicizing the nuclear issue in an attempt to gain control over both North and South Korea. The South Korean delegation demands that North Korea abandon its nuclear weapons program and retract its decision to withdraw from the NPT, but according to delegation spokesman Lee Pong Cho, the South Korean delegation is disappointed that North Korea refuses to make any concrete commitments during the meeting. The two sides agree to continue cooperating in order to resolve peacefully the conflict over North Korea’s nuclear program, and at the conclusion of the talks, they agree to meet again in April. [Note: The tenth round of talks is scheduled to take place from 7 to 10 April in Pyongyang, but since North Korea fails to confirm that it will participate in the talks and does not invite the South Korean delegation to Pyongyang, the talks are postponed until 27 April.]

20 January 2003
The Ministry of Foreign Affairs and Trade denies a Japanese newspaper report about a South Korean proposal to supply North Korea with natural gas in order to end the nuclear crisis.

17 January 2003
A Japanese newspaper reports that South Korean government officials revealed a proposal to the US to supply North Korea with natural gas in exchange for completely dismantling its nuclear program. According to the proposal, South Korea, China, Japan, Russia and the US will support private companies to construct the pipelines to run through Sakhalin and Kyushu.

16 January 2003
South Korean Ambassador to the UN Son Chun Yŏng says that the North Korean nuclear crisis will eventually be resolved through dialogue, but he speculates that a peaceful resolution will take at least two years. Son claims that while both the US and North Korea are using strong rhetoric, both sides have stressed a desire to resolve the issue through dialogue. However, Son points out that the 1993 nuclear crisis required over a year and half before it was resolved, and since the current crisis involves nuclear, missile and biochemical weapons, "it will take at least two years for the issue to be resolved."

16 January 2003
Speaking before the National Assembly's Defense Committee, South Korean Defense Minister Lee Chun says that a war between North and South Korea would be "unavoidable" if the United States carried out a preemptive attack on the North's suspected nuclear weapons facilities. Lee says there is a high probability that North Korea will target South Korea if Pyongyang develops uranium-based nuclear weapons. Lee also claims that American and South Korean forces are prepared for a "worst-case scenario". [NOTE: On 18 January, a spokesman for the Ministry of National Defense says that Lee’s statements did not indicate that the security situation on the peninsula was becoming increasingly precarious, but rather the statements were meant to reiterate that readiness of South

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Korea's armed forces to handle any contingencies that might arise.


16 January 2003

South Korean President-elect Roh Moo Hyun meets with Japanese Foreign Minister Yoriko Kawaguchi and says that while he will not tolerate North Korea's attempts to develop nuclear weapons, "the issue should be resolved through dialogue." Roh says that "cooperation between South Korea and Japan is very important in solving the North Korean nuclear issue." Later in the day, Roh tells reporters that he believes once North Korea escapes its status as a rogue state, it can abandon its nuclear weapons program. Roh also says that he would not consider a military strike against North Korea even if it was found to be reprocessing nuclear fuel for a bomb.


13 January 2003

South Korean President-elect Roh Moo Hyun meets with US Assistant Secretary of State James Kelly and informs him that South Korea will play a "leading role" in resolving the North Korean nuclear standoff. Roh also reiterates his belief that the nuclear issue should be resolved through peaceful dialogue. Speaking to reporters after the meeting, Kelly states that the United States is willing to talk to North Korea. Kelly says, "Once we get beyond nuclear weapons, there may be opportunities with the US, with private investors, with other countries to help North Korea in the energy area."


11 January 2003

Japanese Vice Foreign Minister Yukio Takeuchi and Im Sŏng Jun, South Korean presidential envoy, meet in Japan and agree that Japan, South Korea and the United States should work together to end the North Korean nuclear crisis. The two officials reportedly agree to use their respective diplomatic channels to urge Pyongyang to engage in dialogue. They also agree that tough economic sanctions imposed by the UN Security Council could do more harm than good.

*Related content is available on the website for the Nuclear Threat Initiative, www.nti.org.*
10 January 2003

North Korea declares its withdrawal from the Nuclear Nonproliferation Treaty (NPT). According to South Korean government officials, this is a move by North Korea to bring the US to the negotiating table. However, South Korean President Kim Dae Jung calls for an emergency National Security Council meeting and says North Korea's withdrawal from the NPT "brought the situation on the Korean peninsula from bad to worse by one step."


10 January 2003

The Ministry of Commerce, Industry and Energy (MOCIE) outlines a plan to the presidential transition committee regarding the possibility of turning the Korea Hydro and Nuclear Power Company (KHNP) into a public corporation. According to the MOCIE, this is being considered because nuclear power is directly linked to national security. In addition, MOCIE says turning KHNP into a public firm will be a long-term project that will not be decided upon until after the Korea Electric Power Corporation's (KEPCO) five thermal power firms are privatized.


6-7 January 2003

Representatives from the United States, Japan and South Korea hold a meeting of the Trilateral Coordination and Oversight Group (TCOG) in Washington to discuss North Korea's suspected nuclear weapons program. On 7 January, representatives from the three nations issue a joint statement urging North Korea to eliminate its nuclear program while reiterating their intention to "pursue a peaceful and diplomatic resolution of the issue."


2002

31 December 2002

Park Ui Chun, North Korea's ambassador to Russia, suggests that North Korea will pull out of the Nuclear Nonproliferation Treaty. Speaking at a news conference in Moscow, Pak says, "North Korea is not currently able to meet its commitments under the Nuclear Non-Proliferation Treaty—this is the fault of the United States." Park claims that North Korea can no longer fulfill its treaty obligations because the United States has stopped heavy fuel
oil deliveries and continues to threaten North Korea with a preventive nuclear strike.

29 December 2002
The Ulchin-4 nuclear power reactor is temporarily shut down due to problems with the motor generator. This accident is classified as zero grade according to the standards set by the International Atomic Energy Agency (IAEA). The Ministry of Science and Technology plans to suspend operations at Ulchin-4 until a complete investigation is completed.

26 December 2002
The Korea Hydro and Nuclear Power Company (KHNP) announces it has developed a technique to burn low- and intermediate-level radioactive waste and mix the residue with glass. According to KHNP this technology condenses radioactive waste up to 80% of its original size. KHNP plans to install facilities using this technology at the two nuclear power plants currently under construction in Ulchin. KHNP has been working on this technology since 1994 with the help of Hyundai and SGN, a French Engineering firm.

23 December 2002
The Yŏnggwang-6 nuclear power reactor begins commercial operation. Yŏnggwang-6 is a 1,000MW(e) pressurized water reactor.

23-24 December 2002
North Korean technicians remove most of the seals and disable monitoring cameras at the Radiochemistry Laboratory, which is a plutonium reprocessing plant, and at the fuel fabrication plant in Yŏngbyŏn-kun.
22 December 2002
North Korean technicians begin removing seals and disabling monitoring cameras at the temporary storage facility for about 8,000 spent fuel rods in Yŏngbyŏn-kun.

19 December 2002
Roh Moo Hyun (No Mu Hyŏn; 卢武鉉), a former human rights lawyer, and candidate of the Millennium Democratic Party (세관年民主黨), wins South Korea's presidential election. [Note: Roh has said he would like to continue engagement with North Korea, but cannot accept North Korea developing nuclear weapons.]

10 December 2002
The South Korean government works out the blueprints for the second 10-year basic energy plan until 2011. According to the blueprint, South Korea plans to enhance the energy sector's competitiveness, secure stable energy supplies, and reorganize energy prices. The plan also calls for the construction of nine nuclear power plants. In addition, to prepare for reunification, the government plans to provide coal and production facilities to North Korea, and to pursue various energy cooperation projects.

9 December 2002
Nuclear.ru reports that Russia and South Korea are working towards an agreement to conduct a joint research project on the treatment of irradiated nuclear fuel. According to the report, the Russian Federation State Science Center, the Atomic Reactors Scientific Research Institute, the Federal State Unitary Enterprise, and the Korean Atomic Energy Research Institute (KAERI) plan to carry out this research project over the next 10 years. South Korea and Russia have been conducting research and experiments with irradiated nuclear fuel for the past three years and so far have found that using fused salt in the preparation of irradiated nuclear fuel for long-term storage decreases its volume by a factor of four.

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3 December 2002
During a televised debate in South Korea, Grand National Party presidential candidate Lee Hoe Ch’ang says that North Korea has nuclear weapons. The statement is controversial as the rival Millennium Democratic Party (MDP) calls for Lee to provide proof of the accusation or retract it because the MDP says it creates anxiety for the South Korean people and increases tensions between the two Koreas.

28 November 2002
The Ulchin-3 nuclear power reactor leaks radioactive material while technicians conduct repair work on the cooling system after radiation level increased on 26 November. The leak exposes 109 employees to radiation, but the Ministry of Science and Technology claims the employees’ exposure is minimal.

27 November 2002
The Ministry of Science and Technology (MOST) announces that South Korea will participate in an international research project to develop the "Gen IV" (fourth generation nuclear reactor). The purpose of the Gen IV project is to develop a smaller and safer nuclear reactor that is less harmful to the environment. South Korean officials attended a GIF Forum (Gen IV International Forum) meeting 14-15 November in Washington with seven other countries to discuss the project. During the meeting, the member countries agreed to establish technical and steering committees in preparation for the research and development of the Gen IV reactor. According the MOST officials, South Korea will most likely focus its research on the sodium-cold fast reactor model that increases uranium combustion by more than 60 times and reduces the potential environmental damage from spent nuclear fuel.

26 November 2002
The radiation level for the Ulchin-3 nuclear power reactor’s coolant increases to the first of three emergency levels.

26 November 2002
A South Korean Ministry of Unification official says that contacts between the LWR reactor project office in Seoul

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and its counterpart in Pyongyang have been cut off, and that training for North Korean engineers originally scheduled for this month are now in doubt. The training on the safe operation of reactors was to be held in South Korea.

15 November 2002
The Ministry of Unification expresses disappointment over the Korean Peninsula Energy Development Organization’s (KEDO) decision to halt heavy oil shipments to North Korea. The Minister of Unification states that he fears a tough US stance will have a negative impact on North-South relations.

14 November 2002
KEDO’s executive board meets in New York and decides to suspend shipments of heavy fuel oil to North Korea beginning with the shipment of December 2002. [Note: The oil shipment now in route from Singapore will be allowed to continue.]

12 November 2002
South Korea and Chile sign a nuclear cooperation agreement in Seoul. According to the agreement, the two countries will cooperate in the peaceful uses of nuclear energy including research and development, and the construction of nuclear power plants.

11 November 2002
The South Korean Ministry of Commerce, Industry and Energy (MOCIE) announces the signing of a memorandum of understanding (MOU) with Vietnam. According to the MOU, South Korea will work with Vietnam to build nuclear power plants in Vietnam with a target date of 2017 to begin operation. The Korean Hydro and Nuclear Power Company (KHNP) will collaborate in nuclear plant construction, selection of plant types, security, waste management, and education of personnel.
4 November 2002
During a series of summit meetings in Phnom Penh organized by the Association of Southeast Asian Nations, Japanese Prime Minister Junichiro Koizumi, Chinese Premier Zhu Rong Ji, and South Korean Prime Minister Kim Sŏk Su agree that North Korea should abandon its nuclear weapons program. The three sides say they will pressure Pyongyang into resolving the issue in a peaceful manner.

3 November 2002
Doosan Heavy Industries and Construction Company and British Nuclear Fuel agree to collaborate in the power industry in South Korea and other countries. The agreement calls for joint projects in the global nuclear energy market, co-development of next generation nuclear technology, and corporate cultural exchanges.

26 October 2002
Operations at the Ulchin-1 nuclear power reactor are suspended due to problems with the power transmitter. According to the Ministry of Science and Technology, the accident is classified as zero grade, which means it has no impact on nuclear security.

20 October 2002
Operations at the Ulchin-1 nuclear power reactor are suspended due to problems with the power transmitter. According to the Ministry of Science and Technology, the accident is classified as zero grade, which means it has no impact on nuclear security. [Note: The problem also occurs on 26 October.]

19-22 October 2002
North and South Korea hold their Eight Inter-Ministerial Talks in Pyongyang. The two sides discuss a number of economic issues, and issue a joint statement that includes, "The North and the South agreed to make common efforts to guarantee peace and security on the Korean peninsula, consistent with the spirit of the June 15 Joint Declaration, and to actively cooperate to resolve all problems through dialogue, including the nuclear issue." North Korean officials tell South Korean Minister of Unification Chŏng Se Hyŏn that Pyongyang is willing to resolve the nuclear issue if the United States first changes its hostile policy towards North Korea.

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18 October 2002

South Korea’s National Assembly adopts a resolution calling for North Korea to immediately abandon all programs to develop weapons of mass destruction. However, rival political parties differ on the details for addressing North Korea’s nuclear program.


18 October 2002

In testimony before the National Assembly's Unification, Foreign Affairs and Trade Committee, Minister of Unification Ch’oe Sŏng Hong says that the South Korean government had some information regarding North Korea’s uranium enrichment program before James Kelly's visit to Pyongyang the first week of October. However, Ch’oe says the government was only able to grasp the details of the intelligence in August 2002.


18 October 2002

In testimony before the National Assembly's National Defense Committee, South Korea’s Minister of National Defense Lee Jun says it is still uncertain whether North Korea has completed or is operating an HEU production facility. He also says that North Korea should be able to use a uranium bomb without testing it.


18 October 2002
An official at the Korea Atomic Energy Research Institute (KAERI) says he doubts that North Korea has the technology and the capability to enrich uranium. According to the official, North Korea's recent admission of its nuclear program is a "gesture to move towards the free world."

18 October 2002
Doosan Heavy Industries and Construction Company ships four steam generators for use in a nuclear power plant in Tennesse. Doosan won the $50 million contract in September 1999. This is the first export of key nuclear power equipment by South Korea to the US.

17 October 2002
The Blue House (Ch'ŏng'wadae), the South Korean presidential residence, issues a statement regarding North Korea's admission to having a uranium enrichment program to US envoy James Kelly. Im Sŏng Jun, Senior Secretary to the President for Foreign Affairs and National Security, says President Kim Dae Jung considers the issue very serious and that Pyongyang's development of nuclear weapons is unacceptable. However, the government considers the candid admission a sign that North Korea is prepared to resolve the issue through dialogue. The South Korean government's position is that the issue should be resolved peacefully through dialogue. The spokesman calls on North Korea fulfill its commitments under the NPT, Agreed Framework, and the Joint Declaration on the Denuclearization of the Korean Peninsula.

17 October 2002
South Korea, Japan, and China stress the importance of continued engagement with North Korea following the revelation that North Korea has been pursuing a clandestine nuclear weapons program based on uranium enrichment technology. Tokyo pledges to continue normalization talks with North Korea scheduled to resume 29 October, but Japanese officials claim that they will suspend the talks if North Korea fails to comply with the Agreed Framework. Im Sŏng Jun, South Korean national security adviser, says that Seoul regards the admission "as a sign North Korea is willing to resolve this problem through dialogue." In addition, according to a Blue House statement, Seoul will continue with its plan to send an aid package consisting of 400,000 tons of rice and 100,000 tons of fertilizer. However, "if public sentiment worsens here," a Seoul official says, "it will be difficult to give any additional aid." Chinese Foreign Ministry spokeswoman Zhang Qiuyue says that China continues to oppose the
introduction of nuclear weapons on the Korean Peninsula but believes the issue "should be settled through dialogue and negotiations."


16 October 2002
Richard Boucher, spokesman for the US State Department, announces that during high-level talks in Pyongyang held from 3-5 October, US Assistant Secretary of State for East Asia and Pacific Affairs James Kelly presented his North Korean hosts with recently acquired US evidence that indicates North Korea has been pursuing a nuclear weapons program based on uranium enrichment. According to Boucher, North Korean officials acknowledged the existence of a uranium enrichment program when meeting with Kelley. This program, Boucher claims, is a serious violation of North Korea's commitments under the Agreed Framework, the NPT, its IAEA safeguards agreement and the Joint North-South Declaration on the Denuclearization on the Korean Peninsula. "Over the summer," Boucher says, "President Bush—in consultations with our allies and friends—had developed a bold approach to improve relations with North Korea." Boucher continues, "In light of our concern about the North's nuclear weapons program, however, we are unable to pursue this approach." [Note: US press reports suggest that the evidence regarding North Korea's uranium enrichment program is based on the discovery that North Korea has been attempting to acquire large amounts of high-strength aluminum for gas-centrifuges.]


10 December 2002
The Ulchin-4 nuclear power reactor is temporarily shut down due to an unidentified malfunction in the generation system.


3-5 October 2002
US Assistant Secretary of State for East Asia and Pacific Affairs James Kelly leads a delegation to Pyongyang to discuss various bilateral issues. While in Pyongyang Kelly meets with First Vice Foreign Minister Kang Sŏk Chu and Vice Foreign Minister Kim Kye Kwan. On the first day of the talks, Kelly offers no specific evidence, but says the United States has evidence that North Korea has been pursuing a program to produce highly enriched uranium for nuclear weapons. The North Korean delegation initially denies the allegations, but on the second day of the talks, the North Korean delegation admits to having such a program. North Korean media describe Kelley's attitude as "arrogant" during the talks. Later, a "high-ranking South Korean government official" says that Kang proposed to link US nuclear suspicions and a reduction in conventional forces with the United States lifting economic sanctions and changing its hostile policy towards North Korea. [Note: US press reports suggest that the evidence regarding North Korea's uranium enrichment program is based on the discovery that North Korea has been attempting to acquire large amounts of high-strength aluminum for gas-centrifuges.]

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19 September 2002
During a meeting on energy development policies, South Korean officials estimate that the country's nuclear energy facilities will increase 70 percent by 2010.


16 September 2002
South Korea and the US agree to cooperate in developing a nuclear reactor that can isolate plutonium. The purpose of this joint project is to develop technology so that plutonium from spent fuel can be reused in nuclear power reactors.


14 September 2002
South Korea joins 17 other countries in adopting a joint statement calling for the early implementation of the Comprehensive Test Ban Treaty (CTBT).


7 September 2002
The Trilateral Coordination and Oversight Group (TCOG) meeting is held in Seoul. The delegations from the United States, Japan and South Korea were led by Assistant Secretary of State for East Asian and Pacific Affairs James A. Kelly, Director General of Asian and Oceanian Affairs Hitoshi Tanaka, and Deputy Foreign Minister Lee Tae Shik. The three sides reconfirm their goal of resolving the issue of North Korea's WMD and missile programs through dialogue, and "highlight the importance of improved implementation of the Agreed Framework." [Note: Later reports indicate that while in Seoul, James Kelly briefs the South Korean government on US intelligence regarding North Korea's uranium enrichment program.]


September 2002
India's Heavy Water Board announces it has signed a contract this year to supply a small quantity of heavy water to South Korea, but does not specify the amount or the value of the contract. India exported 100 metric tons of heavy water to South Korea in 1996.

15 August 2000
The 6th Permanent Coordinating Group (PCG) meeting between South Korea's Ministry of Science and Technology (MOST) and the US Department of Energy is held in Washington, DC. The two sides discuss current and future cooperative research programs. Current programs include the development of human resources for nuclear safeguard inspections, the development and implementation of safeguard systems for DUPIC (Direct Use of spent PWR fuel in CANDU), and the development of remote monitoring and physical protection systems.

14 August 2002
Doosan Heavy Industries and Construction receives a contract from Westinghouse to supply $68 million worth of equipment for a nuclear power plant in Tennessee. The equipment includes four steam generators for a 1,200MW(e) light water reactor.

9 August 2002
Westinghouse Electric Company announces it has been awarded a $350 million contract by Doosan Heavy Industries and Construction. The contract calls for Westinghouse to provide components, instrumentation control equipment, and technical and engineering support services for four nuclear power plants to be built in South Korea.

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9 August 2002
Doosan Heavy Industry and Construction Company wins the bidding for a $1.66 billion (2 trillion won) contract with the Korea Hydro and Nuclear power Company (KHNP). Doosan will supply nuclear facilities and turbine generators to four planned nuclear power plants in Kori and Wŏlsŏng that are expected to be completed in 2009 and 2010. KHNP grants Korea Power Engineering Corporation a $415.45 million (500 billion won) contract to perform design work for the nuclear reactors.

7 August 2002
KEDO holds a ceremony in Kŭmho-chigu, Shinp'o to mark the pouring of concrete for the construction of the first light water reactor under the Agreed Framework. Charles Pritchard, US Representative to KEDO, attends the ceremony and says, "The United States will continue to abide by the terms of this accord [the Agreed Framework] so long as North Korea does the same." Pritchard says that under the construction schedule, KEDO will deliver key components to the first reactor in mid 2005, and therefore, North Korea and the IAEA need to begin the safeguards inspection process now.

25 July 2002
An official of the Korea Electric Power Corporation (KEPCO) says the firm has recently signed a contract with Kazakhstan to purchase 800 tons of yellow cake each year for eight years starting in 2006. In addition, the yellow cake will undergo a downstream process of enrichment and concentration in either Kazakhstan or Russia before being imported to South Korea. According to KEPCO officials, the direct import of yellow cake will save the company $30 million in nuclear fuel costs per year.

20 July 2002
The North Korean airline Air Koryo conducts the first direct inter-Korean flight to transport South Koreans working on the KEDO light water reactor project from Yangyang, Kang’wŏn Province, South Korea to Sŏndŏk-ri, Chŏngp’yŏng-kun, South Hamgyŏng Province, North Korea.

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18 July 2002
The Wŏlsŏng-2 nuclear power reactor experiences a small leakage of heavy water from a valve of the secondary cooler system. The leak exposes 10 workers to radiation.

11 July 2002
In Hanoi, South Korea and Vietnam sign a memorandum of understanding on the peaceful use of atomic energy.

2 July 2002
A 25-member North Korean delegation arrives in South Korea to participate in a training program as part of the LWR construction project under the Agreed Framework. The delegation is led by Kim Yŏng Il, a director in North Korea's Nuclear Safety Regulatory Committee (核安全監督委員會), and the group will receive training at the Korea Institute of Nuclear Safety (韓國原子力安全技術院) in Taejŏn. The group is scheduled to stay in South Korea until 27 July.

29 June 2002
North and South Korean naval forces clash in coastal waters off the west coast. One South Korean vessel is sunk and four sailors are killed. North Korean casualties are estimated to be about 30. During the skirmish, South Korean elint indicates that North Korean radars have been turned on for ship-borne anti-ship Styx missiles and for Silkworm missiles based onshore. The South Korean vessels disperse chaff as a countermeasure and reportedly break off their aggressive pursuit of the North Korean vessels in fear that North Korea could respond with a missile attack, which would potentially result in a serious escalation of the conflict.

17 June 2002

Government delegations from the United States, Japan, and South Korea hold a Trilateral Coordination and Oversight Group (TCOG) meeting in San Francisco. The three sides agree about the importance of holding "comprehensive and flexible talks with North Korea." The US and Japanese delegations reaffirm support for Kim Dae Jung's policy of engagement with Pyongyang, and for the implementation of the Agreed Framework.


Mid 2002

US government officials say they will not support South Korean efforts to develop a fast breeder reactor. South Korean officials have used the term liquid metal reactor (LMR) to emphasize the project as reactor development rather than a fuel cycle program, but according to US officials, they are both potential breeders, which the US cannot support on nonproliferation grounds.


21 May 2002

The Yonggwang-5 nuclear power reactor begins commercial operation. Yonggwang-5 is a 1,000MW(e) pressurized water reactor (PWR).


Related content is available on the website for the Nuclear Threat Initiative, www.nti.org.
9 May 2002
The Korea Atomic Energy Research Institute (KAERI) announces it will construct a state of the art radiation application research center with a scheduled completion for next year. KAERI hopes to use the new research center to develop new technologies for bioengineering, the environment, medicine, agriculture, and food science. —Pak Hui Pom, Chonja Sinmun, "KAERI's High-Tech Radiation Application Research Center Construction Gets Underway," 9 May 2002, in "ROK Atomic Energy Institute Building Radiation Research Center," FBIS Document ID: KPP20020510000109.

May 2002
According to a Nuclear Fuel report, officials at the Korea Hydro and Nuclear Power Company (KHNP) do not support any plans to build a fast breeder reactor. In addition, KHNP is not in a hurry to reprocess spent fuel and extract plutonium. Officials from the South Korean government and the Korea Atomic Energy Research Institute (KAERI) expressed interest in these projects to the US last month, hoping to gain approval to move forward. However, KHNP officials feel the financial burden of constructing eight more nuclear reactors by 2015 is too much for the company, and they expect the government to finance the fast breeder reactor if a decision is made to move forward with the project. —Mark Hibbs, "KHNP Finding Market Deregulation Disincentive to Close Fuel Cycle," Nuclear Fuel, 13 May 2002, p. 4, in Lexis-Nexis, web.lexis-nexis.com.

Late April 2002
The Korea Hydro and Nuclear Power Company (KHNP) sets 2003 as the beginning date to designate a site for radioactive waste and interim storage of spent fuel. KHNP and the Ministry of Commerce, Industry and Energy hope to select three or four possible sites by August or September 2002 and make a final decision by the end of 2002. The government's previous efforts to select a site by application were unsuccessful as no applications were received due to the lack of support from local citizens to host a waste site. According to some officials, KHNP will focus its efforts on communities that already host a nuclear power plant, and they site Yŏnggwang as a possible candidate. —Mark Hibbs, "South Korea Aims to Select Site for LLW, Spent Fuel by Early 2003," Nucleonics Week, 2 May 2002, p. 19, in Lexis-Nexis, web.lexis-nexis.com.

Late April 2002
The Korea Atomic Energy Research Institute (KAERI) announces it will establish an international program to coordinate emergency response activities for a radiological emergency in Korea, China or Japan. The program will also provide a framework for technical assistance during a radiological emergency. The South Korean government decides to support this program due to fears that any sort of nuclear accident in China or Japan will dampen the political acceptance of Korea's nuclear energy program. —Mark Hibbs, "South Korea Seeks to Coordinate Emergency Response with China, Japan," Inside NRC, 22 April 2002, p. 7, in Lexis-Nexis, web.lexis-nexis.com.

25 April 2002
Romania's Autonomous Nuclear Activity Utility (RANN) is expected to bid for Korea Hydro and Nuclear Power
Company's international tender for heavy water. Last year, Romania sold 16 metric tons of heavy water to South Korea.

5 April 2002
The Ulchin-4 nuclear power reactor experiences a tube rupture in a steam generator causing technicians to activate the emergency cooling system. The rupture was discovered during planned maintenance in which the reactor was shut down. The incident is classified as level one on the International Nuclear Event Scale (INES) because all safety systems functioned properly and operators acted accordingly. Officials from the Ministry of Science and Technology say the exact cause of the rupture will not be known until experts from South Korea, the US and Germany conduct an examination.

2-4 April 2002
The second subcommittee meeting of the 12th Meeting of the Korea-Saudi Arabia Joint Committee is held in Seoul. During the meeting the two sides agree to increase cooperation in the field of atomic energy. South Korean officials provide information on their development of the 330MW(e) thermal System Integrated Modular Advanced Reactor (SMART) for desalination purposes. Saudi Arabian officials express interest in bilateral research cooperation in radiation technology, safety, the impact of radiation techniques, the utilization on polymers, the environment, food production and health care.

Early April 2002
The Joint Standing Committee on US-Korea Nuclear Cooperation is held in Seoul. The two sides discuss the possibilities of bilateral cooperation in fast breeder reactor research. South Korea has wanted to develop this technology, but the US has consistently discouraged any efforts related to cooperation with US companies. However, the Ministry of Science and Technology has made plans to go ahead and hopes to finish a detailed design of a 150MW(e) pool type fast reactor with a uranium-plutonium core. The Korea Atomic Energy Research Institute (KAERI) worked out the preliminary design in 1997 and completed a conceptual design in April 2002. Korean officials hope to finish the project, but expect to run into problems as South Korea does not possess any separated plutonium.
April 2002
The South Korean government lifts security alerts imposed at all nuclear power plant sites following the 11 September 2001 terrorist attacks in the US. Instead, the government is now focusing on the older nuclear reactors that are more vulnerable to internal sabotage, and on other threats such as an attack on off-site power supplies. The Ministry of Science and Technology plans to conduct a research project to improve the physical protection of nuclear power plants beyond the current requirements.

April 2002
France signs cooperation agreements with three South Korean research organizations during the annual Korean Atomic Industrial Forum. The agreement with the Korea Atomic Energy Research Institute (KAERI) renews a 1997 agreement on collaboration in the production and use of radioisotopes, the development of technology for reactor physics, and in the dismantlement of nuclear facilities. The agreement with the Korea Institute of Energy is for cooperation in energy storage and fuel cells, and the agreement with the Korea Institute of Science and Technology is for cooperation in the field of fuel cell development.

27 March 2002
The Ministry of Science and Technology and the Korea Atomic Energy Research Institute inaugurate a center for regional nuclear cooperation. South Korea first requested that Seoul be chosen as the site to house an International Atomic Energy Agency regional cooperation center two years ago at the Asia-Pacific Regional Cooperation Asia meeting in India. South Korea has agreed to host and finance the center for a two year interim period. During this period, the center will focus on establishing a legal framework for future operations.

18 March 2002
The Korea Hydro and Nuclear Power Company (KHNP) announces it will sign an agreement with Romania’s National Company Nuclearelectrica on 19 March 2002. Under the agreement, KHNP will provide technical assistance for the operation of the Cernavoda-1 Nuclear Power Plant and will help establish the second nuclear power plant that is currently under construction and is expected to be completed in 2005.

14 March 2002
The Ministry Commerce, Industry and Energy announces that a coolant leak in the transformer caused the temporary shut down of the Wŏlsŏng-1 nuclear power reactor. According to the Ministry, the leak was detected

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on 13 March 2002, and the reactor is expected to be under repair for about eight days. 

12 March 2002
The CEO of the Korea Electric Power Corporation (KEPCO) steps down from his position amidst threats from the labor force to launch strikes over the government’s plan to privatize the company. This is the second CEO of KEPCO to step down within three years. Both CEO’s are close associates of President Kim Dae Jung.

7 March 2002
South Korea’s Ministry of Unification allows the Korea Institute of Nuclear Safety (KINS) to carry out safety projects in the construction of light water reactors in North Korea. The safety projects include inspections of safety and quality control, and safety education programs for North Korean nuclear experts.

March 2002
Korea Hydro and Nuclear Power Company’s technicians find 32 cracks from stress corrosion cracking in the Yŏnggwang-3 nuclear power reactor’s steam generator tubes. The cracks are plugged during a five and a half week maintenance outage of the unit. Officials from the Korea Institute of Nuclear Safety (KINS) cite water chemistry problems as a possible cause for the cracks. KHNP officials plan to request a license from regulators to operate Yŏnggwang-3 and -4 with coolant temperatures 10 degrees below normal if necessary. This is the first time a crack is detected in the Westinghouse Combustion Engineering System 80 design reactor. [Note: Stress erosion cracks are found in the Yŏnggwang-4 reactor as well, and technicians expect to plug them during an outage scheduled for fall.]

20 February 2002
During his visit to South Korea, George W. Bush says the United States has no intention of invading North Korea. Bush also says that he supports Kim Dae Jung’s "sunshine policy" of engagement with North Korea, and that Washington is prepared to renew dialogue with Pyongyang.

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16 February 2002
South Korea’s Ministry of Science and Technology and the Vietnam Atomic Energy Commission sign an agreement to promote the exchange of human resources, information and business projects on atomic energy.

8 February 2002
South Korean Minister of Foreign Affairs and Trade Ch’oe Sŏng Hong tells the National Assembly that South Korea will take issue with North Korea’s WMD programs when inter-ministerial talks resume. Ch’oe says that South Korea has told North Korea to address the suspicions surrounding its missile and WMD programs during the June 2000 summit and other occasions.

7 February 2002
South Korean Unification Minister Chŏn Se Hyŏn tells the National Assembly that the South Korean government will seek the opening of a direct air route between North Korea and South Korea to facilitate the construction of the light water reactors in North Korea under the Agreed Framework.

6 February-6 March 2002
The first interim inspections of all light water reactors (LWR) under the ROK-IAEA LWR Enhanced Cooperation agreement are performed.

6 February 2002
Im Tong Wŏn, national security and unification advisor to the South Korean president, says that North Korea poses a threat to security on the Korean peninsula, but the threat must be reduced through peaceful dialogue. Im says that the use of military force will only result in the danger of igniting another Korean war.

6 February 2002
South Korean President Kim Dae Jung says that nuclear and missile problems must be resolved peacefully. Kim says that recently North Korea has been harshly criticizing the United States because of the US attitude towards North Korea. Kim also says that there can be policy differences among allies, but that anti-Americanism is not in Korea's interest.

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29 January 2002
During his State of the Union Address, President George W. Bush says North Korea is part of an "axis of evil."

25 January 2002
The Trilateral Coordination and Oversight Group (TCOG) concludes a one-day meeting in Seoul. The TCOG consists of government officials from the United States, South Korea, and Japan that meet to coordinate policy towards North Korea. The participants say North Korea will be an important topic during George W. Bush's trip to Asia in February, and that Bush's visits would "positively contribute to peace and stability on and around the Korean peninsula." A South Korean government official later reveals that the US delegation informs the Japanese and South Korean participants that the Bush administration will now require "step-by-step reciprocity from North Korea, and will spell out how North Korea will be punished or rewarded for future conduct."

2001
27 December 2001
The Korea Atomic Energy Research Institute (KAERI) announces it has developed a technique to safely store radioactive tritium produced in heavy water nuclear reactors. KAERI has spent over 1 billion won in the past three years to develop this technology. The technique uses a thermal process to absorb hydrogen isotopes that bond with titanium. The tritium is then stored in a vacuum container that can hold up to 500 kilocuries (KCi), which is the amount of tritium to be produced from the Wŏlsŏng heavy water reactor in six months after it enters commercial operation in 2005. In addition, a one tenth scale pilot plant is currently in operation at the Wŏlsŏng nuclear power plant to process 10kg of heavy water per hour.

16-29 December 2001
Kim Hŭi Mun, director general of North Korea's Light-Water Reactor Bureau, leads a 20-member North Korean delegation to South Korea to tour nuclear power facilities. The visit is a result of the training protocol signed by
North Korea and KEDO on 20 October 2000. While in South Korea the delegation travels to Ulchin, North Kyŏngsang Province to visit South Korea's Ulchin-3 and -4 nuclear power reactors.


10 December 2001
South Korea's Ministry of National Defense announces it will inaugurate a nationwide Military Nuclear Biological and Chemical Warfare Command by March 2002. In addition, the Ministry states that it will import 27 billion won worth of equipment to detect nuclear, biological and chemical attacks or threats.


7 December 2001
Japanese officials participating in the KEDO executive board meeting in Seoul say that Hitachi Limited and Toshiba Corporation are expected to provide the turbines for the light water reactors under construction in North Korea. The firms are expected to replace General Electric of the United States, which pulled out of the deal after failing to receive indemnification for any possible future accidents at the site.


6-7 December 2001
KEDO holds an executive board meeting in Seoul to discuss the light water reactor project under way in North Korea. The meeting covers the KEDO budget for 2002, and the extension of the EU's executive membership in KEDO for another five years. The EU is expected to increase its financial contribution to 20 million ECUs per year from 15 million ECUs. KEDO expenditures for 2001 are $90.56 million.


3 December 2001
In an interview with the BBC, South Korean Unification Minister Hong Sun Yŏng says, "Several North Korean hard-

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liners are trying to enfeeble or reverse the reconciliation process [with South Korea]." He also says that North Korean hard-liners are using South Korean enhanced security measures in the wake of the terrorist attacks on 11 September 2001 as a pretext to exert their influence. Hong says there is "friction or tension between militarists and economists."


1-4 December 2001
KEDO Executive Director Charles Kartman leads a delegation to Pyongyang. Kartman meets with Kim Sŏng Su, North Korea's director of the light water reactor project. North Korea and KEDO sign the Quality Assurance and Warranties Protocol. The protocol lays the groundwork for the participation of North Korean safety personnel in the light water reactor project. The protocol also covers the electricity supply, core parts, and the initial supply of nuclear fuel. During Kartman's stay in Pyongyang, he and North Korean officials also discuss labor issues and the need to establish a separate communication network to increase construction efficiency.


29 November 2001
Kim Byŏng Ku, the chief of the Korea Atomic Energy Research Institute's Future Atomic Technology Development Bureau, is appointed as the director of the IAEA's Africa, East Asia and Pacific department.


27 November 2001
Following a meeting in San Francisco, the Trilateral Coordination and Oversight Group (TCOG) issues a statement
reiterating the commitment of the three member countries—Japan, South Korea, and the United States—to implement the Agreed Framework.


30 October 2001
During a joint press conference with Greenpeace and the Korean Federation for Environmental Movement, environmentalists urge South Koreans to reject any government plans to export nuclear waste to Russia. According to a member of the Korean Federation for Environmental Movement, exporting nuclear waste to Russia will cause South Korea to lose all justification for protesting North Korea’s import of Taiwan’s nuclear waste. Russia recently announced its interest in allowing other countries including South Korea to export nuclear waste, but the South Korean government has not made any official decision or comment on the issue.


22 October 2001
South Korea and Vietnam sign an agreement to pursue joint research projects. Under the agreement, Vietnamese and Korean scientists will conduct a study on whether a Korean-type nuclear power plant can be developed in Vietnam. In addition, South Korean experts will train high-ranking Vietnamese officials and their atomic energy related staff about the nuclear energy sector.


17 October 2001
South Korea and the IAEA sign a memorandum of understanding on the Enhanced Cooperation on Safeguards Implementation of light water reactors in South Korea. The new safeguards system is expected to be implemented starting 1 January 2002.


15-19 October 2001
The 10th South Korea-IAEA Joint Review Meeting is held in Seoul. On 17 October 2001, a Memorandum of Understanding (MOU) is signed between South Korea and the IAEA on the enhanced cooperation on safeguard implementation of light water reactors in South Korea. According to the MOU, South Korea will participate in all scheduled inspections for light water reactors while the IAEA will perform annual Physical Inventory Verification (PIV) inspections and other inspections as deemed necessary.


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12 October 2001
The Ministry of Science and Technology (MOST) announces it has signed an agreement with the International Atomic Energy Agency (IAEA) and Indonesia to cooperate in developing the technology to construct and operate a nuclear power desalination plant. Under the agreement, the three parties will collaborate on reviewing the commercial viability and technical feasibility of the construction and operation of the SMART (System-Integrated Modular Advanced Reactor), which South Korea is in the process of developing to supply energy and drinking water to Indonesia.


11-15 October 2001
The 11th IAEA-ROK Joint Review Meeting on Safeguards Implementation is held in Seoul. The meeting focuses on discussions of safeguard techniques and measures at various nuclear facilities. The two sides agree that the implementation of the LWR Enhanced Cooperation Program in January 2001 was helpful for the effectiveness and efficiency of safeguards implementation.


10 October 2001
South Korea and Thailand agree to take steps towards signing a memorandum of understanding on the cooperation of atomic energy. During the talks, both sides agree to hold a seminar on nuclear policy for Thai policy planners, and on the latest developments in technology to train Thai students in the field of atomic energy. Thai officials express interest in gaining South Korean support in building a nuclear research reactor, assistance in the uses of radioscopes and the safe uses of nuclear energy.


3 October 2001
An unnamed "South Korean government official" or "diplomatic source" reports that KEDO will be able to begin negotiations with North Korea by the end of the year on the delivery of the core reactor parts for the light water reactors under construction as part of the Agreed Framework. The agreement will have to comply with the export controls of the United States, South Korea and Japan. South Korea and Japan have already presented their draft agreements, and the United States is to present its draft agreement soon. The United States has reportedly been reluctant to establishing a protocol for the transfers of critical technology and materials since North Korea has yet to submit to full safeguards inspections.


October 2001
South Korean and American officials discuss potential projects for developing instrumentation and control (I&C)
technology for the Korean Advanced Pressurized Water Reactor (APR-1400). South Korea's nuclear industry has so far acquired nearly all the technology to manufacture PWRs except I&C systems.


**Late September 2001**

Korean officials say that the Korea Hydro and Nuclear Power Company is looking for a new site to construct at least two 1,400MW(e) nuclear reactors at Tŏk Ch'ŏn on the east coast. The new reactors will be the Advanced Power Reactor (APR-1400s) design, which was originally to be built at Shin-Wŏlsŏng. However, no formal decision has been made to build the reactors at Shin-Wŏlsŏng or Tŏk Ch'ŏn.


**Late September 2001**

Government officials admit South Korea has more likely prospects in the Indonesian and Romanian nuclear industry than competing for exports to China. According to an official at the Ministry of Commerce, Industry and Energy, South Korea does not have enough political power to influence decision makers in China to import Korean equipment and technologies. On the other hand, Indonesia has expressed interest in the Korea Atomic Energy Research Institute's (KAERI) SMART (System-Integrated Modular Advanced Reactor) PWR which is a 150MW(e) reactor used for desalination. South Korea is also preparing to participate in the construction of Romania's Cernavoda-3 PWR. The Ministry of Science and Technology has also been conducting a study for the Vietnam Atomic Energy Commission about its interest in constructing nuclear power reactors.


**21 September 2001**

Lawmakers criticize safety at nuclear power plants during the National Assembly's annual audit of the government. According to some lawmakers, a total of 41 cracks in the steam generator tubes were found in two nuclear power plants this year. In addition, various defects such as corrosion of steam generator tubes, welding flaws in pipes of the steam turbines, and cracks in the concrete foundations were found in eight of the power plants. In 2000, 94 defects were found, which is an increase from 89 in 1999 and 32 in 1998.


**15-18 September 2001**

North and South Korea hold the fifth round of ministerial talks in Seoul. The delegations are headed by North Korean Senior Cabinet Councilor Kim Ryŏng Sŏng and South Korean Unification Minister Hong Sun Yŏng. The two sides agree to resume construction of a railway connecting Seoul to Kaesŏng, North Korea, where the South pledged to finance the development of an industrial zone.

—"DPRK Delegation Reaches Seoul for Inter-Korean Ties," Xinhua News Agency, 15 September 2001, in Lexis-Nexis,

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Mid-September 2001
The Ministry of Science and Technology establishes a new Nuclear Emergency Division within the Nuclear Affairs Directorate. The decision to immediately establish this division comes after the 11 September attacks on New York and Washington, DC. Prior to the attacks, the Nuclear Emergency Division was expected to launch in October. The Nuclear Emergency Division is expected to create a database of information on physical protection and resistance from external threats, review the resistance of nuclear components to direct hits from passenger jet aircraft, and investigate whether efforts to include air crash in the design of reactors had taken into account a scenario in which a large amount of flammable jet fuel is used. In addition, the director of the Nuclear Policy and R&D Division states that the new Emergency Division will be "less concerned about threats from North Korea and more concerned about the threat from radical Islam."


14 September 2001
A 61-member delegation from KEDO and South Korea attends the groundbreaking ceremony for the light water reactors in North Korea.


12 September 2001
A South Korean Foreign Ministry official says that the groundbreaking work for the KEDO light water reactor project will begin as scheduled on 13 September 2001, but there will be no ceremonies. [Note: This report is erroneous; the groundbreaking ceremony is held on 14 September.]


11 September 2001
The World Association of Nuclear Operators (WANO) meeting to be held in Seoul is cancelled due to the 11 September attacks on the Pentagon and the World Trade Center.

10-14 September 2001
The second IAEA-Japan-Korea Joint Workshop on IAEA Safeguards is held in Japan. The purpose of the workshop is to enhance IAEA safeguard techniques and measurement methods for light water reactor (LWR) inspections. During the workshop, Korea and the IAEA discuss the possibility of expanding the program from LWRs to research reactors.

10 September 2001
A nuclear power plant condition report is submitted by the Ministry of Science and Technology revealing a total of 1,087 crack over 0.22 mm in width over the last two years. There were 329 cracks found in the Kori power plant, 279 in Ulchin, 232 in Yŏnggwang and 178 in Wŏlsŏng. According to one lawmaker, 39 of the cracks are serious and their size exceeds three meters in length and 0.5 to 4mm in width. In addition, another lawmaker accuses the Korea Plant Service and Engineering Department, which is responsible for maintenance, of negligence because of the arrest of its managing staff for embezzling 142 million won.

10 September 2001
In hearings before the South Korean National Assembly's Unification, Foreign Affairs and Trade Committee, the Ministry of Unification says that $638 million was spent on the KEDO light water reactor project between February 2000 and 31 August 2001. South Korea provided $447 million (70 percent) and Japan provided $191 million (30 percent) of the total. South Korea’s expenditures on the project have resulted in a national debt of 150 billion won in 1999, 255 billion won in 2000, and 262.5 billion won for the period between January 2001 and 31 August 2001. The total deficit from the project over this period is 667.5 billion won. The operating expenses for KEDO during 2001 are $18.36 million, with the United States, South Korea and Japan each contributing $4.56 million. US expenses for heavy fuel oil for the year are $70.32 million, and the United States has supplied North Korea with 308,000 tons of heavy fuel oil from January 2001 to 31 August 2001. The Ministry of Unification also reveals that KEDO plans to begin training North Korean technicians to operate the light water reactors under construction in North Korea. According to the Ministry, the training is to begin in February 2002, and will be divided into two steps for 529 personnel in all.

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9 September 2001
At the 7th expanded panel for a Limited Nuclear Weapons Free Zone for Northeast Asia, a group of local and foreign scholars adopt the Seoul Declaration for the creation of a nuclear free zone in Northeast Asia. Participants discuss the size and shape of the zone, the weapons categories, administrative and verification regimes, and the role of peaceful uses of nuclear energy. If participants make an agreement by next year, it will be non-binding, but it will set the stage for Northeast Asian countries to eventually agree to create a nuclear free zone.

31 August 2001
Site preparation work for the KEDO light water reactor project is completed in [Kŭmho-chigu], Shinp’o, North Korea.

29-30 August 2001
Government officials from the United States, South Korea and Japan meet in New York for a KEDO meeting to discuss nuclear exports. The meeting is held to coordinate policy on the transfer of nuclear facilities, equipment, materials and technology to North Korea under the Agreed Framework.

28 August 2001
KEDO Executive Director Charles Kartman reveals that excavation work will begin in September 2001 to prepare the foundations for the light water reactors to be constructed in North Korea under the Agreed Framework.

26 August 2001
Ulchin-1 nuclear power reactor is shut down at 9:32 AM due to jellyfish blocking the inflow of seawater to its cooling system. Ulchin-2 nuclear power reactor experiences the same problem, but is not shut down. The plant is expected to resume operations by late evening.

23 August 2001
The Korea Nuclear Fuel Company (KNFC) experiences a uranium hexafluoride (UF6) leak during a routine maintenance operation. According to the Ministry of Science and Technology (MOST), the leak was contained to the facility and did not spread into the surrounding environment. Additional inspectors are expected to investigate
the exact cause of the leak.[Note: MOST reports on 24 August that three employees of the Korea Nuclear Fuel Company were exposed to minimal amounts of radiation during the accident.]

21-25 August 2001
A high-level KEDO delegation meets with North Korean officials in Pyongyang to discuss the supply of the two light water reactors under the Agreed Framework.

20 August 2001
A team of nuclear experts from South Korea visit a heavy water plant in Romania and is expected to visit the Cernavoda nuclear power plant. The South Korean officials conclude that Romania's heavy water is suitable for nuclear reactors in Korea.

13-24 August 2001
Six North Korean nuclear specialists participate in a 12-day "Training Course on State Systems of Accounting for and Control of Nuclear Material" in Canberra and Sydney, Australia. The program also includes participants from Australia, China, South Korea, and New Zealand.

14 August 2001
South Korea and Egypt sign an agreement on the peaceful use of nuclear energy.

August 2001
The Vietnamese government briefs both US and South Korean officials on a study conducted on the feasibility of nuclear power projects in Vietnam. In addition, Vietnamese and South Korean officials meet to discuss Vietnam's nuclear plans and the sale of natural gas to South Korea.

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Late July 2001
South Korea signs a charter that formally establishes the Generation IV International Forum (GIF). The GIF was established to increase international cooperation in developing the next generation advanced reactor and fuel technologies. The charter provides the basic framework for member countries to plan and conduct collaborative research on advanced nuclear power technology. Other countries to sign the charter include the US, Argentina, Brazil, Canada, France, and the UK.


23 July 2001
South Korea and the Ukraine sign an agreement calling for cooperation in atomic power generation, nuclear safety and the production of isotopes. According to the Ministry of Science and Technology, the agreement will provide opportunities for South Korea to participate in nuclear power projects in the Ukraine.


16 July 2001
South Korean President Kim Dae Jung issues an amended presidential decree to implement and enforce the South Korean Atomic Energy Act. The changes include the establishment of a review committee for export controls, which could affect the delivery of nuclear components and technology for the light water reactors under the Agreed Framework.


15 July 2001
The Chosun Ilbo reports that between 1 January 2001 and 20 June 2001, the South Korean government borrowed W172.5 billion with an interest of W17.1 billion in order to finance its share of the LWR project in North Korea. The National Assembly has delayed legislation to levy a 3.0 percent tax on South Korean utility costs to finance the South Korean share of the project.


12 July 2001
Prime Minister Lee Han Dong approves the government's finalized new nuclear power policy. The new policy calls for the completion of four nuclear power reactors currently under construction by 2006, and four new reactors to start construction in 2004. In addition, the policy calls for the construction of a nuclear waste disposal facility by
2008 and of an interim waste storage facility by 2016. In addition, the South Korean government announces plans to build a series of new nuclear power plants in order to reduce foreign dependence on oil, and to meet projected energy demands. The new plan calls for the completion of four new reactors by 2006 (Yŏnggwang-5 and -6, and Ulchin-5 and -6), of which two are already under construction in Yŏnggwang. In addition to the four reactors, the government plans to add six more between 2006 and 2011. These include Shin-Kori-1 through -4, and Shin Wŏlsŏng-1 and -2. According to the plan, eight of the new reactors will be 1,000MW(e) pressurized water reactors (PWRs), and two will be 1,400MW(e) next generation design reactors.


5 July 2001
The Korea Atomic Energy Research Institute (KAERI) announces it has developed the world's first treatment for liver cancer using radioisotope injections. The injections are made up of radioactive material produced in the Hi-Flux Advanced Neutron Application Reactor (HANARO).


4-6 July 2001
North and South Korea hold the first direct meetings on export control issues regarding the supply of the light water reactors under the Agreed Framework. The meeting is held in Hyangsan, North Korea, and it addresses the export controls of the United States, South Korea and Japan.


1 July 2001
The South Korean government decides to unilaterally designate a site to deposit nuclear waste. The decision comes after the government's unsuccessful attempt to select a site through an application process in which the selected kun [county] or city receives financial benefits.


Early July 2001
South Korea, Japan, China, Taiwan and the US agree to jointly conduct research on the disposal of nuclear waste.


July 2001
The Sixth Conference of the Parties (COP-6) to the UN Framework Convention on Climate Change is held in Bonn. During the Conference, South Korean officials do not support Japan in including nuclear energy in the Kyoto

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Protocol's Clean Development Mechanism (CDM). South Korea and other Asian countries initially supported including nuclear energy in the CDM during an IAEA meeting last year. [Note: South Korean officials admit in August that their failure to support including nuclear energy is because it would give advanced nuclear countries like Japan an advantage in China and other emerging Asian nuclear markets.]

25 June 2001
KEDO officials say that 21 North Korean policymakers will be invited to a briefing on 28 June at the light water reactor construction site in [Kŭmho-chigu], Shinp'o, North Korea. North Korean officials requested the briefing so that they could inform their superiors on the progress of the project. Cho Kyu Hyŏng, deputy executive director of KEDO, will give the briefing.

21 June 2001
South Korean Defense Minister Kim Dong Shin meets with US Secretary of Defense Donald Rumsfeld in Washington, D.C. The two agree on a number of issues, including: the United States should maintain a long-term military presence in Korea to ensure regional stability; the United States and South Korea should strengthen military readiness against North Korea and develop an allied defense posture for the 21st century; and North Korea poses a threat with its nuclear and missile programs, and must submit to IAEA inspections. Secretary Rumsfeld also expresses US support for Kim Dae Jung's engagement policy towards North Korea. The two sides also agree that South Korea should take the lead in negotiating conventional arms control issues with North Korea, which seems contradictory to the results of the Bush review of policy towards North Korea announced on 6 June 2001.

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20 June 2001
At a luncheon hosted by the Korea Society in New York, Charles Kartman, executive director of KEDO, says that there will be no more delays in the construction of the two light water reactors in North Korea.

18 June 2001
The Korea Atomic Energy Research Institute (KAERI) announces it will sign an agreement with "CHESTEN," a Moroccan institute for peaceful atomic energy research. According to KAERI, the two institutes plan to agree on promoting the exchange of information and technology, the development of small and medium sized nuclear reactors, and the production of isotopes.

14 June 2001
Mitsubishi Heavy Industries, Limited agrees to provide Hyundai Heavy Industries Company with the manufacturing technology for pumps used in nuclear power plants. In addition, Mitsubishi plans to export equipment and dispatch a team of engineers to South Korea to offer instruction on design and manufacturing.

14 June 2001
South Korean Unification Minister Im Tong Wŏn says that South Korea has no intention of linking the supply of electricity to North Korea with the issues of nuclear weapons and ballistic missile proliferation.

9 June 2001
South Korean Minister of Foreign Affairs and Trade Han Sŭng Sŭ says he is confident that the Bush administration will abide by the Agreed Framework. Han met with White House and State Department officials last week in Washington. Han quotes officials as saying that the new target date for transferring the two light water reactors is 2008.

6 June 2001
The Ministry of Science and Technology's denial that there are no active faults near the Wŏlsŏng nuclear power plant prove to be wrong. A researcher from the Korea Institute of Geological and Mineral Resources admits providing conflicting information about the classification of an active fault. The researcher stated that there was only one earthquake in the Wŏlsŏng area in over 380,000 years, which conflicts with the research findings that

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found there had been one earthquake between 31,000 and 52,000 years ago.

4 June 2001

The Ministry of Science and Technology denies the existence of active faults near nuclear power plants in Wŏlsŏng. According to the Ministry and the Korea Electric Power Corporation (KEPCO), the sites for nuclear power plants were completed in the 1980's when there were no signs of active faults, and the Korea Institute of Geoscience and Mineral Resources did not conduct geological surveys until 1995. In addition, a researcher at the Korea Institute of Geoscience and Mineral Resources says that the possibility of the fault near Wŏlsŏng being active is 50 percent and its length is only 150 meters.

4 June 2001

Charles Kartman, executive director of KEDO, says the United States will not provide any compensation for delays in the construction of two light water reactors in North Korea. However, Kartman denies reports that the reactors will be replaced with conventional power plants.

3 June 2001

A report by the Korea Institute of Geoscience and Mineral Resources reveals active faults near the Wŏlsŏng area with three of them located within 5km of a nuclear power plant. The US Nuclear Regulatory Commission bans the construction of nuclear power plants within 8km of an active faults more than 300 meter long.

June 2001

The United States and South Korea begin a joint study on confidence-building measures (CBMs) with North Korea to address Pyongyang's ballistic missiles, WMD programs and conventional forces. The joint study team reportedly completes the first part of the study in late February 2002, with 32 items to be proposed for CBMs with North Korea.
Mid 2001
According to a *Nuclear Fuel* report, US officials believe the Bush administration will stick to its current policy of not allowing South Korea to reprocess US-originated spent fuel. The US recently released new energy policy initiatives which include pyroprocessing and other spent fuel reprocessing technologies. South Korean officials expressed interest in whether these initiatives would apply to Korea, but US officials highly doubt the Bush administration will switch from its current policy.

Mid 2001
The Korea Electric Power Corporation (KEPCO) awards contracts for the construction of Yŏnggwang-5 and -6 nuclear power reactors. ITT A-C Pump is awarded a contract to provide the main circulating water pumps, the turbine building open circulating water pumps and the fire protection systems.

31 May 2001
South Korea and Russia hold talks on cooperating in the field of atomic energy. During the talks, both sides agree to increase cooperation by exchanging experts in the production and use of radioactive isotope for medical and industrial purposes. In addition, they agree to cooperate in the technological development of advanced nuclear reactors, and radioactive waste treatment.

27-31 May 2001
The International Atomic Energy Agency (IAEA) holds a seminar in Egypt to discuss the status and near prospects of small and medium reactors from industrialized and developing countries. At the seminar, the president of the Korean Nuclear Society announces South Korea will begin construction of a 65MW(e) pilot plant in August as the final design phase of the System Integrated Modular Advanced Reactor (SMART), which is expected to be completed by June 2007. The Korea Atomic Energy Research Institute (KAERI) has been working on the SMART reactor since 1997 and the conceptual design was completed in March 1999.

29 May 2001
After the Trilateral Coordination and Oversight Group (TCOG) meeting in Honolulu, senior officials from South Korea, the United States and Japan hold an unofficial meeting to discuss North Korea policy. During the meeting,
South Korean Unification Minister Im Tong Wŏn, former US Deputy Secretary of Defense William Perry William Perry, and Ryozo Kato, who is later named the new Deputy Vice Foreign Minister of Japan, review the Bush administration's policy toward North Korea.


26 May 2001
James Kelly, US representative to the Trilateral Coordination and Oversight Group (TCOG), briefs his South Korean and Japanese counterparts on the US policy review of North Korea. He says, "We are in the final stage of the comprehensive review of US policy toward North Korea." All three delegations agree that consultation and coordinated policy is needed towards several issues regarding North Korea, including missiles, WMD, and humanitarian issues. The delegations reaffirm their commitment to the Agreed Framework, and express strong support for South Korea's engagement policy towards North Korea.


23 May 2001
Five construction companies are hoping to bid for the construction of Shin-Kori-1 through -4 nuclear power reactors, and Shin-Wŏlsŏng-1 and -2. The Korea Electric Power Corporation (KEPCO) is expected to ask for bids in January 2002 for Shin-Kori-1 and -2, in June 2002 for Shin-Wŏlsŏng-1 and -2, and in December 2002 for Shin-Kori-3 and -4. The construction companies interested in bidding include the SK Engineering & Construction (E&C) Company, the LG E&C Company, Sanwhan Enterprises, the Sambu E&C Company, and Hyundai E&C Company. The five companies are reportedly considering forming a consortium.


17 May 2001
The Wŏlsŏng-3 nuclear reactor is shut down due to a power supply failure of the turbine auxiliary system programmable logic controller. The programmable logic controller directs the lubricating oil pump and other accessories to the turbine engine.


16-18 May 2001
The 22nd US-South Korea Joint Standing Committee for Nuclear Energy Cooperation is held in Washington, DC. The

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two sides discuss policy, technical cooperation, nuclear safety cooperation and safeguards. On 16 May, the Ministry of Science and Technology (MOST) and the US Department of Energy sign the first International Nuclear Energy Research Initiative (I-NERI). The I-NERI is a program created by the Department of Energy's Office of Nuclear Energy, Science and Technology to encourage research on nuclear technology through international collaboration. The agreement with South Korea allows the two countries to fund joint project teams. The two countries are expected to issue their first call for proposals in early July.


7 May 2001
South Korean media report that the United States has decided to replace the two light-water nuclear reactors being constructed in North Korea by KEDO with thermal power stations. According to reports, President Bush has instructed Deputy Secretary of State Richard Armitage to inform South Korea and Japan of the decision during his upcoming diplomatic trip to South Korea and Japan. However, a spokesman for the South Korean government says that the United States does not have the final decision over the replacement of the light-water reactors with conventional power plants.


1-5 May 2001
A KEDO delegation visits Pyongyang to participate in "high-level expert negotiations" with North Korea. The talks are in regard to the provision of two LWRs under the Agreed Framework. It is later revealed that quality guarantee protocols are covered in the talks, and that North Korea agrees it will be the responsible party for operating the reactors, and that it will accept responsibility for any accidents at the site.


1 May 2001
KEDO’s Executive Board names Charles Kartman as the new executive director of KEDO.


1 May 2001
Ulchin-1 and -2 nuclear power reactors are temporarily shut down at 1:40 and 4:53 AM due to congregations of

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shrimp blocking the generators. According to the Korea Electric Power Corporation the reactors will resume operations following a clean-up, and no other accidents have been reported. Both power plants were shut down in 1997 on two and three occasions due to the same problem of shrimp blocking the generators.


Late April 2001
At the annual Korea Atomic Industrial Forum (KAIF) in Seoul, Korean officials site economic factors as the main decision behind constructing PWRs rather than Atomic Energy of Canada, Limited’s CANDU reactors. According to officials at KAIF, the Ministry of Commerce, Industry and Energy and utility companies conducted a three-year study and concluded that it was more efficient to build more Korean Standard Nuclear Plants. In addition, heavy water reactors cost more to maintain, and CANDU units generate more spent fuel than the PWRs.


20 April 2001
The International Energy Agency (IEA) approves South Korea’s accession to the organization. Membership to the IEA allows South Korea to work together with other countries to control oil supplies during emergencies, share energy information, coordinate energy policies and cooperate in the development of rational energy programs.


19 April 2001
Russia’s Minister of Atomic Energy announces that Russia plans to pursue a program to reprocess South Korea’s nuclear waste, including spent fuel. According to the Minister, Russia’s lower house passed a bill allowing the import of nuclear waste from other countries. Russia hopes to obtain contracts with South Korea, Japan and Taiwan after the bill is passed in the federal assembly.


9 April 2001
The Ministry of Science and Technology informs the Korea Hydro and Nuclear Power Company of the nuclear power plant blackout in Taiwan. In addition, MOST warns KHNP of the dangers of a blackout and orders the Yŏnggwang and Kori stations to take immediate action to assure that the emergency diesel generators are operating in case of a blackout, and to assure that they have alternative supplies of AC power.


2 April 2001
The Korea Hydro and Nuclear Power Company (KHNP) is created as a subsidiary of the Korea Electric Power

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CNS

Corporation (KEPCO). KHNP manages and oversees all nuclear power plants in South Korea.

30 March 2001
Korean officials announce it will build its first Advanced Pressurized Water Reactor (APR) at Shin-Kori-3 and -4. The Korea Electric Power Corporation (KEPCO) plans to build four 1,400MW(e) APRs by 2014. The APR was originally named the Korea Next Generation Reactor (KNGR) and was intended to be a 1,300MW(e) PWR. [Note: KEPCO offers The Korea Heavy Industry and Construction Company (Hanjung) and CE a formal invitation to bid to supply the reactors for Shin-Kori-1 and -2 in April 2001. A formal contract is expected to be signed later this year.]

28 March 2001
Chang Sŏn Sŏp, head of South Korea's Office of Planning for the Light Water Reactor Project, says that replacing the light water nuclear reactors with thermoelectric power plants would be impractical. He says, "There would be difficulties in revising the Agreed Framework and the replacement would not be of help in reducing the construction period or curtailing of costs."

27 March 2001
A 15-member delegation comprised of officials from the Ministry of Commerce, Industry and Energy, the Korea Electric Power Corporation, the Korea Power Engineering Company, and Hyundai Industries Corporation leave to have talks with officials from China's nuclear sector. The delegation plans to hold talks on how Korean companies can participate in the construction of nuclear power plants in China. According to the Ministry of Commerce, Industry and Energy, Korean companies are considering forming a consortium with Westinghouse Electric Company to enter the Chinese market.

26 March 2001
The Ministry of Commerce, Industry and Energy announces the government's plan to invest $179 million this year to enhance technology for nuclear power generation. The plan is an eight-year project consisting of eight areas including the development of nuclear design code systems, code systems for nuclear safety, and environmental protection measures for the soil around nuclear waste sites.

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22 March 2001
Rumania's Foreign Minister requests Korean companies to participate in the construction of nuclear plants in Rumania during a three-day visit to Seoul. Representatives from Rumania met with South Korean nuclear experts and visited nuclear power plants in Wŏlsŏng and Yŏnggwang earlier this month.

16 March 2001
South Korea and the Czech Republic sign an agreement to cooperate in the field of atomic energy and to share manufacturing technology and information on the use of radioactive isotopes for medical purposes.

15 March 2001
The Korea Atomic Energy Research Institute (KAERI) announces it has developed a new technology to lessen the effects of an earthquake on nuclear reactors.

13 March 2001
The head of the North Korean delegation for inter-ministerial talks, which are scheduled to begin today in Seoul, calls his counterpart in Seoul to inform him that North Korea will have to postpone the talks. Chŏn Kŭm Chin, the North Korean representative gives no reason for the sudden postponement, but some speculate the reason may be health problems for Chŏn, the recent summit between Kim Dae Jung and George W. Bush, or the perceived US hard-line policy towards North Korea.

10-13 March 2001
A KEDO delegation travels to Pyongyang "to participate in high-level negotiations" with North Korea officials regarding the light water reactor project.
9 March 2001
KEPCO, the main contractor for the KEDO light water reactor project, announces that the Dong Ah Construction Industrial Company will no longer participate in the project, thus leaving its 20 percent share of the construction project to be divided among the other three companies subcontracted for the project.

8 March 2001
The Atomic Energy Safety Commission approves the Korea Atomic Energy Research Institute’s (KAERI) plan to process and supply nuclear fuel for the Hi-Flux Advanced Neutron Application Reactor (HANARO). In addition, KAERI will also produce 45 bundles a year of fuel rods for the HANARO research reactor and 420kg of mixed powder used in making fuel rods for exports.

2 March 2001
The Ministry of Commerce, Industry and Energy decides to extend the application period for local governments interested in hosting a nuclear waste site by four months. The decision comes after no applications are received at the end of the original deadline. According to MOCIE, if no applications are received the Korea Electric Power Corporation (KEPCO) will select a site. KEPCO has been selected as the government’s contractor to build the nuclear waste site.

28 February 2001
The Ministry of Commerce, Industry and Energy (MOCIE) announces that no applications have been received from local governments to house the nation’s first nuclear waste site. The government has been looking for nuclear waste disposal sites since June 2000 and has offered a subsidy of $234.4 million to the local government chosen to house the waste.

27 February 2001
South Korea and Russia make a joint statement on their support of the nonproliferation of weapons of mass destruction, and agree to uphold the 1972 Anti-Ballistic Missile Treaty. This statement is viewed by many as South Korea and Russia’s opposition to the proposed US missile defense system. South Korean officials deny these allegations.
—"Washington Downplays Significance of Joint S Korea-Russia Statement," Agence France Presse, 28 February
19-21 February 2001
Charles Kartman, US special envoy for Korean affairs, meets with South Korean officials in Seoul to discuss various issues. While in Seoul, Kartman meets with Chan Sun Sup, head of South Korea’s Office of Planning for the Light Water Reactor Project. The two reportedly discuss recent developments in the KEDO project, including the employment of 250 Uzbeks to work on the project beginning in March.

3 February 2001
Desaix Anderson, director general of KEDO, says that construction of the two light water nuclear reactors in North Korea would be continued even though the Bush administration has pursued the replacement of the light water reactors with conventional power plants. He dismisses media reports of replacing one LWR with a thermal plant.

1 February 2001
KEDO issues an Authorization to Proceed allowing KEPCO to commence negotiations with the Doosan Heavy Industries and Construction Company to begin preliminary work on the turbine generators for the KEDO light water reactor project. [Note: the General Electric Company (GE) was to be the supplier of the turbine generators, but after failing to receive liability guarantees from the US Congress, GE pulled out of the KEDO project.]

19 January 2001
The Ministry of Science and Technology and the Canadian Nuclear Safety Commission sign an Exchange of Notes on the transfer of a tritium removal facility. The Korea Electric Power Corporation (KEPCO) plans to construct a tritium removal facility at the Wŏlsŏng nuclear power plant site to extract tritium, which builds up in the heavy water moderator and coolant of the CANDU reactors.

18 January 2001
South Korea and Brazil sign an agreement on cooperation in the areas of nuclear power, information technology and biological science. In addition, the two countries agree to increase bilateral trade and to cooperate on international issues.

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16 January 2001
Ulchin-2 nuclear power reactor temporarily shuts down due to a complete closing off of the steam circuit belt.
According to the Ministry of Science and Technology, no radioactive leaks are reported and Ulchin-2 is expected to resume operations on 17 January.

16 January 2001
The Ministry of Commerce, Industry and Energy holds a panel meeting to discuss ways to promote the export of the Korean Standard Nuclear Power (KSNP) plant. The panel decides to form a consultative committee of experts in the nuclear and construction field to search for new contracts to build nuclear power plants in other countries, especially China. The panel also encourages domestic companies such as the Korea Electric Power Corporation (KEPCO) to form a consortium with Westinghouse. In addition, the committee plans to help domestic companies export technology related to plant operation, equipment, fuel, plant design, repair and maintenance.

13 January 2001
Song Min Sun, director general of the North American Affairs Bureau in South Korea’s Ministry of Foreign Affairs and Trade, says the idea of replacing a nuclear power plant, currently under construction in North Korea, with a thermal plant is unworkable "politically, economically and technologically." Song says, "Once, we reviewed the idea, but reached the conclusion that it is unworkable because of underlying problems regarding the replacement." Noting that Seoul is set to provide 70 percent of the total construction cost reaching $4.6 billion, Song said that it should have the key voice in any possible change in the agreement.

11 January 2001
The Ministry of Science and Technology holds a meeting to review national inspections of nuclear facilities in 2000 in which 148 inspections were performed at 32 nuclear facilities. The meeting concludes that all facilities are in compliance with the safeguard plan approved by the Ministry of Science and Technology.

11 January 2001
The Ministry of Commerce, Industry and Energy (MOCIE) announces that South Korea's nuclear power plants operated at the highest rate in history during the year 2000 at 90.4%. Prior to the year 2000, the highest operating rate was in 1998 at 90.2%. The 16 nuclear power plants account for 40.9% of the total electricity generated in South Korea.
10 January 2001

A South Korean official announces that construction of two nuclear power plants under the Agreed Framework is likely to be further delayed due to contractual and funding problems. The first reactor is supposed to be built by 2003 and the second by 2004. General Electric Company of the US backed out of a deal to supply turbine generators for the project because the supply contract did not contain compensation guarantees in case of plant accidents. KEDO has now decided to award the power turbine contract to Japan's Hitachi-Toshiba consortium. According to the official, the contract worth $100 million will be signed within six months. The official also says that work on site preparation has almost been completed and reactor construction work is expected to begin in the second half of 2001. The contract with the Japanese consortium would increase the pace of planning and constructing the nuclear power plants. However, according to the official, some South Korean lawmakers have opposed the Japanese firms' participation, saying it will only benefit Japan's economy, while turning the North Korean power stations into a Japanese model instead of Korean. Other South Korean lawmakers refute the contention, stressing that Japanese earnings from the contract will only be $250 million as compared to a $1 billion contribution to the project by Japan.


5 January 2001

The Chosun Ilbo reports that at the two Trilateral Coordination and Oversight Group (TCOG) meetings held on 30 March 2000 and 26 June 2000, the US delegation reportedly proposed to build six standard power plants instead of one of two light water nuclear reactors, as specified under the Agreed Framework. According to the documents produced from the TCOG meeting, the US delegation suggested that the proposal would help ease North Korean power shortages in a shorter time frame and at a much lower cost. However, according to the Chosun Ilbo, the South Korean government disagreed with the proposal saying that even though electricity supply to North Korea is a key issue of ongoing North-South dialogue, it cannot be mixed with the conditions of the Agreed Framework. The United States stated its dissatisfaction with South Korea's attempt to support North Korea's electricity generating capacity on its own, disregarding the Agreed Framework. The US contention is that such a move will aggravate the US position at the negotiation table with North Korea.


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17 December 2000
The Ministry of Commerce, Industry and Energy announces that it has decided to use Korean Standard Nuclear Plants (KSNP) for the Wŏlsŏng-5 and -6 nuclear reactors, which are scheduled to be built by 2009 and 2010 respectively.

22 December 2000
KEPCO signs a contract with Hyundai Engineering and Construction, Donga Construction, Daewoo Corporation and Korea Heavy Industries for the secondary stages of construction for the two KEDO light water reactors in North Korea. The four firms are contracted to complete construction of the reactors, turbines, generators and other related facilities.

19 December 2000
President Kim Dae Jung says at a meeting of the National Science and Technology Council that he supports research programs to develop alternative sources of energy such as nuclear fusion.

11 December 2000
Uzbekistan becomes a member of KEDO.

9 December 2000
Officials say that South Korea and the Korean Peninsula Energy Development Organization (KEDO) have held talks with Uzbekistan about joining KEDO. KEDO officials are interested in having Uzbekistan supply the uranium for the light water reactors in North Korea.

4 December 2000
The South Korean government decides to push ahead with an inter-Korean nuclear cooperation project for peaceful uses that include the establishment of a nuclear cooperation committee and mutual inspections.
According to government officials, the idea came about "from the perception that a reconciliatory and cooperative

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29 November 2000

The Korea Electric Power Corporation (KEPCO) announces that Kori-1 nuclear power plant has generated over one trillion kilowatt hours of electricity since it began operations 23 years ago. The one trillion kilowatt hours accounts for 34.5% of all electricity generated in South Korea since June 1977.


22 November 2000

An employee of the Korean Inspection and Engineering Corporation suffers exposure to fatal levels of radiation while conducting nondestructive testing in his office. According to investigations, the accident was caused by the employee’s failure to use proper safety measures. [Note: A task force from the Ministry of Science and Technology collects all radioactive substances and seals all the radioisotopes on 24 November 2000. The materials are sent to the Korea Institute of Nuclear Safety.]


10-15 November 2000

South Korea attends the first meeting of the Forum for Nuclear Cooperation in Asia (FNCA) held in Bangkok. Participating countries include South Korea, Japan, Australia, China, Indonesia, Malaysia, the Philippines, Thailand and Vietnam. During the meeting, member countries draft a joint communiqué for increased regional nuclear cooperation in seven fields. The fields include utilization of research reactors, nuclear energy for agricultural development, nuclear energy for medical science, public information on nuclear energy, radioactive waste management, nuclear safety, and human resources development.


10 November 2000

South Korea and Vietnam sign a cooperation agreement on the development of nuclear energy. According to the agreement, the two countries will cooperate in developing nuclear power, operating a research reactor in Vietnam, applying nuclear and radiation technology, and establishing nuclear law.


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6-8 November 2000
A DUPIC (Direct Use of Spent PWR Fuel in CANDU Reactors) Project Review Meeting is held in South Korea. Participants discuss the termination of the research and development of DUPIC fuel characterization, the revision of the joint cooperation agreement between the US and South Korea that expires in March 2002, research and development activities, DUPIC safeguards beyond 2002, and IAEA support programs.


November 2000
The Korea Institute of Nuclear Safety (KINS) starts a new research project to update and strengthen safety regulations for Korea's four CANDU-6 nuclear power reactors. In addition, the Ministry of Science and Technology and KINS are requiring these reactors to be shut down for routine inspections and maintenance every 20 months. Officials state that after research is completed in 2002, they hope to develop a complete set of performance indicators for CANDU reactors.


29 October-2 November 2000
The 12th Pacific Basin Nuclear Conference (PBNC) organized by the Korea Atomic Industry Forum (KAIF) and the Korea Nuclear Society (KSN) is held in Seoul. The speakers discuss the KEDO project, new reactor designs, research and development programs in Korea, new construction, sustainable development, and nonproliferation issues.


31 October 2000
Woori Technology Company says it will sign a technology agreement with Siemens on nuclear power generation control systems on 1 November 2000.


27 October 2000
South Korean lawmakers criticize the government's loose safety control of nuclear power plants and facilities during a National Assembly audit. According to some lawmakers, a government report revealed more than 40
fragments of broken couplings at a reactor in Ulchin in 1998. In May 2000, another 116 coupling fragments were found in the same reactor's steam generating machine. Another lawmaker accuses the Korea Institute for Nuclear Safety and the Korea Atomic Energy Research Institute (KAERI) of failing to keep track of sealed containers of radioactive isotopes that are hazardous to humans and the environment if handled improperly. In addition, lawmakers accuse the government of importing scrap metal contaminated with radiation to build schools and apartments in 1983.

27 October 2000
Several South Korean government officials propose building a radioactive waste disposal site in North Korea in return for energy aid. South Korea will soon run out of nuclear waste storage and the government has been trying to select a site to build a waste facility. According to some government officials, a nuclear waste disposal site in North Korea "would be a good example of mutual interests served between the two Koreas."

23 October-10 November 2000
The Sixth Nuclear Cooperation Policy Seminar is held for South Korean nuclear experts in Washington, DC. Attendees include officials from the Ministry of Science and Technology, the Korea Institute of Nuclear Safety (KINS), and the Korea Atomic Energy Research Institute (KAERI). The seminar covers an overview of the formation of nonproliferation policy, the international nonproliferation regime, the US nuclear export control regime, US views on nuclear fuel cycle technologies, US nuclear technology policy and trends, and international nuclear cooperation. The seminar is coordinated by Energy Resources International, Inc, and by Bengelsdorf, McGoldrick and Associates.

22 October 2000
The Ministry of Science and Technology (MOST) announces its plan to promote the establishment of the secretariat of the International Atomic Energy Agency's Regional Cooperation in Asia (RCA) in Seoul. South Korean government officials requested having the RCA secretariat established in Seoul during an IAEA meeting held in India in March 2000. MOST officials state they are willing to transfer technology to other Asian nations and lead projects worth $5 million if Seoul is chosen as the new headquarters.

22 October 2000
The Ministry of Commerce, Industry and Energy announces it will begin to develop the next generation Korean
standard nuclear power plant capable of producing 1.4 million kilowatts of electric power by the end of next year. The project to develop the next generation Korean standard nuclear power plant began in 1992 and its progress has recently been evaluated by the Korea Electric Power Corporation (KEPCO), the Nuclear Power Institute, the Safety Technology Institute and the New Nuclear Reactor Center. The new power plant is expected to be built and completed by 2010.


16-18 October 2000
The Ninth IAEA-ROK Joint Review Meeting on Safeguards Implementation is held in Vienna. IAEA and South Korean officials discuss strengthening safeguards, safeguard implementation, inspection results of 1999, and review the status of facility attachments (FAs) and design information questionnaires (DIQs).


16 October 2000
During a plenary session of the National Assembly's Committee on Unification, Foreign Affairs and Trade, Kim Dŏk Ryong (Grand National Party) says that South Korea and the US secretly had discussed the possibility of converting one of the light water reactors for North Korea into a thermal power plant. According to Kim, the US and South Korea considered this option in May as a solution to the delay in building the two light water reactors. In addition, he says that the two countries discussed the possibility of having South Korea supply power directly to the North, but this idea was rejected by South Korean officials.


Mid October 2000
The South Korean government asks Atomic Energy of Canada, Limited (AECL) to resubmit its bid to construct heavy water reactors for the Wŏlsŏng-5 and -6 nuclear power plants. According to the Ministry of Commerce, Industry and Energy, AECL submitted a bid for $3 billion, which is $370 million less than the cost to construct a standard light water reactor. The government is reportedly having difficulties deciding between the Canadian heavy water reactor and the standard light water reactor design.


October 2000
South Korean officials explain to the US Nuclear Regulatory Commission (NRC) that they are putting more emphasis on nuclear safety and increasing government funding for both the Ministry of Science and Technology's (MOST) safety directorate and the Korea Institute for Nuclear Safety (KINS). Since 1997, the NRC has been worried about nuclear safety in South Korea and other Asian countries.

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20 September 2000
The Board of Audit and Inspection presents a report to an opposition lawmaker on the number of technicians exposed to radiation at South Korea’s nuclear power plants. According to the report, approximately 310 technicians were exposed to radiation at the Yŏnggwang power plant in 1998. These technicians were exposed to a total of 41 rem of radiation while repairing three broken pins in the control rod tube. According to the Korea Electric Power Corporation (KEPCO) the level of radiation exposed to power plant workers is less than the amount most people are exposed to in one year. In addition, the report notes that 14 nuclear power plants across the country were shut down 52 times between 1997 and June 2000 due to accidents. According to the report, KEPCO failed to repair programming errors in the Wŏlsŏng-2 nuclear reactor in 1983 and 1986 that caused the generator to break down twice.


8 September 2000
South Korea and Russia agree to cooperate in the field of atomic energy and promote the exchange of technology and information on next generation liquid metal reactors.


Early September 2000
The Ministry of Science and Technology (MOST) announces that regulators and safety consultants have completed establishing the guidelines for mandatory periodic safety reviews for all nuclear power plants in South Korea. MOST plans to include the details of its periodic safety program in South Korea’s second national report to the International Nuclear Safety Convention, which will be filed with the IAEA in 2001. [Note: MOST and the Korean Institute of Nuclear Safety have been consulting European, Japanese and the US Nuclear Regulatory Commission for the past three years on the details of the periodic safety program.]


September 2000
South Korea and Russia hold talks on ways to enhance cooperation in atomic energy. During the talks, Russia expresses an interest in constructing nuclear power plants in China, Japan and South Korea.


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September 2000
The South Korean government says it will spend 27 billion won to develop the next generation of super-conduction nuclear fusion research equipment over the next year. South Korea has spent 73.6 billion won on this project since 1995 when it designated nuclear fusion as one of the nation’s top priority science projects.


22 August 2000
The Ministry of Commerce, Industry and Energy (MOCIE) announces it has chosen the Korean Standard rather than CANDU reactors for Shin-Kori-1 and -2 nuclear reactors. The Korea Electric Power Corporation (KEPCO) will hold a meeting in late August to confirm the decision. Kori-1 and -2 reactors are expected to be completed by 2009. In addition, MOCIE states that the reactor design for Shin-Wolsong-1 and -2 will be made by the end of the year.


22 August 2000
The Korea Institute of Science Technology Evaluation and Planning announces That South Korea will need fourth generation nuclear reactors as an energy source in 20 years. South Korea, the US, Japan, France, Brazil, South Africa, the UK, Germany and the IAEA have been cooperating together to develop fourth generation reactors and they are expected to come online around 2020. Partner countries are expected to send representatives to South Korea on 28 August to discuss nuclear energy policies and other issues related to fourth generation nuclear reactors.


Mid August 2000
The Korea Electric Power Corporation (KEPCO) offers to purchase 1,000 metric tons of heavy water from Romania's Romag Prod Heavy Water Factory. Discussions regarding the purchase have been ongoing since mid July.


9-15 August 2000
The first Japan-Korea joint workshop on IAEA safeguards is held at the Korean Atomic Energy Research Institute in Taejŏn. The workshop covers a combination of theoretical and practical exercises on environmental sampling analysis, inspection techniques, spent fuel measurement and measuring nuclear materials. A similar workshop is planned to be held in Japan next year.


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3 August 2000
The Ministry of Commerce, Industry and Energy says that the five affiliate companies of the Korea Electric Power Corporation (KEPCO) to be privatized will be sold through stock offerings. The government plans to privatize the energy sector by creating spin-off firms from KEPCO with the exception of nuclear power plants.

1 August 2000
South Korea and Japan sign an agreement on nuclear safeguards. Under the agreement, the two countries agree to increase nuclear cooperation, hold annual meetings on nuclear safety and emergency management technology, and to exchange nuclear safety specialists.

14 July 2000
According to South Korean news reports, the South Korean government is delaying the announcement of the model type for four new nuclear power plants out of fear of a possible trade dispute with Canada. Officials from the Ministry of Commerce, Industry and Energy stated that the Korean Standard Nuclear Power (KSNP) plant will most likely be chosen for Shin-Kori-1 and -2 nuclear reactors. However, the decision has not been made for Shin-Wŏlsŏng-1 and -2 nuclear reactors. According to the report, the Korea Electric Power Corporation (KEPCO) will make a decision based solely on efficiency, but the government has not yet decided which model to choose due to lobbying by those who support the Canadian CANDU reactor.

13 July 2000
The Korea Electric Power Corporation (KEPCO) announces that subcontractors have agreed to let Hyundai Engineering and Construction Company take half of the third phase of constructing the two light water reactors in North Korea. Daewoo Engineering and Construction Company, Dong Ah Construction Industrial Company and Korea Heavy Industries and Construction (Hanjung) agreed to take a 5% reduction from their second phase share while Hyundai's portion will increase 15%.

11-12 July 2000
The Ministry of Commerce, Industry and Energy holds the government's first public forum for a nuclear waste site. The two-day presentation is held in Taejŏn and is attended by 31 officials from 24 local governments and organizations. The government plans to hold presentations at every local government that expresses interest in becoming a nuclear waste site.

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26-28 June 2000

The 21st Joint Standing Committee on Nuclear Energy Cooperation (JSCNEC) between the US and South Korea and the US is held in South Korea. The two sides discuss nuclear policy, and cooperation in the areas of technology and safeguards. Export controls for the KEDO light water reactor project is discussed for the first time during a JSCNEC meeting. Officials from South Korea and the US discuss export control requirements and regulations, and agree to mutual cooperation on export control issues.


13-15 June 2000

North Korea’s National Defense Commission Chairman Kim Jong II and South Korean President Kim Dae Jung meet in Pyongyang to discuss various bilateral issues. On 14 June, the two leaders sign an agreement, the "Joint North-South Declaration," by which they pledge to work for reconciliation and eventual reunification of the two countries. The agreement contains a clause by which the two Koreas agree not to engage in offensive military operations against each other. Upon returning to Seoul following the historic talks, Kim Dae Jung announces that he raised the issue of international concerns over North Korea’s nuclear and missile programs. According to South Korean government spokesman Park Chun Yong, President Kim Dae Jung, in a 16 June telephone conversation with US President Bill Clinton says that he comprehensively discussed the North Korean weapons development program with North Korean leader Kim Jong II during their summit in Pyongyang. Park says, "President Kim told President Clinton that he strongly urged the North Korean leader to successfully conclude negotiations with the United States on North Korea’s nuclear and missile programs, and that leaving these weapon issues unsettled could impede regional peace and cooperation."


1 June 2000

Hyundai Engineering and Construction Company reaffirms its intentions to be the main contractor for the third stage of the light water reactor project in North Korea. However, company officials are showing the willingness to discuss related building issues with the Daewoo Engineering and Construction Company, the Dong Ah Construction Industrial Company, and Korea Heavy Industries and Construction (Hanjung). The companies have been unable to agree upon how to divide the terms of the project.

―Yonhap News Agency, 1 June 2000, in "Hyundai to Continue 3d Part of DPRK Reactor Project Alone," FBIS

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22 May 2000
Twenty liters of cooling water leaks from the Wŏlsŏng-1 pressurized heavy water reactor while technicians carry out an inspection of the joints in the feed-water pumps. The leak exposes two technicians to moderate levels of radiation. According to the Korea Institute of Nuclear Safety, the technicians were exposed to 4.59 mSv of radiation which is equivalent to 15 chest x-rays. During the inspections, no other problems are found with the nuclear power plant.


15 May 2000
An official from KEPCO, the primary contractor for the KEDO light water reactor project, announces that the current consortium of South Korean subcontractors for the project will be disbanded unless an agreement on how to divide the project is reached by the end of June. The statement is in response to a complaint filed by Daewoo Construction on the same day to the Fair Trade Commission claiming that Hyundai Engineering and Construction is attempting to monopolize the third stage of construction. [Note: In 1996, Hyundai, Donga, Daewoo, and Korea Heavy Industries agreed to divide the light water reactor project 35%, 25%, 20%, and 20% respectively.]


19 April 2000
Officials from South Korea's Ministry of Science and Technology (MOST) meet with the Nuclear Regulatory Commission's (NRC) Commissioner to discuss issues within the US-South Korean agreement on nuclear cooperation. The bilateral agreement expires this year and the two countries will hold discussions in June to extend the agreement. During the talks, MOST officials explain South Korea's plans to develop a set of standards and procedures for extending licenses that differ from formal NRC licensing procedures. In addition, Korean officials request more information on changes to the US regulatory environment.


19 April 2000
The Ministry of Science and Technology reveals a new plan to promote 154 projects in 26 categories in order to develop new technologies and increase nuclear safety. The government plans to invest 27 billion won for nuclear reactor research, 24.5 billion won for safety research, 15 billion won for nuclear fuel, and 18.4 billion won for radioactive waste disposal. In addition, 17.4 billion won will be allocated for radioactive isotope research.
10 April 2000
Ulchin-1 nuclear power reactor is temporarily shut down due to damage to power-transmission cables, which was cause by a forest fire in the area. According to officials, no damage is reported to the nuclear reactors.

1-4 April 2000
KEDO and North Korean officials meet in Hyangsan, North Korea to discuss a protocol on the training of North Korean engineers who will operate the two light water reactors once they are completed. KEDO reportedly wants the engineers trained in South Korea, but North Korea insists the training take place in any country other than South Korea. According to a KEDO official, North Korea agrees to comply with KEDO’s decision to conduct the training at a South Korean nuclear plant.

30-31 March 2000
The US, Japan and South Korea hold a meeting of the Trilateral Coordination and Oversight Group (TCOG) in Tokyo to coordinate their policies on North Korea. According to reports, the US side suggests that one of the LWRs being supplied to North Korea under the Agreed Framework should be replaced with six conventional power plants. However, the South Korean delegation disagrees with the proposal.

22-24 March 2000
The Seventh Korea-Japan Atomic Power Council meeting is held in Seoul. Participants discuss increasing nuclear safety in Asia and agree to jointly address the North Korea nuclear issue. The two sides agree to increase bilateral cooperation in the nuclear energy industry.

Related content is available on the website for the Nuclear Threat Initiative, www.nti.org.

17 March 2000
A DUPIC (Direct Use of Spent PWR Fuel in CANDU Reactors) open-lab ceremony is held at the DUPIC Fuel Development Facility for over 50 participants from South Korea and other countries. During the ceremony, a demonstration is made of the remote fabrication process of DUPIC fuel.

9 March 2000
South Korean President Kim Dae Jung delivers his "Berlin Declaration," which proposes governmental talks between the two Koreas, and aims to increase inter-Korean exchanges.

8 March 2000
A professor at Inha University announces he has developed a pilot generator called the Ocean Thermal Energy Converter (OTEC) using high temperature water released from nuclear power plants and low-temperature water from the deep sea. The Ministry of Science and Technology (MOST) has been supporting this research and hopes to commercialize the technology with water discharged from the Kori and Wŏlsŏng nuclear power plants.

3 March 2000
The Yŏnggwang-3 nuclear power plant is temporarily shut down due to a leak in the coolant from the flow meter.

28 February 2000
The Korea Electric Power Corporation (KEPCO) begins its two day seminar for 200 companies bidding to supply auxiliary components for the two light water reactors in North Korea. The companies bidding are all from member countries of the Korea Peninsula Energy Development Organization (KEDO).

Related content is available on the website for the Nuclear Threat Initiative, www.nti.org.
28 February 2000
The Ministry of Commerce, Industry and Energy announces that South Korea's nuclear power operation rate is 88.2%, which is the second highest in the world. [Note: The average rate for countries operating five or more nuclear power plants is reportedly 75.6%. Belgium has the highest operation rate in the world with 93%.] —"Korea's Nuclear Power Operation Rate World's 2nd Highest," Asia Pulse, 28 February 2000, in Lexis-Nexis, web.lexis-nexis.com.

24 February 2000

24 February 2000
A ceremony is held for the completion of the Ulchin-4 nuclear power plant. The Ulchin-4 plant has a capacity of 1,000MW(e) and is South Korea's second Korean-type pressurized light water reactor (PWR). —Chosun Ilbo, 23 February 2000, in "ROK Ulchin No. 4 Nuclear Reactor Completed," FBIS Document ID: KPP20000223000067; Ch’oi Yun P’il, "Ulchin Wŏnjŏn 4 Hogi Chun’gong," Hankook Ilbo, 25 February 2000, p. 2, in KINDS, www.kinds.or.kr.

15 February 2000

8 February 2000
The Korea Electric Power Corporation (KEPCO) says it is making a bid to export its Korea Standard Nuclear Plants to China through a consortium that includes ABB-CE. The bid is for the construction of two 1,000MW(e) nuclear plants in China worth $3 billion. If the consortium is awarded the contract, KEPCO will design and manage the project while supplying auxiliary facilities, and ABB-CE will build the main reactor. —Korea Times, 9 February 2000, in "Korea Electric Bids to Export Nuclear Plants to China," FBIS Document ID: KPP20000209000086; Lee Myŏng Chae, "Hanjŏn Han' gukhyŏngwŏnjŏn Chunggug'e Such'ul Ch’ujin," Donga Ilbo, 10 February 2000, p. 37, in KINDS, www.kinds.or.kr.

Related content is available on the website for the Nuclear Threat Initiative, www.nti.org.
7 February 2000

The Yŏnggwang-4 nuclear power plant is temporarily shut down due to a malfunction of an arithmetic unit that detects the position of the control rods. The malfunction caused the 27th control rod to be misplaced. Yŏnggwang-4 resumes operations later in the afternoon.


February 2000

According to a Nuclear Fuel report, the British government decided last fall to support British Nuclear Fuels (BNFL) efforts to reprocess spent fuel from South Korea's nuclear power reactors. A study done by BNFL's consultants concluded that South Korea was a potential major customer for both reprocessing and MOX fabrication by BNFL's Sellafield Mixed Oxide Fuel Plant. According to the report, South Korea is interested in considering reprocessing, but must first gain approval from the US to reprocess any US-origin spent fuel.


Late January 2000

The Ministry of Commerce, Industry and Energy revises plans to privatize the utility industry under the guidance of a Seoul National University professor who had assisted in preparing the original restructuring plan. Under the new plan, the government is considering spinning off the Korea Electric Power Corporation's power plants into separate subsidiaries and listing them on the stock exchange. A revised restructuring plan is expected to be released in March at the earliest.


31 January 2000

The Technology Center for Nuclear Control and the Argentine-Brazilian Agency for Accounting and Control of Nuclear Materials (ABACC) sign a technology cooperation agreement.


30 January 2000

The Korea Atomic Energy Research Institute announces it has developed a robot to be used in South Korea's nuclear power industry. The robots are expected to be used starting in March or April for maintenance and other repair duties at nuclear power plants.


Related content is available on the website for the Nuclear Threat Initiative, www.nti.org.
28 January 2000
Researchers at the Korea Atomic Energy Research Institute announce that they have developed an agent that chemically dissolves radioactive material and can be used to clean up radioactive contamination. The agent is made from a mixture of clay, ion-exchange materials and an unspecified water-soluble polymer and has reportedly been patented in South Korea and the UK.

24-26 January 2000
The Sixteenth ROK-Canada Joint Coordinating Committee Meeting on Nuclear Energy is held in Ottawa, Canada.
The two sides discuss issues related to bilateral nuclear cooperation, international nonproliferation and safety.

21 January 2000
The Fifth Annual Permanent Coordinating Group (PCG) Meeting between the Ministry of Science and Technology (MOST) and the US Department of Energy is held in Seoul. The delegations agree in principle to extend the arrangement for PCG with minor changes in intellectual property rights and a new action sheet on physical protection.

20 January 2000
The Swiss firm Asea Brown Boveri AG (ABB) announces that it recently signed contracts with Korea Heavy Industries and Construction Co., Ltd. and Korea Power Engineering Corporation to deliver $200 million worth of equipment and services for the KEDO light water reactor project.

20 January 2000
Chinese Defense Minister Chi Haotian tells South Korean Defense Minister Cho Sŏng T'ae that Beijing fully supports efforts to make the Korean peninsula free of nuclear weapons, and that China is actively working towards that end. Chi, meeting with his South Korean counterpart in Seoul, is the first Chinese Defense Minister to visit South Korea since its founding in 1948. Chi is in Seoul 19-23 January.

19 January 2000
The Korea Institute for National Unification (KINU) publishes a report concluding that retired South Korean generals favor possessing nuclear weapons or at least having the capability of developing them after reunification. The findings are based on a survey conducted by KINU in April 1999 of 300 retired generals. According to one of the authors of the report, the results represent fears amongst Koreans of a military build up by Japan and China.

13 January 2000
The Ministry of Commerce, Industry and Energy announces the fifth power supply plan through 2015 that includes a plan to gradually shut down old nuclear power plants starting in 2008. Kori-1 and Wŏlsŏng-1 reactors are expected to close down in 2008 and 2013 respectively.

6 January 2000
The Satellite Technology Research Center at the Korea Advanced Institute of Science and Technology (KAIST) reveal for the first time in public a satellite image of the Yŏngbyŏn-kun region in North Korea. The image was taken by the Uribyŏl-3 satellite which was developed completely by South Korean technology.

4 January 2000
Researchers at the Korea Atomic Energy Research Institute (KAERI) announce that they have successfully developed a free electron laser accelerator. The accelerator is 70 centimeters in diameter, four meters long and two meters high and is used to transform electronic beams into light energy and then into far infrared. According to researchers, the accelerator can be used for bioengineering research, DNA sequencing, environmental monitoring of areas harboring nuclear power plants, and atomic energy development.

Related content is available on the website for the Nuclear Threat Initiative, www.nti.org.
1999

31 December 1999
The Uljin-4 nuclear power reactor, which is South Korea's sixteenth nuclear power plant, begins commercial operations. Uljin-4 is a 1,000MW(e) pressurized light-water reactor. South Korea's nuclear power plants now account for over 40% of the country's electric power.

27 December 1999
A dedication ceremony is held for the Wŏlsŏng-3 and -4 nuclear power reactors. Wŏlsŏng-3 and -4 are both 700MW(e) pressurized heavy water reactors. During the ceremony, Prime Minister Kim Jong P'il pledges to have the government ensure the safety of nuclear reactors and the neighborhoods surrounding the plants. The completion of these power plants brings South Korea's capacity to produce electricity to 12.7 million kilowatts per year.

27 December 1999
Local residents and environmental groups stage a protest in Wŏlsŏng against the government's plans to construct additional nuclear power plants. The recent accident at Wŏlsŏng in which 22 workers were exposed to radiation aroused public concern over safety measures at South Korea's nuclear power plants.

27 December 1999
Korea Heavy Industries and Construction Company (Hanjung) sign an agreement with the Korea Electric Power Corporation (KEPCO) to supply components for the two light water reactors for North Korea. Under the agreement, Hanjung will provide 850 billion won worth of nuclear furnaces, turbine generators and other equipment for North Korea's reactors.

15 December 1999
An official from South Korea's Office of Planning for the Light-Water Reactor Project announces that KEDO will not provide financial assistance to North Korea for the construction of a new electricity transmission and distribution system [power grid], which is necessary for the successful operation of the two KEDO light water reactors.
15 December 1999
KEDO and KEPCO sign a $4.6 billion dollar turnkey contract in Seoul, allowing KEPCO to begin construction on the two light water reactors in [Kŭmho-chigu], Shinp'o. The contract, signed by KEDO Executive Director Desaix Anderson and KEPCO President Ch'oe Su Pyŏng, supercedes the preliminary works contract signed by KEDO and KEPCO in August 1997. [Note: While the turnkey contract is signed on 15 December, it does not become effective until 3 February 2000 when KEDO signs a contract with Japan's Bank of International Cooperation for $1 billion in funding for the project.]

4 December 1999
The US Department of Energy's Idaho National Engineering and Environmental Laboratory (INEEL) announces it has signed a contract with the Korea Atomic Energy Research Institute (KAERI) to test a new nuclear reactor fuel for the High flux Advanced Neutron Application Reactor (HANARO). Under the contract, INEEL will create the preliminary design for the instrumented capsule to test the reactor fuel design, and will develop the control system used for the experiments and the handling systems to remove the capsule from the reactor.

11 December 1999
Kyodo News Service reports that three Japanese firms, Mitsubishi Industries, Toshiba, and Hitachi, will participate in the KEDO light water reactor project as subcontractors. According to a Japanese official quoted by Kyodo, the three firms will sign working agreements with the Korea Electric Power Corporation by the end of the month.
10 December 1999
The Ministry of Commerce, Industry and Energy announces plans to build 106 more power plants through the year 2015 and to increase current power generating capacity by 45.13 million kilowatts. Among the 106 power plants, 14 will be nuclear, 22 coal burning, 22 LNG, 15 oil burning and 12 hydroelectric.


21-22 November 1999
KEDO’s Executive Board meets in New York to narrow differences between board members on a turn-key contract to be signed with KEPCO, the primary contractor of the light water reactor project. The board agrees to wrap up the turn-key contract before 15 December, the date site preparation work in [Kŭmho-chigu], Shinp'o is schedule to be completed.


18 November 1999
Dr. Shin Sŏng T’aek, a researcher with the Korea Institute for Defense Analysis, claims that since 1994 North Korea has stockpiled 40kg of plutonium. While this amount of plutonium is enough for 10 small nuclear weapons, Shin claims that Pyongyang will not develop several nuclear weapons due to its "one nuclear warhead strategy." Shin presents his conclusions, which are based on data from the CIA and a South Korean-US nuclear inspection team, at the Korea-Russia Defense Forum held in Seoul.


8-9 November 1999
The Trilateral Coordination and Oversight Group (TCOG), comprising the United States, South Korea, and Japan, meets in Washington. The three delegations discuss coordinating policies on North Korea and implementing the comprehensive approach to North Korea recommended in the Perry Report. On 9 November, the three nations issue a joint statement in which they reaffirm their commitment to the Agreed Framework.

5 November 1999
An official from South Korea's Ministry of Foreign Affairs questions the credibility of a report submitted by US Congressional Republicans on 3 November claiming that North Korea is actively pursuing nuclear weapons despite the 1994 Agreed Framework. The official claims that "the evidence Republicans presented is just a compilation of various suspicions which have already been raised by the news media in the United States."

3 November 1999
The Korea Electric Power Corporation's board of directors announces it will split its power generation holdings into six subsidiaries. A single subsidiary, which will not be put for sale, will hold South Korea's nuclear power plants, but the reactors will remain under government control. KEPCO plans to sell off one of the subsidiaries by the end of 1999 and four others by 2002.

1-2 November 1999
KEDO and South Korea's Export-Import Bank hold working-level talks in Seoul to finalize the loan agreement for South Korea's $3.2 billion [to be paid in South Korean won] contribution to the light water reactor project.

27 October 1999
The Chairman of the Hyundai Business Group announces that Hyundai Engineering and Construction, and the Korea Electric Power Corporation (KEPCO) plan to participate in an international bid next March to construct two nuclear power plants in Guangdong Province in China. The companies will participate in the bidding as a consortium led by the Hyundai Engineering Group.

21-22 October 1999
The Eighth ROK-IAEA Joint Review Meeting on Safeguards Implementation meeting is held in Seoul. During the meeting, officials from South Korea and the IAEA discuss the inspection results of 1998, review the status of facility attachments (FAs) and design information questionnaires (DIQs), and the implementation of safeguards at nuclear related facilities.

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20 October 1999
The Vice Minister of Commerce, Industry and Energy tells reporters that the government has not yet decided on the model of the additional 12 nuclear reactors that South Korea plans to build. In addition, he states that the government will reconsider the Korea Electric Power Corporation's (KEPCO) plans to order additional CANDU pressurized heavy water reactors due to the recent heavy water leakage at the Wolsong power plant.

20 October 1999
The South Korean government announces it will form a team of investigators called the "Comprehensive Nuclear Safety Inspection Team" to inspect nuclear power plants across the country as well as investigate the recent heavy water leakage at the Wolsong plant. The investigation team was organized by the Minister of Commerce, Industry and Energy, the Minister of Government Information, and the president of the Korea Electric Power Corporation (KEPCO). The Nuclear Safety Inspection Team will consist of residents near nuclear power plants, environmental groups, members of the Nuclear Safety Commission, nuclear experts and regional government representatives. The investigation is expected to be completed by November and the findings will be available to the public.

18-20 October 1999
The Ministry of Science and Technology (MOST) and the IAEA host a seminar on IAEA safeguards for the 21st century at the Nuclear Training Center of the Korea Atomic Energy Research Institute (KAERI). The purpose of the seminar is to encourage participating countries to join the new safeguards regime. The seminar focuses on the nuclear non-proliferation regime, components of the non-proliferation regime, and regional and national arrangements.

14 October 1999
Chang Son Sop, director of South Korea's Office of Planning for the Light-Water Reactor Project, says that while KEDO-KEPCO negotiations are in the final stages, there is only a 50 percent chance that the contract will be completed in time to begin construction on the two light water reactors by the end of the year.

14 October 1999
Kim Myong Kyu of the National Congress for New Politics states at a National Assembly hearing on the Ministry of Commerce Industry and Energy (MOCIE) that all sixteen nuclear power plants contain basic defects. According to Kim, Kori-1 through -4 and Yonggwang-1 and -2 have damage to their controlling rods and buttress pins.

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Yŏnggwang-3 and -4, and Uljin-3 and -4 are in danger of losing controlling functions due to a distortion of the nuclear fuel lines caused by high temperature combustion. Furthermore, the reactor core of the Wŏlsŏng plants are in danger of a melt down due to the possible leakage of cooling water caused by the faulty design of the coolant pipeline. Kim suggested that the government reconsider constructing the additional 15 nuclear power plants under the fifth long-term program on power supply and demand.


13 October 1999
Experts from the Korea Institute of Nuclear Safety (KINS) report finding 49 unidentified welded sections in the Yŏnggwang-3 and -4, and Uljin-1 nuclear power reactors (Uljin-1 has the same piping system as the Yŏnggwang reactors). In addition, welded sections were also found in Uljin-2, Wŏlsŏng-1, and Kori-3, and -4. Unidentified welded sections refer to parts that were welded in noncompliance with the original design. According to experts, these flaws can cause corrosion of the pipes due to the boric acid contained in the coolant water.


11 October 1999
The Korean Federation for Environmental Movement (KFEM) files a claim with the Seoul District Court asking for an investigation of the president and four officials of the Korea Electric Power Corporation (KEPCO). According to KFEM, KEPCO officials did not respond to the accident at the Wŏlsŏng-3 nuclear power on 4 October, even though alarms in the plant rang for one hour and seventeen minutes. In addition, KFEM accuses KEPCO for failing to report the incident to the Ministry of Science and Technology officials, which is a violation of the nuclear power law.


8 October 1999
The National Assembly’s science and technology committee sites human error and mechanical problems as the cause of the radiation leak at the Wŏlsŏng-3 nuclear power reactor. The investigative committee found that workers opened a pipe connection to replace a broken bearing without shutting a valve that could have blocked the spill of heavy water. The committee also notes that workers could have prevented the accident if they took proper safety measures while conducting the repair work. The Korea Electric Power Corporation (KEPCO) announces that it will dismantle the malfunctioning parts in the Wŏlsŏng-3 nuclear power reactor for seven days to determine the exact cause of the leak. According to KEPCO officials, nuclear experts from the manufacturer and the Ministry of Science and Technology will conduct the investigation.

5 October 1999
KEDO holds its annual general meeting in New York. After the meeting, Marc Vogelaar, KEDO's director for public and external promotion and support, announces that KEDO is ready to begin construction on the two light water reactors. Vogelaar also tells reporters that the start up date for the first reactor is 2003.

4 October 1999
The Wŏlsŏng-3 nuclear power reactor leaks 45 liters of heavy water exposing twenty two workers to low-level radiation. According to KEPCO officials, heavy water leaks from the damaged ring of a seal connecting the motor and the pump. Three of the twenty two workers are under special care for possible overexposure to radiation. Specific details on how the leak occurred are not revealed.

1 October 1999
The National Congress for New Politics (NCNP; President Kim Dae Jung's political party) accuses the Ministry of Science and Technology (MOST) of ignoring the hydrogen leak in Uljin-2 nuclear power reactor stating that it is the responsibility of the Ministry of Commerce, Industry and Energy to manage the problem. According to the NCNP, Uljin-2 has been leaking hydrogen since last September at a rate of 1.9 cubic meters a day and as of 30 September the rate increased to 34.34 cubic meters a day. Alsthom, the manufacturer of the power plant, warned that the plant should be shut down for repair and that if the leakage is over 40 cubic meters a day an explosion is likely in the case of hydrogen mixing with oxygen.

October 1999
South Korean and Taiwanese officials state that they have not made a concrete decision on whether to store spent fuel from Japan or any other country. Since September, Japanese officials have been holding discussions about the possibility of storing spent fuel on one of the several islands owned by South Korea or Taiwan as an alternative to storing it in the Russian Federation.

October 1999
The Wŏlsŏng-4 nuclear power reactor begins commercial operations. The Wŏlsŏng-4 reactor is a 700MW(e)

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CANDU pressurized heavy water reactor (PHWR).


29 September 1999
Officials at the Yŏnggwang nuclear power station announce that reactor one resumed operations at 11:20 pm on 28 September.

28 September 1999
The Yŏnggwang-1 nuclear power reactor is shut down due to a malfunction of the electronic circuit board that controls signals. Officials at the plant state that no radioactive leaks have been reported and the power plant is expected to resume operations by the evening.

27 September 1999
The Ministry of Science and Technology announces that the government is working on plans for a Periodic Safety Review (PSR) on nuclear power facilities. The PSR requires the Korea Electric Power Corporation (KEPCO) to conduct a full inspection from design to facility maintenance of nuclear power plants, most likely every ten years. The South Korean government attempted to implement this program last year, but KEPCO rejected the idea because routine inspections are performed every year and a half. However the recent malfunctions at several nuclear power plants have increased concerns over safety.

25 September 1999
Approximately 30 delegates from the United States, Japan, South Korea, and KEPCO meet with North Korean officials in Pyongyang to discuss pending issues concerning the KEDO light water reactor project.

12 September 1999
US President Bill Clinton, South Korean President Kim Dae Jung, and Japanese Prime Minister Keizo Obuchi issue a joint statement saying that the three nations are prepared "to undertake measures to improve their respective relations" with North Korea. The three leaders issue the statement before the opening of the Asia-Pacific Economic Cooperation forum in Auckland, New Zealand.

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10 September 1999
The Korea Heavy Industries and Construction Company (Hanjung) signs a $50 million contract with ABB-Combustion Engineering to supply four steam generators for a 1,200MW(e) light water reactor to the Tennessee Valley Authority (TVA). The steam generators will be manufactured in Hanjung’s plant in Ch’ang’wŏn, South Kyŏngsang province and they are expected to be delivered to TVA by October 2002.

9 September 1999
The Korea Federation for the Environment Movement (KFEM) accuses British Nuclear Fuels (BNFL) of lobbying the South Korean government to buy reprocessed plutonium. According to KFEM, British Nuclear Fuels set up a secret office in Seoul in the early 1990’s and lobbied to secure a contract to sell plutonium.

3 September 1999
KEDO’s Executive Board meets in News York and agrees to try to start construction on the two light water reactors in [Kŭmho-chigu], Shinp’o by the end of the year. In this regard, the board, comprising the United States, EU, South Korea, and Japan, resolves to hold talks with KEPCO, the primary contractor of the project, as soon as possible to finalize arrangements for the commencement of reactor construction.

2 September 1999
The Korea Electric Power Corporation (KEPCO) announces that it will be divided into six units in November as part of government reforms to privatize the power industry. KEPCO plans to sell off its power generating facilities to five hydroelectric and thermoelectric power companies, and keep the nuclear power plants under a single subsidiary. KEPCO officials note that the privatization will not happen until 2000.

25 August 1999
Chang Sŏn Sŏp, chief South Korean representative to KEDO, announces that construction of two light water reactors in [Kŭmho-chigu], Shinp’o will begin by the end of the year. According to Chang, the project will be accelerated due to North Korea’s threat to abandon the 1994 Agreed Framework if construction on the reactors continues to be stalled.

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18 August 1999
South Korean President Kim Dae Jung tells Taku Yamasaki, former chief of the Liberal Democratic Party's Policy Affairs Research Council in Japan, that the 1994 Agreed Framework and KEDO are vital to ensuring that North Korea does not develop nuclear weapons. Kim also urges Japan not to follow through with its threat to freeze funding for the KEDO light water reactor project if North Korea tests another long-range missile.


17 August 1999
The South Korean Ministry of National Defense announces that it has established an observation post in an undisclosed area in Kang'wŏn Province that can detect nuclear and high explosive tests as well as missile launches from North Korea. The observation post was established in mid-July by the Korea Institute of Geology, Mining and Materials, and the Southern Methodist University of the US. The observation post uses four micro barometers, barometers and seismographs to detect any activity by North Korea.


16 August 1999
The South Korean Office of Planning for the Light-Water Reactor Project announces that preliminary site preparation in [Kŭmho-chigu], Shinp'o will be extended until 15 December. An official from the office says that delays in negotiations among the nations responsible for financing the KEDO project have in turn delayed the conclusion of a contact between KEDO and KEPCO, the primary contractor for the project.


12 August 1999
The South Korean National Assembly unanimously approves a loan of $3.2 billion [to be paid in wŏn] to fund the KEDO light water reactor project. The loans, to be provided through the Inter-Korea Cooperative Fund, will cover 70 percent of the estimated $4.6 billion project.


11 August 1999
The US and South Korean officials discuss ways to improve bilateral science cooperation. During the talks, officials from both countries agree on South Korea's participation in US nuclear energy projects, US participation in Korea's
next generation nuclear fusion research project and the Korea Superconducting Tokamak Advanced Research project (KSTAR).


5-9 August 1999
Representatives from the United States, China, and the two Koreas meet in Geneva for the sixth round of four-party peace talks aimed at replacing the 1953 Korean Armistice Agreement with a formal peace treaty. The talks once again fail to make significant progress reportedly due to North Korea's continuing insistence that the talks address US troop withdrawal from South Korea. Despite the lack of noticeable progress, the four nations, in a joint statement, describe the talks as "useful and productive."


5 August 1999
South Korean Foreign Affairs and Trade Minister Hong Sun Yŏng tells the National Assembly's Unification, Foreign Affairs and Trade Committee that Seoul intends to continue supporting the KEDO light water reactor project even if North Korea tests another long-range missile.


26 July 1999
US Secretary of State Madeline Albright, South Korean Minister of Foreign Affairs and Trade Hong Sun Yŏng, and Japanese Foreign Minister Masahiko Komura meet on the sidelines of the ASEAN Regional Forum. The three foreign ministers issue a joint statement warning Pyongyang that if it launches another long-range missile, "it would adversely affect peace and stability on the Korean Peninsula and beyond, and would have serious negative consequences" for North Korea. While the three foreign ministers do not specify what consequences would follow a missile launch, Komura reiterated Tokyo's threat to freeze contributions to KEDO if Pyongyang tests another missile.


Mid July 1999
South Korea establishes a sound detection station in Kang'wŏn Province that is capable of detecting a nuclear test explosion in North Korea. The stations, located near the demilitarized zone and consisting of four ultra-low frequency reception facilities, are set one kilometer apart and are capable of detecting explosions up to 1,000km away.

—"Seoul Sets Up Observation Station Able to Detect NK's Test of Atomic Bomb," Korea Times, 17 August 1999, in

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13-14 July 1999
Senior officials from the United States, Japan, and South Korea meet in Tokyo to coordinate policies on North Korea. During the Trilateral Coordination and Oversight Group (TCOG) meeting, the three nations agree to work together to deter North Korea from testing another long-range ballistic missile. According to an official from the Japanese Foreign Ministry, the three nations will face similar domestic problems in funding KEDO if North Korea shows signs of preparing for a missile launch.

6 July 1999
The Korean Peninsula Energy Development Organization (KEDO) holds a meeting at the Ministry of Science and Technology (MOST) to discuss the transfer of strategic technology to North Korea for the light water reactor construction project. Officials from the Korea Electric Power Corporation (KEPCO), Korea Heavy Industries and Construction Company (Hanjung), Korea Power Engineering Company (KOPEC) and the Technology Center for Nuclear Control attend the meeting.

2 July 1999
South Korea signs a contract with KEDO to provide $3.2 billion for the light water reactor project. The contract is signed by Chang Sŏn Sŏp, South Korea's representative to KEDO, and KEDO Executive Director Desaix Anderson. According to an official from South Korea's Office of Planning for the Light-Water Reactor Project, South Korea will provide the funds in wŏn, at a fixed rate of 1,100 wŏn per dollar. [Note: The contract is unanimously approved by the National Assembly on 12 September.]

Late June 1999
According to a Nuclear Fuel report, South Korean government and energy industry officials said that South Korea will most likely overturn the decision by former KEPCO president Chang Yŏng Shik to reject the reprocessing of spent nuclear fuel. The report also states that both government and foreign firms have been informed that KEPCO will reconsider reprocessing and separating recycled plutonium as mixed oxide fuel once a new president is appointed. [Note: Under the terms of the 1992 "Joint Declaration on the Denuclearization of the Korean Peninsula," South Korea is prohibited from reprocessing spent fuel. Furthermore, the US-ROK bilateral agreement concerning civilian uses of atomic energy signed in 1972 also prohibits South Korea from reprocessing without permission from the United States.]

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25-26 June 1999
The US, Japan, and South Korea hold a meeting of the Trilateral Coordination and Oversight Group (TCOG) in Washington to coordinate their policies on North Korea amid rising tension on the Korean Peninsula following a naval clash on 15 June. The delegations are headed by Wendy Sherman, councilor for the US State Department, Ryozo Kato, director-general of the Japanese Foreign Ministry, and Chang Chae Ryong, deputy minister of foreign affairs and trade.

25 June 1999
Japan and South Korea hold working-level talks in Sapporo to discuss implementation of the KEDO light water reactor project. The talks focus on the contract between KEDO and KEPCO, the primary contractor for the light water reactor project.

24-25 June 1999
The second phase of remote monitoring equipment is installed at the Yŏnggwang-3 nuclear power reactor. The equipment will collect video images and seal data on containment vessels and on the spent fuel storage pond, and transmit the information to the IAEA and Technology Center for Nuclear Control (TCNC) simultaneously.

21-23 June 1999
The 20th Joint Standing Committee on Nuclear Energy Cooperation (JSCNEC) between the US and South Korea is held in Washington, DC. The two sides discuss nuclear policy, cooperation in research, export controls, the export of jointly developed nuclear technology to other countries, and safeguards.

21 June 1999
South Korean and the International Atomic Energy Agency (IAEA) officials sign the Additional Protocol (INFCIRC/540) to the Comprehensive Safeguards Agreement. The South Korean government expects to request the National Assembly to ratify the Additional Protocol in the fall.

8-15 June 1999
North Korean vessels cross the Northern Limit Line in the Yellow Sea on 8 June, apparently to fish in the crab-rich waters. South Korean Navy vessels respond by bumping the ships back across the line that separates the two countries. The tense standoff continues and comes to a head on 15 June, when the two nations, still technically at

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war, exchange heavy gun fire for ten minutes. The ten-minute naval clash, the largest since the 1953 Armistice Agreement, results in casualties on both sides and the sinking of a North Korean gunship. In response to the rising tension on the peninsula, the United States sends air and naval reinforcements to South Korea. [Note: North Korea does not recognize the Northern Limit Line because it was not part of the 1953 Armistice and was established unilaterally by the UN Command in Seoul following the war. On 29 June 2002, a South Korean naval vessel is sunk in a similar clash.]


7-8 June 1999

Senior US and South Korean officials meet in Hawaii to discuss recent developments in North Korea including the recent US inspection of a suspected nuclear facility in Kŭmch'ang-ri.


29 May 1999

William Perry, coordinator of US policy on North Korea, meets with South Korea's Unification Minister Im Tong Wŏn and Ryozo Kato, Japanese director general for foreign policy, in Seoul to discuss his recently concluded trip to North Korea. In Pyongyang, Perry proposed a package deal to North Korea by which it would halt its nuclear and missile programs in exchange for an easing of economic sanctions, increased food aid, and diplomatic recognition from Washington and Tokyo. At a press conference later in the day, Perry says that he "clearly and firmly" expressed the combined concerns of the United States, South Korea and Japan over North Korea's nuclear and missile programs. However, Perry adds, "It will take some time for (North Korea) to further reflect upon the views I have expressed and for us to reflect on our visit."


24 May 1999

William Perry, coordinator of US policy on North Korea; Im Dong Wŏn, South Korea's Minister of Unification; and Ryozo Kato, Japanese director general for foreign policy, meet in Tokyo to fine-tune their countries' respective policies on North Korea. The three also discuss Perry's upcoming trip to Pyongyang and the package deal he is to present to high-ranking North Korean officials. The three say in a joint statement that they hope Perry's meetings in Pyongyang "will produce useful insights as the review of a joint approach toward North Korea moves toward a

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conclusion."

11-14 May 1999
The 11th DUPIC (Direct Use of spent PWR fuel in CANDU) Technical Review Meeting is held in South Korea. Attendees include representatives from the Korea Atomic Energy Research Institute (KAERI), the IAEA, the US, and Atomic Energy of Canada, Limited. The purpose of the meeting is to discuss DUPIC safeguards and to finalize IAEA safeguard approaches.

13-17 May 1999
South Korean Foreign Minister Hong Sun Yŏng meets with US officials in Washington to encourage the United States to support a comprehensive approach to North Korea based on South Korean President Kim Dae Jung's "sunshine policy." At a 17 March joint press conference with US Secretary of State Madeline Albright, Hong says that William Perry, in his upcoming trip to North Korea, will deliver a package of "attractions and incentives" to Pyongyang. Hong adds, "North Korea is well-advised to seize this opportunity."

9 May 1999
The Korea Electric Power Corporation (KEPCO) announces that the Yŏnggwang-3 nuclear power reactor shut down due to a malfunction of one of the three water pumps in the steam generator. According to KEPCO, the power plant is expected to resume operation shortly. The malfunction raises concerns since the Yŏnggwang-3 reactor is the same design as the reactors to be supplied to North Korea under the 1994 Agreed Framework.

4 May 1999
South Korean President Kim Dae Jung, in a CNN interview calls on the United States and North Korea to improve relations by reducing mutual threats and faithfully implementing the 1994 Agreed Framework.

May 1999
The South Korean government restructures the Atomic Energy Bureau of the Ministry of Science and Technology

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by reducing its six divisions into four. The four divisions include the Atomic Energy Policy Division, the Atomic Energy Cooperation Division, the Nuclear Safety Division and the Radiation Safety Division.


24-25 April 1999
Representatives from the US, South Korea, and Japan meet in Hawaii to coordinate policies on North Korea. The three nations, taking note of the threat that North Korea's nuclear and missile programs pose to regional security, agree to establish the Trilateral Coordination and Oversight Group (TCOG) to institutionalize the process of coordinating policies on North Korea.


24 April 1999
Chang Yŏng Shik, president of the Korea Electric Power Corporation (KEPCO) submits his resignation.


19 April 1999
The Minister of Commerce, Industry and Energy announces that Chang Yŏng Shik will be fired from his position as president of the Korea Electric Power Corporation (KEPCO). According to the Minister, the government's decision to fire Chang is because he leaked information about a thermal power plant in North Korea and for his public criticisms of the government's restructuring plans for the energy sector.


15 April 1999
Korea Heavy Industries and Construction Company (Hanjung) announces that it has contracted to sell four heavy water storage tanks to Atomic Energy of Canada, Limited (AECL), which will use the tanks in the construction of the Qinshan Atomic Power Plant in China. The plant is scheduled for completion in November 2003. According to Hanjung, the 140 billion won contract with AECL will include the provision of 20 different types of nuclear components by July 2001.


13 April 1999
The South Korean government signs and ratifies the Comprehensive Test Ban Treaty (CTBT).

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12 April 1999
Chang Yong Shik, president of KEPCO, the primary contractor of the KEDO light water reactor project, tells reporters in Japan that the reactors to be constructed in North Korea should never use mixed oxide fuel (MOX), a mixture of uranium and plutonium.

12 April 1999
Chang Yong Shik, the president of the Korea Electric Power Corporation (KEPCO) announces that KEPCO has no plans to reprocess spent nuclear fuel or process them into mixed oxide. According to Chang, the decision is due to a lack of economic benefits of reprocessing, pressure from the South Korean government, and the possibility of misunderstanding by North Korea.

Mid April 1999
According to a report by Nuclear Fuel, South Korean is setting aside an inventory of spent fuel from two French supplied reactors at Uljin for possible reprocessing despite KEPCO's a recent statement by KEPCO President Chang Yong Shik that South Korea will not reprocess. However, some Korean and French government and industry officials are waiting for KEPCO to reverse its decision when a new president is appointed in 2001. The two reactors at Uljin are not subject to US prior consent rights since the fuel was supplied by France.

8 April 1999
The director general of the Nuclear Energy Agency (a semi-autonomous body of the OECD) states that South Korea can soon become a major exporter of nuclear technology and equipment to other countries. In addition, the director general suggests that South Korea team up with energy companies in Europe and the US to participate in projects in China and other Asian countries.

4 April 1999
Officials at Yŏnggwang-2 nuclear power reactor discover washers and bolts from support pins in two of the three generators. According to officials, the debris was due to the poor quality of the metals used. Officials say the pins will be replaced during a two-month maintenance period.
—Chosun Ilbo, 4 April 1999, in "Investigators Find Debris in Nuke Plant's Generators," FBIS Document ID:
4 April 1999
Kori-3 nuclear power reactor shuts down due to a problem with the cooling system and steam generator. According to Kori’s chief engineer, it will take ten days to service the reactor.

1 April 1999
The Korea Electric Power Corporation (KEPCO) announces that Yŏnggwang-2 nuclear power reactor will undergo maintenance inspections on its steam generators for the next two months. Yŏnggwang-2 has been non-operational since 23 March. According to KEPCO officials, Westinghouse, the reactor’s designer, will be contracted to carry out the maintenance.

April 1999
The Korea Electric Power Corporation (KEPCO) is expected to order two CANDU-9 pressurized heavy water reactors from Atomic Energy of Canada, Limited (AECL) and two pressurized water reactors (PWR) from ABB-Combustion Engineering within two months. KEPCO plans to construct these nuclear power plants at a site previously named Ponggil, which is adjacent to the four Wŏlsŏng plants. KEPCO has renamed the site "Shin-Wŏlsŏng" (New Wŏlsŏng).

Early April 1999
The KEDO Executive Board meets in New York to discuss loan guarantees for the $4.6 billion light water reactor project in North Korea. The United States, EU, South Korea, and Japan reportedly agree that contracts with KEDO should include the consortium’s guarantee to pay back the loans if North Korea defaults. However, the United States reportedly demands assurance that it would not assume responsibility for paying back the loans even though it is a KEDO board member.

27 March 1999
A foreign substance is found in the steam generator of the Yŏnggwang-2 nuclear power reactor. [Note: Yŏnggwang-2 is shut down for an inspection of the foreign substance on 28 March. According to the Korea Electric Power Corporation (KEPCO) there is approximately 50-70 grams of this foreign substance in the reactor. Yŏnggwang-2 is expected to be shut down for approximately ten days.]

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24 March 1999
The Korea Atomic Energy Research Institute (KAERI) announces it has developed a new technology to accurately assess the level of deterioration of metal parts used in nuclear power reactors.

23 March 1999
Yŏnggwang-2 nuclear power reactor is shut down due to a malfunction of the turbine generator.

18 March 1999
The Ministry of Commerce, Industry and Energy (MOCIE) announces an eight-year plan that includes investing 500 billion won to acquire more sophisticated and advanced nuclear power technology by the year 2006. The plan calls for self reliance in nuclear technology, computerization of nuclear plant design codes, and increasing the competitiveness of Korean technology in the international market. [Note: According to the Kukmin Ilbo, MOCIE makes this announcement on 21 March 1999.]

13 March 1999
An official in South Korea's Planning Office for the North Korean Light-Water Reactor Project says that the canning of the spent-fuel rods from the 5MW(e) nuclear reactor in Yŏngbyŏn-kun will be complete sometime in May or June 1999.

8 March 1999
William Perry, coordinator of US policy on North Korea, travels to Seoul and meets with President Kim Dae Jung, Foreign Affairs and Trade Minister Hong Sun Yŏng and Im Dong Wŏn, senior presidential secretary for foreign affairs and national security. Perry, who for the past few months has been writing a review of Washington's policy on North Korea, discusses the differences between Washington's and Seoul's approach to addressing concerns...
arising from North Korea. After meeting Perry, Hong announces that the two sides agreed to "solve North Korea's nuclear and missile issues within the framework of Seoul's engagement policy."


6-10 February 1999

Charles Kartman, US special envoy for Korean affairs, meets with senior South Korean officials in Seoul to discuss progress in the four-party peace talks and the US desire to gain access to North Korea's suspected underground nuclear facility in Kŭmch'ang-ri. On 9 February, Kartman meets with Kwŏn Chong Rak, director general for the North American Affairs Bureau of the South Korean Foreign Ministry, and Terusuke Terada, Japanese special envoy for Korean affairs, to coordinate US, South Korean and Japanese policies on various North Korean issues including the suspect Kŭmch'ang-ri facility, implementation of the 1994 Agreed Framework, and the possibility of another North Korean missile test. According to a government official in Seoul, Kartman informs Kwŏn and Terada that the United States will not ease economic sanctions against North Korea until Pyongyang allows inspection of the Kŭmch'ang-ri site. Terada also reportedly says that Japan will not send additional food aid to North Korea until suspicions about the site are erased.


4 February 1999

South Korea and Egypt sign an agreement to cooperate in the field of nuclear energy. Officials from the two countries discuss ways to exchange technology and facilities for the construction of nuclear power plants.


1 February 1999

Yŏnggwang-3 nuclear power reactor shuts down due to a malfunction of the turbine generator. According to Yŏnggwang plant technicians, no radioactive leaks are detected and the reactor is expected to resume full operations by 2 February.


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19-23 January 1999
Representatives from North Korea and KEDO meet in Hyangsan, North Korea for talks on a protocol detailing the procedure for training North Korean technicians on light water reactor operations.

19-22 January 1999
Representatives from the United States, China and the two Koreas meet in Geneva for the fourth round of four-party peace talks aimed at replacing the 1953 Korean Armistice Agreement with a formal peace treaty. For the first time the four parties meet in two earlier established subcommittees, one to address facilitating a lasting peace between the two Koreas, and the other to address reducing tension on the peninsula. The talks make little progress as North Korea reportedly renews its demand for the withdrawal of all US forces from South Korea. The four parties agree to resume talks in mid-April.

14-16 January 1999
US Secretary of Defense William Cohen meets with South Korean officials in Seoul to coordinate policies on North Korea. Cohen and Defense Minister Ch’ŏn Yong T’aek issue a joint statement in which they state that “combined defense readiness should be steadfastly maintained against a wide range of possible threats” from North Korea. Ch’ŏn and Cohen also demand full access to a suspected nuclear facility in Kŭmch’ang-ri. At a joint press conference with Ch’ŏn, Cohen says that while there is no conclusive evidence that the site is related to a clandestine nuclear weapons program, “we believe there is sufficient evidence for us to be suspicious, and the suspicions must be addressed.” Ch’ŏn adds that Seoul and Washington will take joint action if conclusive evidence is found that the Kŭmch’ang-ri facility is nuclear related.

14 January 1999
A KEDO official announces that due to difficulty in collecting funds, full-scale construction of the two light water reactors will not begin on 15 January as scheduled. Instead, construction is scheduled to begin five months later on 15 June.

12 January 1999
Chang Sŏn Sŏp, director of South Korea’s Office of Planning for the Light-Water Reactor Project, announces that it

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would be physically impossible to complete the light water reactors by the original target date of 2003. Chang says that due to several events, including the September 1996 incursion of a North Korean submarine into South Korea and North Korea's firing of a rocket over Japan in August 1998, the two light water reactors will not be completed for several years beyond the original target date.

7 January 1999
South Korean Defense Minister Ch'ŏn Yong T'aek and his Japanese counterpart Housei Norota meet in Seoul to expand military cooperation to prepare for possible aggression from North Korea. The two defense ministers agree that stability in Northeast Asia requires greater transparency in North Korea's nuclear program. At the meeting, Norota also reiterates Tokyo's threat to suspend all financial contributions to the KEDO light water reactor project if North Korea test launches another long-range missile. [Note: On 31 August 1998, Tokyo suspended all financial support to KEDO after North Korea test fired a rocket over Japanese territory. Tokyo did not lift the freeze on financial contributions until late-October 1998.]

5 January 1999
The US, China and the two Koreas hold working-level consultations at the UN in New York to prepare for the upcoming fourth round of four-party talks to be held in Geneva during 18-22 January.

4 January 1999
South Korean President Kim Dae Jung urges a diplomatic solution to problems arising from North Korea's nuclear and missile programs. Presiding over a National Security Council meeting, Kim says, "We need to solve the pending problems, including the North's nuclear and missile issues, through dialogue and negotiation."

4 January 1999
Researchers at the Korea Atomic Energy Research Institute (KAERI) unveil the development of the world's first free electron laser (FEL). This new device can be used in research related to DNA, semiconductors, isotope separation, molecular structure and next generation military surveillance systems. The FEL project cost one billion won and took researchers at KAERI three years to complete.

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January 1999
According to a report in Nucleonics Week, the US denied greater nuclear cooperation with South Korea because of suspicions that South Korea was developing nuclear weapons in the 1970s under former President Park Chung Hee. However, the US never officially denied nor admitted any knowledge of a nuclear weapons program in South Korea. According to US officials, the US discovered that South Korea was involved in research related to nuclear weapons development in the 1970s that did not require IAEA reporting. In response to this discovery, the US enforced strict verification and safeguard clauses into the US-ROK bilateral cooperation agreement, which includes challenge and short notice inspections at all nuclear related facilities.

January 1999
Construction begins on the Uljin-5 and -6 nuclear power reactors. Uljin-5 is expected to begin commercial operation in June 2004, and Uljin-6 in June 2005.

Early 1999
The Korea Electric Power Corporation (KEPCO) resumes payment to ABB Combustion Engineering (ABB-CE) for the construction of the Yŏnggwang-5 and -6 nuclear power reactors. Construction began in early 1997, but KEPCO suspended payment when the Korean economic crisis hit. However, construction continued throughout 1998 and both units are expected to begin commercial operation in 2002.

1999
The South Korean government issues W150 billion ($125 million) in treasury bonds to help finance the LWR project under the Agreed Framework.

1999
South Korea performs national inspections at 32 nuclear facilities. The facilities include twelve pressurized water reactors (PWRs), four CANDUs, four fuel fabrication plants, ten research and development facilities at KAERI (Korea Atomic Energy Research Institute) and two others. During the first half of the year, inspections concentrate on the refueling of eight PWRs and the initial core loading of Wŏlsŏng-4 nuclear power reactor. During the second half of the year, inspections are performed at twelve PWRs, four CANDUs, the High flux Advanced Neutron Application Reactor (HANARO), the Post Irradiation Examination Facility (PIEF), the CANDU Fuel Fabrication Plant (CFFP), and

the Korea Nuclear Fuel Company. [Note: Sources do not specify the two "other facilities"].

1998
22 December 1998
Representatives from the United States, South Korea and Japan meet in New York to coordinate their policies on North Korea. The three nations agree to maintain pressure on Pyongyang to allow inspections of a suspected underground nuclear facility in Kŭmch'ang-ri.

20 December 1998
The Wŏlsŏng-3 nuclear power reactor is temporarily shut-down due to a high pressure signal from the coolant system.

18 December 1998
The Wŏlsŏng-3 nuclear power reactor is temporarily shut-down due to the malfunctioning of its unit distribution transformer. According to the Ministry of Science and Technology, no radioactive leaks are reported.

17 December 1998
The South Korean military detects a North Korean spy submarine at 11:15 PM about 2km from the South Korean Imp’o-ri Army Battalion in Yŏsu, South Chŏlla province. South Korean Navy vessels give chase and sink the submarine around 5:55 AM on 18 December. [Note: On 19 December, North Korea denies any wrongdoing and accuses South Korea of creating the incident in order to fuel tension on the peninsula.]

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16 December 1998
Officials from the Ministry of Science and Technology (MOST) and the Korea Atomic Energy Research Institute (KAERI) discuss and review national inspections performed in 1998. At the end of the meeting, MOST decides to expand national inspections from 13 to 27 facilities in 1999. The 27 facilities include eight research facilities, three fuel fabrication plants, 12 light water reactors, and four on-load refueled reactors.

11 December 1998
The Ulchin-1 nuclear power reactor shuts down due to a pipe rupture. According to the Ministry of Science and Technology (MOST) the rupture is a result of coolant leaking from the steam generator which caused the pipe to erode.

9 December 1998
The Institute of Foreign Affairs and National Security, a South Korean think tank under the Ministry of Foreign Affairs and Trade, issues a report urging US President Bill Clinton to invoke a presidential decree overriding the congressional freeze on heavy fuel oil deliveries to North Korea until 31 May. The report also calls on the United States and South Korea to offer additional food aid in exchange for access to the suspected nuclear weapons facility in Kŭmch'ang-ri.

9 December 1998
Korea Electric Power Corporation (KEPCO) officials announce plans to expand services to nuclear power plant projects in other countries such as Turkey and Hungary. According to KEPCO officials, bids have been placed for the Akkuyu nuclear project in Turkey, and KEPCO is in the process of preparing a bid for an 80MW(e) nuclear power plant project in Hungary.

8 December 1998
A dedication ceremony is held for a 65MW(e) nuclear power plant in Rizal, Philippines that the Korea Electric Power Corporation (KEPCO) has been restoring since 1995. KEPCO was awarded the bid to refurbish the power plant under a "rehabilitation, operation, maintenance and management" basis.

7 December 1998
Korea Electric Power Corporation (KEPCO) officials announce that they are in negotiations with Asea Brown Boveri-Combustion Engineering (ABB-CE) and other foreign firms to form a consortium to participate in constructing

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nuclear power plants in China.
Document ID: FTS19981207000092; "KEPCO Eyeing Reactor Business in China," Korea Herald, 8 December 1998, in
KINDS, www.kinds.or.kr; Seoul Maeil Business Fax, 8 December 1998, in "KEPCO Holds Talks with ABB for Nuclear

4 December 1998
Seoul announces that in 1999 it plans to send an additional consul to the KEDO office in [Kŭmho-chigu], Shin'p'o as
construction of the reactors gets under way. [Note: Currently there are five consuls at the KEDO office: two each
from the United States and South Korea, and one from Japan.]
—Yonhap News Agency, 4 December 1998, in "South Korea to Send One More Envoy to Nuclear Energy Body

3 December 1998
South Korean Defense Minister Ch'ŏn Yong Taek says that North Korea's nuclear and missile programs remain a
threat to Northeast Asia. Speaking at an annual meeting of top ranking military personnel, Chun says that South
Korea must remain at full alert as tension grows over North Korea's suspected nuclear weapons program.
—Lee Sung Yul, "Defense Minister Calls for Full Readiness: Against Possible Tension over N.K.'s Suspected Nuclear
Arms Program," Korea Herald, 4 December 1998, in Lexis-Nexis, web.lexis-nexis.com; Kim Yŏng Bŏn, "Puk Naenyŏn

Early December 1998
The National Congress for New Politics and the United Liberal Democrats block a vote in the National Assembley to
increase electricity prices by four percent over 10-15 years to help finance the light water construction project in
North Korea. According to a Nucleonics Week report, the energy industry strongly urged both parties to oppose the
rate increase for fears that it will hinder their recovery from the 1997 economic crisis.
—Mark Hibbs, "Heavy Industry, Seoul Parties Block Rate Increase for KEDO," Nucleonics Week, 10 December 1998,

Late 1998
South Korean officials make plans to develop a study on the aging process of the Wŏlsŏng-1 nuclear power reactor.
The study is to be held in 1999 with the hope of finding ways to extend the life of the reactor by at least 10 more
years. In addition, the Korea Institute of Nuclear Safety (KINS) will draft a comprehensive regulatory outline for the
life extension of all Korean nuclear reactors by 2000. So far, the Korea Electric Power Corporation (KEPCO) has
taken steps to extend the life of Kori-1, Korea's oldest reactor, by replacing parts such as the steam generators,
condenser tubes, and the control system. However, there are no formal rules, regulations and standards for aging
nuclear reactors.
—Mark Hibbs, "KEPCO, KINS to Develop Plan for Extending Wolsong-1 Life," Nucleonics Week, 10 December 1998,

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30 November 1998
The Ministry of Science and Technology (MOST) and the International Atomic Energy Agency (IAEA) sign a memorandum of understanding on strengthening cooperation with the IAEA's regional and inter-regional training courses and workshops. According to the Ministry of Unification (MOU), MOST will act as the national coordinator for hosting the IAEA's regional and inter-regional training courses and workshops.

22 November 1998
South Korean President Kim Dae Jung, in a meeting with top government officials says, "If North Korea's underground site is confirmed to be a nuclear weapons storage facility, we will first ask Pyongyang to remove nuclear weapons. Should it deny the call, a grave situation will take place."

21 November 1998
US President Bill Clinton and South Korean President Kim Dae Jung urge North Korea to allow inspections of a suspected underground nuclear facility at Kŭmch'ang-ri. Speaking at a joint press conference, Clinton says that Washington and Seoul "have strong information that raises a suspicion, but no one knows for sure what the facility is." Kim warns that the two allies "will not tolerate any development of nuclear weapons or any other weapons of mass-destruction" by North Korea.

20 November 1998
After his visit to Pyongyang, Charles Kartman, special envoy for Korean affairs, announces that the United States and South Korea have "compelling evidence" that the underground facilities currently under construction in Kŭmch'ang-ri are related to a nuclear program. However, the South Korean government denies that there is clear evidence. South Korean President Kim Dae Jung also says, "there is suspicion that the underground facilities in Kŭmch'ang-ri are nuclear-related, but there is no clear evidence."

20 November 1998
South Korean President Kim Dae Jung says that there is not yet any "conclusive evidence" to prove that the
underground facility in Kŭmch’ang-ri, North Korea is related to a clandestine nuclear weapons program.


16 November 1998
The Korea Electric Power Corporation (KEPCO) announces it will establish a consortium to participate in nuclear power projects in China. According to KEPCO officials, the consortium will be established before 2001. KEPCO officials hope to provide the technology and training, while foreign firms finance the project.


15 November 1998
The Korea Electric Power Corporation (KEPCO) announces it will suspend operations of Ulchin-1 nuclear power plant in February 1999. In addition, KEPCO says it will continue to operate Ulchin-1 at a lower generating capacity to prevent further leakage of coolant until February 1999.


13 November 1998
The Korea Heavy Industries and Construction Company (Han jung) announces it has successfully developed monoblock rotors for use in 1,000 MW(e) nuclear power plants. Hanjung has invested $6.1 billion since 1996 to develop this technology.


11 November 1998
The Ministry of Science and Technology (MOST) announces that the Ulchin-1 nuclear power reactor has leaked four to seven liters of coolant from June to September 1998, and is still leaking. MOST is discussing the possibility of lowering the reactor’s generating capacity or suspending operations because if this trend continues, Ulchin-1 will leak over ten liters of coolant by the end of this year or early next year.


9 November 1998
KEDO adopts a resolution stipulating how the costs of constructing two light water reactors will be divided among the executive board members. Under the resolution, South Korea will finance 70 percent of the $4.6 billion project, and Japan will provide $1 billion. The remaining $400 million will be provided by the United States and the EU, but the details of how much each would pay is not mentioned in the resolution.


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5 November 1998
South Korean Foreign Affairs and Trade Minister Hong Sun Yŏng announces that South Korea has discovered "some suspect parts of North Korea's underground facility," but, Hong adds that South Korea will not take "excessive action until we obtain a clear conclusion that the underground facility is related to a nuclear program." Hong states that until such proof comes forward, South Korea will continue to support the KEDO light water reactor project.

November 1998
South Korea and Canada agree to jointly participate in international biddings for nuclear power plant projects in China and Turkey during the APEC summit.

Late October-Early November 1998
The chief of Ulchu-kun requests that the Korea Electric Power Corporation (KEPCO) construct all four of its planned nuclear power plants in and around the county. KEPCO's original plan was to split the four plants between Ulchu-kun and Kijang-kun. The chief's decision to request the construction of nuclear power plants is due to the employment opportunities and increased revenue.

27 October-7 November 1998
The United States and South Korea hold the annual Foal Eagle combined military exercise. The military exercise, aimed at preparing for a North Korean invasion, involves 50,000 South Korean troops and 35,000 US troops. Foal Eagle '98 is the largest combined military exercise since the cancellation of Team Spirit in 1993. [Note: Team Spirit was cancelled in order to encourage North Korea to sign the Agreed Framework, but since Team Spirit's cancellation, North Korea has accused the United States and South Korea of merely replacing Team Spirit with other combined military exercises.]

26 October 1998
South Korea and Turkey sign an agreement on the peaceful uses of nuclear energy. Under the agreement, both countries will cooperate in constructing nuclear power plants and research reactors, the processing of nuclear materials, security and protection against radiation, and the exchange of technology and personnel.

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23 October 1998
Kim Tŏk Ryŏng, a member of South Korea's National Assembly, claims that Seoul has evidence that two recently discovered underground facilities in North Korea are related to a clandestine nuclear weapons program. According to Kim, one of the facilities is located in Kŭmchang-ri, Taegwan-kun, and the other is located between T'aechŏn-kun and Kusŏng. Kim says the Kŭmch'ang-ri facility, to be completed within six years, is expected to house a reactor and a reprocessing plant. The other facility, according to Kim, is located under an island in the middle of a lake, and is already producing plutonium. However, South Korea's Unification Minister, Kang In Tŏk, announces that the United States and South Korea have not yet determined whether or not the facilities are in fact related to a nuclear weapons program.


21-24 October 1998
Representatives from the United States, China, and the two Koreas meet in Geneva for the third round of four-party peace talks aimed at replacing the 1953 Korean Armistice Agreement with a formal peace treaty. This round of talks shows progress as the four parties agree to form two subcommittees to discuss establishing peace on the peninsula and reducing tension between North and South Korea. At the talks, the United States and North Korea meet in private to discuss the suspected underground nuclear facility located near Kŭmch'ang-ri. North Korea reportedly offers to allow the United States to inspect the site in return for compensation due to the "infringement of its sovereignty." On 24 October, a US official announces that at the bilateral meetings, North Korea agreed to allow Charles Kartman, head of the US delegation, to visit the suspected site as early as November.


21 October 1998
Chang Yong Shik, president of the Korea Electric Power Corporation (KEPCO) is chosen as the sixth chairman of the World Association of Nuclear Operators (WANO).

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**20-22 October 1998**

The 7th IAEA-ROK Joint Review Meeting on Safeguards Implementation is held in Seoul. During the meeting, 20 new action items are identified for the effective implementation of safeguards. In addition, discussions are held on South Korea's support programs, the joint use of safeguard instruments, short notice random inspections, and requirements for medical certificates. During the meeting, South Korean officials express the willingness to host the IAEA’s Regional Safeguards Training Course in 1999.


**18 October 1998**

The Ulchin-1 nuclear power reactor leaks coolant from three of its steam generator tubes. According to the Ministry of Science and Technology, the tubes leaked 1.31, 3.87 and 6.38 liters of coolant.


**Mid-October 1998**

South Korean officials announce that the government is against reprocessing spent nuclear fuel because of the 1994 Agreed Framework between the US and North Korea. The government’s position is shared by Korea Electric Power Corporation’s new president Chang Yŏng Shik who voiced his opposition to reprocessing when he came into office in May.


**13 October 1998**

South Korean Foreign Minister Hong Sun Yŏng urges the US Congress to approve funds for heavy fuel oil shipments to North Korea. Stressing the seriousness of the current situation to the survival of the Agreed Framework, Hong says, "In case the US neglects its part of the agreement, they will give North Korea the excuse to scrap the agreement."


**8 October 1998**

South Korean President Kim Dae Jung and Japanese Prime Minister Keizo Obuchi meet in Tokyo to discuss cooperation between their two countries in the 21st Century. The two leaders issue a joint declaration in which they reconfirm their commitment to uphold the 1994 Agreed Framework and recognize KEDO as the most effective mechanism to halt North Korea’s nuclear weapons program.


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2 October 1998
Wŏlsŏng-3 nuclear power reactor is temporarily shut down due to an increase of combustible gas in the interior. According to officials at the Wŏlsŏng power plant, this incident does not affect the safety of the reactor.

October 1998
After a review of nuclear research and development programs, South Korean officials say the government may decrease funds for these projects. The projects that were reviewed include the fast reactor, the advanced PWR (Korea Next Generation Reactor), and the fuel cycle programs.

October 1998
The first phase of remote monitoring systems is installed at the Yŏnggwang-3 nuclear power reactor. The system includes surveillance cameras and a server at the spent fuel storage pond. The data is then transmitted through a telephone line to the IAEA and the Technology Center for Nuclear Control in Taejŏn. Phase II of the remote monitoring systems are expected to be applied in June.

30 September 1998
The Ministry of Commerce, Industry and Energy announces plans to build a radioactive waste disposal facility. The new facility is to hold both low-level radioactive waste and spent fuel. According to the plan that was finalized by the Nuclear Energy Committee, the facility’s size is to be 1.98 million square meters, and is expected to be completed by 2008.

28 September 1998
Kim Chŏng Ryŏm, a former presidential chief secretary under the late President Park Chung Hee states that the US attempted to hinder South Korean plans to import nuclear reprocessing facilities from France in the 1970’s. According to Kim, the US pressured both the Korean and French governments to abandon the transaction, due to fears that the reprocessing facility would be used for military purposes.

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26 September 1998

Classified documents released by the US Department of State reveal both South Korea's plans to develop nuclear weapons, and the US plans to prevent this during the 1970's. According to the documents, President Park Chung Hee doubted US security assurances, and decided to develop weapons to prevent dependence on the US. The US threatened South Korea with suspension of loans to develop nuclear technology and reactors, and pressured the Canadian and French governments. In 1975, the US successfully prevented the sale of a plutonium reprocessing facility by France, which led the South Korean government to abandon its plans to conduct research. South Korea also sought the purchase of solid rocket fuel and rocket motors from the Lockheed Martin Aeronautics Company for ballistic missiles.


16 September 1998

The 4th Permanent Coordination Group meeting to promote safeguards related research and development activities between the US Department of Energy and South Korea's Ministry of Science and Technology is held in Washington DC. During the meeting, South Korea and the US renew the cooperation agreement on DUPIC safeguards (Direct Use of Spent PWR Fuel in CANDU Reactors). In addition, the two countries agree to develop physical protection research programs, and they discuss the development of a curriculum on material control and accounting.


11 September 1998

A dedication ceremony is held for the Ulchin-3 nuclear power reactor. Ulchin-3 is South Korea's first Korean Standard Nuclear Power Plant (KNSP) using a pressurized water reactor (PWR). In addition, a ground-breaking ceremony is held for the Ulchin-5 and -6 nuclear power reactors which are expected to be completed in 2004 and 2005.


6 September 1998

Daewoo Corporation announces it has agreed to provide technology for the construction of nuclear power plants in Taiwan. Daewoo will deliver the technology to New Asia Construction & Development Corporation of Taiwan for ballistc missiles.

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$5 million. Under the agreement, Daewoo will provide a team of three experts to the firm for the next five years.

5 September 1998
The Korean Central News Agency reports that Kim Kwang Mo, a former Chŏng'wadae [Blue House] economic secretary, has admitted that the South Korean government secretly supported the development of nuclear weapons under former President Park Chung Hee. In addition, the report states that the former secretary recalls President Park stating in 1973 that South Korea needs nuclear weapons.

31 August 1998
KEDO’s Executive Board postpones signing an agreement on sharing the cost of the $4.6 billion light water reactor project after North Korea attempts to launch a satellite with a rocket that flies over Japan. Following the launch, Tokyo informs Seoul and Washington that it will not sign the agreement as scheduled and is currently suspending all financial support to KEDO.

27 August 1998
Commenting on the recently discovered underground facility in North Korea, South Korean Foreign Affairs and Trade Ministry spokesman Lee Ho Chin announces that "the government has no grounds to prove that the facility is for nuclear development and the governments of South Korea and the United States share such an evaluation." However, Lee says that South Korea is "closely watching the facility with every possibility in mind, including the possibility of the facility being reserved for nuclear development."

25 August 1998
South Korea's Foreign Affairs and Trade Minister Hong Sun Yŏng submits a report to the National Assembly in which he claims that while there does not yet exist any proof that North Korea has violated the 1994 Agreed Framework, the recently discovered underground facility is most likely linked to a clandestine nuclear program.

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21 August 1998
The Korean Federation for Environmental Movement (KFEM) accuses the Korea Electric Power Corporation (KEPCO) of choosing three locations for nuclear power plant projects without the full approval of residents. According to KFEM, the three sites are Ulchin, Samchok, and Haenam, but these sites have not been officially designated by KEPCO. KFEM accuses KEPCO of bypassing the formal approval process by requesting the Ministry of Industry and Energy to designate these sites.

21 August 1998
The Ministry of National Defense announces plans to inaugurate an anti-nuclear, biological and chemical warfare command by the end of September 1999 to protect against threats from North Korea. According to the Ministry’s reports, the possibility of a chemical attack by North Korea will peak between the years of 2000 and 2002.

18 August 1998
Prime Minister Kim Chong P'il admits that the South Korean government had plans to develop nuclear weapons, but did not provide specific information as to when and how. The Prime Minister stated that "in the past, Seoul had tried to make nuclear weapons but subsequently declared the Korean Peninsula a nuclear-free zone." Kim made his remarks during a meeting with the chairman of the Pugwash Conference of Science and World Affairs.

11 August 1998
Ulchin-3 nuclear power reactor begins commercial operation. Ulchin-3 is a 1,000MW(e) PWR.

12 August 1998
Admiral Joseph Prueher, commander-in-chief of the US Pacific Command, meets with South Korean Defense Minister Ch’ŏn Yong T’aek and chairman of the Joint Chiefs of Staff, General Kim Jin Ho, and promises to make additional assets of the US Pacific Command available in order to counter any small-scale North Korean military provocations, such as the recent submarine incursion.

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6-7 August 1998

Representatives from the United States and South Korea meet in Hawaii to discuss lifting economic sanctions against North Korea. The two sides fail to agree to what degree sanctions should be eased. An official from the South Korean Ministry of Foreign Affairs and Trade says on 10 August that the United States did not completely rule out the possibility of easing sanctions, but “the conditions for lifting sanctions, however, is not favorable to the Republican Congress mainly because of the recent infiltration of a North Korean submarine into the South, and the North’s suspected transfer of missile technology.” [Note: Under the 1994 Agreed Framework, the United States agreed to take steps to ease economic sanctions against North Korea.]


5 August 1998

The Ministry of Science and Technology (MOST) discloses information about Ulchin-3 nuclear power reactors' accidents. According to MOST, an auxiliary unit of Ulchin-3 nuclear power reactor’s steam generator fell off twice in June and July 1998. In addition, on 19 July 1998, during the process of filling one of the tanks with distilled water and nitrogen, the reactor’s pressure increased ten times causing the tank to rupture.


3 August 1998

SK Engineering and Construction Company announces its plan to enter the international nuclear power generation market. SK recently received a certificate for the nuclear power sector from the Korea Electric Association which allows qualified bidders to participate in bids for domestic nuclear power projects. SK plans to form a consortium to bid for nuclear power construction projects in Kori.


27-28 July 1998

KEDO’s Executive Board meets in New York and tentatively agrees on how to share the cost of constructing two light water reactors in North Korea. South Korea will be responsible for $3.22 billion, or 70 percent of the estimated $4.6 billion project. Japan is to pay $1 billion, and the remaining $380 million will be split between the United States and EU. The board does not announce the specifics on how the $380 will be divided between the United States and EU. [Note: The tentative agreement must still be accepted by each of the governments involved.]


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23 July 1998
A shipment of spent nuclear fuel containing 299 spent fuel elements from South Korea arrives at the Idaho National Engineering and Environmental Laboratory (INEEL). The US accepts spent nuclear fuel from South Korea under a bilateral agreement that bans South Korea from reprocessing US originated fuel.

22 July 1998
The Chosun Ilbo quotes a South Korean official working on the KEDO light water reactor project as saying that even though preparatory construction is scheduled to be completed in early August, construction on the actual reactors will probably not begin until October because the United States, South Korea and Japan have yet to reach a final agreement on each party’s share of the construction costs.

2 July 1998
Japanese Vice Foreign Minister Shunji Yanai and his South Korean counterpart meet in Tokyo and agree to seek an early resolution on how to share the construction costs of the KEDO light water reactor project. The foreign ministers agree that US cooperation in funding the reactor construction is indispensable.

1 July 1998
Wŏlsŏng-3 nuclear power reactor begins commercial operation. Wŏlsŏng-3 is a 700MW(e) CANDU reactor built and designed by Atomic Energy of Canada, Limited (AECL), Hanjung Engineering Group and the Daewoo Construction Company.

July 1998
National Assemblyman Pak Kwan Yong (Grand National Party) discloses information regarding a secret project carried out through the Korea Electric Power Corporation (KEPCO) and the 21st Century National Development Research Institute to reprocess spent nuclear fuel abroad then have it returned to South Korea. According to Pak, "the former President Kim knew nothing about the project. The reprocessing project was pushed for the peaceful purposes of securing nuclear fuel." KEPCO decided to abandon this project at the end of June due to the current domestic and international political environment. As a result of abandoning the project, KEPCO decided not to renew a contract with the US law firm Hogan and Hartson, which has been lobbying the US government since April
1997 to allow South Korea to reprocess spent nuclear fuel.
[Note: On 23 July 1998, the South Korean government and the Korea Electric Power Corporation say they cannot comment on this issue because South Korea does not yet have an official policy on reprocessing spent fuel.]

29-30 June 1998
KEDO's Executive Board meets in Brussels to discuss cost-sharing and reducing the total cost of the light water reactor project. The executive board decides to lower the total cost for the light water reactor construction from $5.2 billion to $4.6 billion and agrees to meet in mid-July to formalize the new cost estimate. However, the board members fail to reach an agreement on sharing the cost of the project. [Note: Even with the new figure of $4.6 billion, KEDO still needs at least $300 million to cover construction costs.]

22 June 1998
A North Korean submarine is captured by South Korea 11.5 miles off the South Korean port city of Sokch'o. The 70-ton submarine is detected after becoming ensnared in the nets of a fishing vessel. Following the incident, South Korea places its military on the east coast on high alert.

22-26 June 1998
The 19th annual US-ROK Joint Standing Committee on Nuclear Energy Cooperation is held in Seoul. The purpose of the meeting is to discuss US-ROK bilateral cooperation, the peaceful uses of nuclear energy, and nuclear safeguards.

19 June 1998
The replacement work begins for the Kori-1 nuclear power reactor's steam generators. Korea Heavy Industries and Construction Company (Hanjung) and Westinghouse provide the fabrication design and Bechtel and Hyundai do the construction work for the new steam generators. The Korea Electric Power Corporation (KEPCO) decided to replace the generators to increase the plants reliability in the long-term. The major construction work for the replacement is expected to be completed by the end of July 1998.

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10 June 1998
US Secretary of State Madeline Albright and South Korean Foreign Affairs and Trade Minister Park Chŏng Su meet in Washington to discuss various bilateral issues. Albright and Park agree to hold working-level talks in July on easing economic sanctions against North Korea.

9 June 1998
Speaking at a joint press conference with US President Bill Clinton in Washington, South Korean President Kim Dae Jung says, "We have nothing to fear from North Korea." [Note: Kim, on a nine-day diplomatic trip to the United States, has encouraged the United States to lift economic sanctions against North Korea in order to ease tension on the Korean Peninsula and pave the way for a lasting peace between the two Koreas.]

8 June 1998
Lee Chong Ch’an, director of South Korea’s National Security Planning Agency, says, "At this moment, we have not found any signs that North Korea has reneged on the nuclear agreement with the United States and is actively trying to resume its nuclear weapons program."

3 June 1998
During the 15th meeting of the Korea-Canada Joint Committee on Nuclear Energy, both countries agree to increase cooperation in developing peaceful uses of nuclear energy. In addition, the two countries agree to participate in joint projects to develop nuclear power plants in third countries.

1-2 June 1998
KEDO’s Executive Board meets in New York to discuss cost-sharing for reactor construction and heavy fuel oil deliveries. The executive board, comprised of the United States, Japan, South Korea, and the EU, also discuss ways to reduce the cost of the $5.18 billion project. Japan reportedly proposes a new cost estimate that would reduce

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the total cost by $500 million. Executive board members fail to reach an agreement on cost-sharing and new cost estimates, but they agree to continue talks in Brussels during 29-30 June.


1 June 1998
South Korean President Kim Dae Jung calls on the United States to end economic sanctions against North Korea. In an interview conducted in Seoul, Kim says that in his upcoming visit to Washington he will urge President Clinton and Congress to end sanctions in order to ease tension on the Korean Peninsula. [Note: North Korea has threatened to abandon the 1994 Agreed Framework and restart its nuclear program if the United States does not lift economic sanctions.]


Mid 1998
A Nucleonics Week report states that the US does not favor the purchase of the Canadian CANDU by South Korea. According to the report, sources from South Korea stated in May 1998 that the US might favor Canadian reactors because it would further justify the need to establish the DUPIC (Direct Use of Spent Fuel in CANDU Reactors) fuel cycle. However, US officials deny that they support the DUPIC program and that "no one is interested in DUPIC at a high level of policy."


23 May 1998
South Korea's Foreign Affairs and Trade Minister Park Chŏng Su announces that Seoul is exploring ways to reduce the cost of the KEDO light water reactor project.


20 May 1998
A KEDO official announces that the two light water reactors being constructed in North Korea will not be completed by the original target date of 2003.


12 May 1998
US State Department Spokesman James Rubin announces that the United States, Japan and South Korea have thus
far failed to rectify problems in funding and cost-sharing for the KEDO light water reactor project.

9 May 1998
President Kim Dae Jung appoints Chang Yŏng Shik as the new president of the Korea Electric Power Corporation (KEPCO).

4 May 1998
The Ministry of Commerce, Industry and Energy (MOCIE) announces plans to designate and construct a nuclear waste facility. According to MOCIE and the Korea Electric Power Corporation (KEPCO), the plan will be implemented as early as January 1999. The construction of a nuclear waste facility is expected to cost approximately 1 trillion won (including compensation for local residents) and will have the capacity to store 800,000 barrels of spent fuel. [Note: In 1993, the Ministry of Energy and Resources and the Ministry of Commerce were merged and became the Ministry of Trade and Industry. In 1998, when the Ministry of Foreign Affairs became the Ministry of Foreign Affairs and Trade, the Ministry of Trade and Industry changed its name to the Ministry of Commerce, Industry and Energy.]

4 May 1998
The Ministry of Commerce, Industry and Energy announces that the Korea Electric Power Corporation (KEPCO) will no longer have a monopoly on the energy sector. Under a revised Electricity Business Law, to be submitted to the National Assembly in June, private companies will be able to sell electricity starting in early 1999. [Note: In 1993, the Ministry of Energy and Resources and the Ministry of Commerce were merged and became the Ministry of Trade and Industry. In 1998, when the Ministry of Foreign Affairs became the Ministry of Foreign Affairs and Trade, the Ministry of Trade and Industry changed its name to the Ministry of Commerce, Industry and Energy.]

3 May 1998
The Pacific Nuclear Council (PNC) rejects South Korea’s proposal to transform the PNC into a formal group similar to the Euratom. South Korea’s former Minister of Science and Technology first proposed this idea in February along with a policy paper on the future of nuclear energy in Asia by the Atlantic Council. Many PNC members rejected the proposal because the funding objectives were unrealistic and the purpose unclear. However, South Korean officials hope to revisit this proposal at the PNC’s meeting in late November.

1 May 1998

US Secretary of State Madeline Albright meets with South Korean officials to discuss funding for the KEDO light water reactor project. An official from South Korea's Ministry of Foreign Affairs and Trade announces that Albright "said that her government will consider contributing to the construction of the light water reactors if South Korea pays for the purchase of the heavy fuel oil." Albright reportedly says that the United States will donate $55 million for safety equipment if South Korea assists with the oil deliveries. However, according to the official, Foreign Affairs and Trade Minister Park Chŏng Su informs Albright that Seoul has no intention of funding the oil shipments. Despite recent difficulties in funding the KEDO project, Albright stresses that the United States will not abandon its commitments under the 1994 Agreed Framework.


May 1998

The United States, Japan, and South Korea hold informal talks aimed at reducing the cost of the KEDO light water reactor project. Japan proposes that the overall budget be reduced from $5.18 billion to $4.5 billion.


23 April 1998

The Korea Electric Power Corporation (KEPCO) celebrates the 20th anniversary of nuclear power in South Korea. South Korea established its first nuclear power plant in 1978 with Kori-1, and currently has twelve reactors operating across the country.


15 April 1998

South Korea's Planning and Budget Commission instructs all government agencies to submit a plan to privatize public companies. The Korea Electric Power Corporation (KEPCO) is one of the thirteen public companies subject to privatization.


14 April 1998

An opening ceremony is held for the Nuclear Performance Control Center at the Electrical Engineering and Science Research Institute. The Nuclear Performance Control Center is headed by a professor from Seoul National

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University, and was established by a group of university professors in the field of nuclear energy and civil engineering. The four major research goals of the Center are: prevention of incidents at nuclear power facilities, nationalization and performance verification of equipment, management and extension of the nuclear lifespan, and nuclear performance and assessment training.

13 April 1998
The head of South Korea's Planning and Budget Commission announces that five to six government-owned companies will be up for sale in the international market by late 1998. The Korea Electric Power Corporation (KEPCO) is one of the companies that may be included in the list of companies for sale.

11 April 1998
North and South Korea hold high-level talks in Beijing, and the South promises to follow through with its pledge to finance the construction of two light water reactors in [Kŭmho-chigu], Shinp’o, North Korea. [Note: The Beijing talks are the first high-level consultations between the two Koreas in over four years.]

Mid April 1998
The South Korean government and industry officials announce that South Korea will no longer order pressurized heavy water reactors (PHWRs) from Atomic Energy of Canada, Limited (AECL).

8 April 1998
US Undersecretary of State Thomas Pickering meets with Park Chŏng Su, South Korean Minister of Foreign Affairs and Trade, and Im Tong Wŏn, South Korean Senior Presidential Secretary for Foreign Affairs and Security. Pickering requests that South Korea help fund the annual heavy fuel oil shipments to North Korea, Park and Im reportedly inform Pickering that it would be difficult to convince the National Assembly to accept the additional financial burden given the current economic crisis in South Korea. [Note: The US had originally agreed to completely fund the 500,000 tons/year of oil to North Korea until the completion of two light water reactors. However, following Congress's refusal to allocate the necessary funds, the United States has asked South Korea and Japan to share approximately $20 million/year of the costs.]

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6 April 1998
The first national inspection begins to verify the transfer of spent fuel from Wŏlsŏng-1 nuclear power reactor. The process of transferring the spent fuel bundles into long-term storage and the verification measures will take twelve weeks.

1 April 1998
The Korea Electric Power Corporation (KEPCO) signs a contract with China’s Third Qinshan Nuclear Power Company (TQNPC) to provide training at the Wŏlsŏng -3 and -4 nuclear power reactor sites from May 1998 to June 1999. According to the contract, approximately 60 personnel from TQNPC will receive simulator and commissioning field training.

April 1998
The Institute for Advanced Engineering develops a three-dimensional integrated design system. This new system uses computers to facilitate the construction of CANDU reactors. According to the Institute of Advanced Engineering, the three-dimensional integrated system is being used for the construction of the Wŏlsŏng-3 and -4 nuclear power reactors.

25 March 1998
The Wŏlsŏng-3 nuclear power reactor begins trial operations and the generation of electricity. Wŏlsŏng-3 is a 700MW(e) pressurized heavy water reactor, and is expected to begin commercial operation in late June 1998.

21 March 1998
The Korea Atomic Energy Research Institute (KAERI) announces it has received a license from the US to develop a new technology that could preserve the outer wall of a nuclear power reactor in the case of an accident. According to researchers, the new technology would preserve the nuclear reactor’s vessel by cooling it with water if an accident in which the reactor's core melts.

19-20 March 1998
The KEDO Executive Board meets in New York to discuss sharing the construction costs for the light water reactor project. The board fails to reach an agreement on how much each country will contribute, but according to Chang

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Sŏn Sŏp, director of South Korea's Office of Planning for the Light-Water Reactor Project, all board members
"concurred that reactor construction should not be halted under any circumstances."

9 March 1998
The Chosun Ilbo reports that KEDO has accumulated a $47 million debt in its three years of activity.

7 March 1998
South Korea decides to allow Japan and the United States to provide additional labor and materials for the KEDO light water reactor project in exchange for funding a larger portion of the construction cost. The South Korean government makes the decision at the first meeting of ministers responsible for security and unification under Kim Dae Jung's government.

3 March 1998
The Korea Electric Power Corporation (KEPCO) announces it has shut down 52 power plants. In addition, KEPCO is preparing to shut down Yŏnggwang-1, Wŏlsŏng-1 and Kori-2 nuclear power reactors. The shut downs are a result of decreased energy demand by 2.1 percent of total output.

2 March 1998
Stephen Bosworth, US ambassador to South Korea and former executive director of KEDO, says that the United States is prepared to help South Korea pay for the construction of two light water reactors in North Korea. Referring to Washington's previous stance that it was only responsible for funding the annual heavy fuel oil deliveries, Bosworth says, "Maybe it's time to stop thinking separately about the light water reactors and heavy fuel oil." Bosworth suggests that in order to temporarily relieve the burden on South Korea, "the United States and Japan can pay more early on and Korea can pay later on." However, Bosworth believes that the economic situation in South Korea will soon improve, and stresses that any cost-sharing would be temporary.

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March 1998
The Ministry of Science and Technology with the assistance of the Korea Atomic Energy Research Institute’s Technology Center for Nuclear Control (TCNC) conduct national inspections on six light water reactors. The six light water reactors include Yŏnggwang-1 and -4, Kori-1 and -4, and Ulchin-1 and -2. During the inspections, the Trovan seals are used for the first time on equipment hatches, canal gates, and missile shields.

Early March 1998
Officials from Atomic Energy of Canada, Limited (AECL) state that South Korea's decision to announce the winner of the Ponggil nuclear reactor project may take up to one year. In addition, AECL officials note that they have not heard any reports to confirm rumors that the Korea Electric Power Corporation (KEPCO) will no longer build pressurized heavy water reactors (PHWRs).

28 February 1998
The South Korean government is restructured under a new government organization law. Under the new law, the Atomic Energy Office of the Ministry of Science and Technology is reorganized into six divisions. Safeguard related activities are divided into the Nuclear Control and Inspection Division (NCID) and the Atomic Energy Cooperation Division (AECD). The former Nuclear Control Division is merged with the former Nuclear Inspection Division to create the Nuclear Control & Inspection Division (NCID). The NCID is responsible for conducting all domestic safety and safeguard inspections as well as nuclear export/import control and physical protection of nuclear materials.

26 February 1998
The South Korean sea vessel Taewŏngatamaran-ho, transports 19 technicians and 10 tons of supplies to the light water construction site in Kŭmho-chigu, Shinp'o. [Note: Taewŏngatamaran-ho is the first ship to travel on a temporary shipping route directly connecting North and South Korea.]

25 February 1998
Kim Dae Jung is sworn in as South Korea's president. Immediately following his inauguration, Kim calls for an exchange of envoys and a summit with North Korea. Commenting on the 1991 Basic Agreement between the two Koreas that calls for cooperation and nonaggression, Kim says, "If we only carry out these agreements faithfully, we can successfully resolve inter-Korean problems and move forward on a broad path toward unification." Kim also reaffirms South Korea's commitment to the KEDO light water reactor project.

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16 February 1998
The *Chosun Ilbo* reports that the United States has informed South Korea that it will help fund the construction of the light water reactors in [Kŭmho-chigu], Shinp'o. According to the report, South Korea expects the United States to contribute up to $400 million to the project.


15-17 February 1998
The US and South Korea hold working-level talks in Hawaii on issues related to the Korean Peninsula. The delegations are headed by Charles Kartman, US Deputy Assistant Secretary of State for East Asia and Pacific Affairs, and Song Yŏng Shik, South Korean Assistant Foreign Minister. The two sides discuss food aid to North Korea, progress on the KEDO light water reactor project, and the second round of the four-party talks scheduled for mid-March. Kartman reportedly informs Song that the United States is prepared to lift economic sanctions against North Korea if the four-party talks produce results.


5-6 February 1998
KEDO’s Executive Board meets in New York to discuss cost-sharing for the estimated $5.17 billion light water reactor project. During the talks, South Korea informs the United States, Japanese and European officials that Seoul will not be able to pay any costs for the light water reactor project within the next few years due to the Asian financial crisis. However, South Korean KEDO officials announce that it will pay two thirds of the total cost as the economy recovers from the financial crisis and will fulfill a major role in the light water reactor construction.

According to one member of the South Korean delegation, "We are asking as a matter of principle the United States and Japan to take the burden off South Korea." In a statement issued at the conclusion of the two-day meeting, KEDO says the talks were "productive, and are part of an ongoing process that will continue." However, board members fail to resolve the issue of cost-sharing.

5 February 1998
US State Department spokesman James Rubin announces in his daily briefing that the United States will not share the cost of constructing two light water reactor in [Kŭmho-chigu], Shinp’o. Rubin claims that despite the recent economic crisis in South Korea, it remains the world’s 11th largest economy and is capable of financing a majority of the $5.17 billion project. [Note: In 1995, South Korea agreed to finance a majority of the light water reactor construction in return for playing a central role in the project. However, the 1997-1998 financial crisis and the subsequent IMF bailout have led Seoul to ask for larger contributions from the United States and Japan.]

2 February 1998
Yonhap News Agency quotes a senior official in President-Elect Kim Dae Jung’s transition team as saying that South Korea’s financial burden for the KEDO light water reactor project must be reduced from 70 percent of the total cost to 60 percent. According to the official, the presidential transition team has demanded the government to strongly urge the United States to share the rest of the financial burden for the light water reactor project. However, according to Munhwa Ilbo, a government official says that the South Korean government has officially informed the United States and Japan that Seoul cannot share “more than two thirds” of the total cost due to South Korea’s financial crisis.

Early February 1998
Korea Power Engineering Company (KOPEC) officials deny informing foreign companies of South Korea’s decision to use the PWR rather than the PHWR reactor design. The Korea Atomic Industrial Forum (KAIF) states that KEPCO and the Ministry of Commerce, Industry, and Energy (MOCIE) will announce the contractors for the four nuclear power plants in Ponggil at the end of February. The contracts were originally to be awarded in 1997 but were delayed due to Korea’s financial crisis. [Note: In 1993, the Ministry of Energy and Resources and the Ministry of Commerce were merged and became the Ministry of Trade and Industry. In 1998, when the Ministry of Foreign Affairs became the Ministry of Foreign Affairs and Trade, the Ministry of Trade and Industry changed its name to the Ministry of Commerce, Industry and Energy.]

February 1998

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standard uranium metal from IRMM of Belgium (Institute for Reference Materials & Measurements). The uranium metal will be used as a quantification standard for the chemical analysis of fuel fabrication samples taken during national inspections.


6 January 1998
The Ulchin-3 nuclear power reactor is connected to the power grid and begins generating electricity. Ulchin-3 is a 1,000MW(e) pressurized water reactor and is the first Korean standard nuclear power generation facility in Ulchin.


January 1998
The Korea Power Engineering Company (KOPEC), a subsidiary of the Korea Electric Power Corporation (KEPCO) informs foreign companies that South Korea will base its future nuclear power reactors on the pressurized water reactor (PWR) rather than the pressurized heavy water reactor (PHWR) design. However, officials from PWR manufacturer Asea Brown Boveri-Combustion Engineering (ABB-CE) state that they have not been informed of this decision. South Korean officials have postponed investing in four new nuclear power reactors since 1997, but are expected to award contracts for them in the spring.


1998
South Korea performs inspections at thirteen nuclear facilities. The facilities include six pressurized water reactors (PWRs), two CANDUs, one research reactor, two fuel fabrication plants, and two hot cells. During the first half of the year, priority is given to the fuel transfer at the Wŏlsaing-1 reactor that takes three months. During the three months, national inspectors stay at the site and verify that the transfer of spent fuel is performed according to safeguard procedures. In addition, TRIGA spent fuel which was stored in TRIGA II, III, and the Hi-Flux Advanced Neutron Application Reactor (HANARO) are transferred to the US. During the third quarter of national inspections, a physical inventory verification of the Korea Nuclear Fuel Company (KNFC) is performed. Physical inventory verifications are performed at Kori-4, Ulchin-1 and 3, and Yŏnggwang-4 nuclear power reactors, and new safeguard equipment is installed in the hot cells to monitor nuclear material transfers. During the fourth quarter of inspections, IAEA safeguard equipment is installed at Wŏlsaing-4 and a new surveillance system with remote monitoring capability is installed at Yŏnggwang-3 and Ulchin-4 nuclear power reactors.


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1997

Mid December 1997
The South Korean government decides to revise plans to construct more nuclear power reactors due to demands from the International Monetary Fund (IMF) to decrease government spending in response to the Asian Financial Crisis.

16 December 1997
The Korea Atomic Energy Research Institute (KAERI) announces its plan to sell 20kg of nuclear fuel to the US firm Babcock & Wilcox. The nuclear fuel was produced jointly by KAERI and the French nuclear fuel company CERCA.

12 December 1997
The South Korean government approves a five-year science and technology innovation plan. The plan calls for a 22 trillion won investment over the next five years to emphasize national R&D programs, to promote basic research and training, and to construct the science and technology infrastructure. The national R&D program includes plans to develop new technology for nuclear power.

December 1997
The Ministry of Science and Technology (MOST) holds a meeting to evaluate the performance of the national inspections carried out from August to December 1997. Based on the evaluation, MOST decides to expand national inspections from seven to thirteen nuclear facilities. The thirteen facilities include six light water reactors, two CANDU reactors, two fuel fabrication plants and three research facilities.

4 November 1997
South Korea’s Nuclear Safety Committee (NSC) passes a resolution to issue an operations permit for the Ulchin-3 nuclear power reactor. The Ulchin-3 reactor will begin operating in June 1998.

29 October 1997
South Korean officials ask Turkey to include South Korean companies in expanding Turkey’s nuclear industry during a meeting to promote economic and technical trade between the two countries. South Korea is interested in being a subcontractor for Canadian companies in building the Akkuyu nuclear power plant.
—"Korea Wishes to Participate in Turkey’s Nuclear Plant Project," *Korea Times*, 30 October 1997, p.2, in KINDS.

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9 October 1997
The Korea Atomic Energy Research Institute (KAERI) announces plans to develop a small research reactor by 2002. The 100,000KW(e) reactor can be used in residential centers of 100,000 people. The total construction cost is estimated to be $200 million.

2 October 1997
The presidential candidate of the Democratic Party, Cho Soon states at a seminar in Pusan that South Korea needs to develop the technology and capability to manufacture atomic bombs. In addition, Cho notes that neighboring countries, China and Russia both posses nuclear bombs, and Japan has the technology to manufacture them. The president of the United Liberal Democrats, Kim Jong Pil adds that Korea needs to be capable of deterring threats from possibly China and Japan once the two Koreas are unified.

October 1997
The Korea Electric Power Corporation (KEPCO) awards a contract worth more than $20 million (Canadian dollars) to Atomic Energy of Canada, Limited (AECL) to provide additional fuel handling equipment for South Korea's CANDU reactors.

9-10 September 1997
An informal meeting of US and South Korean nuclear export control officials is held in Seoul. The main topic of discussion is the nuclear export controls of both countries and ways to obtain assurances from North Korea that it will use the supplied light water reactor equipment for peaceful purposes. In addition, participants discuss possible joint participation in other countries' nuclear programs.

3 September 1997
A dedication ceremony is held for Wolsong-2 nuclear power reactor, which is South Korea's second pressurized water reactor (PWR). Construction of the plant took 62 months and cost 1331 billion won (about $1.47 billion). According to the Korea Electric Power Corporation (KEPCO), the addition of Wolsong-2 brings nuclear energy to approximately 30% of the total power generated in South Korea.

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19 August 1997
KEDO holds the groundbreaking ceremony in [Kūmho-chigu], Shinp'o, marking the start of construction on the first of two light water reactors. The ceremony is attended by over 200 people, including Stephen Bosworth, executive director of KEDO, Chang Sun Sop, chief of South Korea's Office of Planning for the Light-Water Reactor Project, Hŏ Jong, North Korean ambassador-at-large, and various other representatives from KEDO member states and contractors working on the project. Bosworth touts the groundbreaking as "the fulfillment of a promise," but Kim Pyŏng Ki, North Korean project manager, claims that the road ahead "is still very long and twisted." After pointing out that the groundbreaking comes 18 months late, Kim says, "It's only when the two light water reactors are completed that the suspicion of the Korean people will be removed thoroughly, and confidence built between the United States and the government of the DPRK."


1 August 1997
National safeguard inspections for nuclear facilities begin with the HANARO research reactor. Seven nuclear related facilities are to undergo inspections by the end of the year including the Korea Nuclear Fuel Company (KNFC), Kori-4, Yŏnggwang-4, Wŏlsŏng-1, Ulchin-1 and a post irradiation examination facility.


10 July 1997
South Korea and Russia conclude a meeting in which the two sides agree that Russia should repay in kind by the end of 1998 loans of $391 million. According to the agreement, Russia will deliver enriched uranium, steel products, aluminum, electrolytic copper and helicopters as repayment. Under a previous agreement made between the two countries in 1995, Russia was to repay part of its loans with weapons. However, due to US pressure and inter ministerial conflicts, the South Korean government decides not to receive any Russian weapons as a form of loan payment.


7-9 July 1997
The Sixth ROK-IAEA Safeguards Review Meeting is held in Seoul. During the meeting, South Korea and the IAEA

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agree to take steps to jointly use NDA (non-destructive assay) equipment seals by early 1998 and to promote cooperation in the joint use of other safeguard equipment.


1 July 1997
The Wŏlsŏng-2 nuclear power reactor begins commercial operation. Wŏlsŏng-2 is a 700MW(e) pressurized heavy water reactor manufactured by Atomic Energy of Canada, Limited (AECL) and the Korea Heavy Industries and Construction Company (Hanjung).


1 July 1997
Construction of the Wŏlsŏng-2 nuclear power reactor is completed. [Note: The Ministry of Science and Technology (MOST) and the Korea Electric Power Corporation (KEPCO) cite 1 July 1997. However, the Korea Hydro and Nuclear Power (KHNP) cites June 1997.]


22-25 June 1997
The Committee to Evaluate and Verify Physical Feasibility of the Next Generation Superconducting Nuclear Fusion Research Apparatus (KSTAR) meets to discuss research results and provide recommendations. The Committee is comprised of experts from Japan, Germany, the Naval Surface Warfare Research Laboratory in the US, and the International Thermonuclear Experimental Reactor group. The committee agrees that the development of KSAR will contribute to worldwide fusion R&D efforts. In addition, the members express satisfaction with the development of the project. [Note: KSTAR is also referred to as the Korea Superconducting Tokamak Advanced Research.]


2 June 1997
The Yŏnggwang-4 nuclear power reactor is temporarily shut-down due to a leak in the micro tube of the secondary cooling system.


28 May 1997
KEDO contracts with Korea Telecom to provide all of the telecommunication links between South Korea and the light water reactor construction site in [Kŭmho-chigu], Shinp’o.

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26 May 1997
The Ministry of Science and Technology (MOST) announces plans for South Korea to develop the technology to use a small, 300MW(e) nuclear power reactor to convert seawater into freshwater. MOST plans to develop this new reactor and technology by 2002.

25-27 May 1997
IAEA Director General Hans Blix travels to Seoul to discuss North Korea’s nuclear program and Taiwan’s planned shipment of nuclear waste to North Korea. Blix promises that the IAEA will continue to make efforts to ensure the transparency of North Korea’s past and present nuclear activities. He also reaffirms that the planned shipment of Taiwanese nuclear waste is comprised solely of low-grade nuclear material and thus not prohibited for international transportation.

Mid 1997
Chung Kun Mo, the South Korean candidate for the IAEA Director General position accuses Mohamed Elbaradeli of not following IAEA procedures for official nominations, and accuses the US of having manipulated the process by which Elbaradeli was selected. Chung was strongly supported by South Korea’s nuclear industry, but failed to gain the support of the South Korean government. In addition, the US and China opposed Chung’s candidacy due to fears that his position would conflict with efforts to keep North Korea’s nuclear weapons program under control.

12-13 May 1997
The KEDO Executive Board meets in Tokyo and decides to allow the European Atomic Energy Community (EAEC) join KEDO as a board member. The board, including representatives from the United States, Japan and South Korea, also decides to begin construction of peripheral facilities for the light water reactor project in mid-July.

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Early May 1997
President Kim Young Sam orders the Ministry of Foreign Affairs to make sure Chung Kun Mo withdraws from the race for director-general of the International Atomic Energy Agency (IAEA). The South Korean government originally supported Chung’s candidacy, but changed positions after opposition from the US. The South Korean government fears Chung’s campaign will interfere with the national interest and its relationship with the IAEA.

Early May 1997
During an interview with the Yonhap News Agency, International Atomic Energy Agency (IAEA) director-general candidate Chung Kun Mo announces his plans to continue running without the support of the South Korean government. According to Chung, US scientists are urging him to continue his candidacy and do not understand why the South Korean government no longer supports him in his effort.

25 April 1997
Ulchin-1 and -2 nuclear power reactors are temporarily shut-down for approximately 7.5 hours due to shrimp clogging the intake water pipes. A similar incident occurred in early February, and company officials site the area in which the Ulchin plants are located as the problem. According the company officials, cold and warm water meet near the power plants and the cold water current carries shrimp and jelly fish.

23 April 1997
Samsung Corporation's construction division is awarded a contract jointly with Dong Ah Construction Company and the Korea Heavy Industry and Construction Company to build Ulchin-5 and 6 nuclear power reactors. This is the first nuclear power plant project undertaken by the Samsung Corporation. According to the $90 million contract, Samsung Corporation holds 20% and is to lead the construction of key components of the Ulchin power plants.

16-21 April 1997
Representatives from North Korea meet with representatives from the United States and South Korea in New York to present Pyongyang’s reply to the 5 March joint briefing on the proposed four-party talks. Kim Kye Kwan, head of the North Korean delegation, says that the confidence needed for the peace talks has not yet been built. Thus, he suggests more rounds of negotiations with the United States and South Korea before the actual peace talks begin.

15 April 1997
According to the Ministry of Science and Technology (MOST) the Korea Electric Power Corporation (KEPCO)

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misclassified the 17 January 1997 incident at the Ulchin-2 nuclear power reactor. KEPCO classified the incident as a grade 0 according to the International Atomic Energy Agency's (IAEA) safety standards when in fact it was a grade 1.


14 April 1997
KEDO selects four South Korean companies—Hyundai Engineering & Construction Company, Dong Ah Industrial Company, Daewoo Corporation, and Korea Heavy Industry & Construction Company—to construct preliminary facilities for the light water reactor project. The companies' work involves building offices and living quarters for personnel, constructing roads between Yanghwa port and the reactor site in [Kŭmho-chigu], Shinp'o, and securing reliable sources for drinking water and electricity.


9-15 April 1997
A KEDO delegation travels to North Korea for working-level talks on preparations for the groundbreaking at the proposed light water reactor construction site. The 54 member delegation meets with North Korean government officials in Shinp'o. Upon returning to Seoul, Ch'oe Yong Jin, head of the delegation, tells reporters that KEDO and North Korea reached an agreement on entry and exit procedures for personnel working on the project. Cho'oe also reports progress in negotiations on wages for North Korean workers. However, Ch'oe says more negotiations are necessary before breaking ground at the construction site. [Note: This KEDO delegation, which travels aboard the South Korean ship Hannara-ho, is the first to travel directly to North Korea by ship. In July 1996, KEDO and North Korea signed a protocol opening four transportation links—two by sea and two by air—between the North and South for materials and personnel related to the light water reactor project.]


3 April 1997
During a press conference, the CEO of Cogema, a French firm providing services related to nuclear power generation, names South Korea and Taiwan as potential markets for reprocessing and recycling of spent fuel. The US has strongly opposed any plans for these countries to begin reprocessing.


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1 April 1997
The Wŏlsŏng-2 nuclear power reactor is connected to the power grid and begins generating electricity.

Early April 1997
The Russian firm Elemash signs an agreement with South Korea to supply nuclear fuel for South Korea's nuclear power plants.

Early April 1997
The Ministry of Trade, Industry, and Energy (MOTIE) plans to secure a new site for two new nuclear power reactors to be operational by 2010, but the ministry has not publicly disclosed the possible locations. MOTIE officials are working with local governments to gain political acceptance to avoid problems such as those seen in trying to obtain construction licenses for the Yŏnggwang-5 and -6 nuclear power plants last year. [Note: In 1993, the Ministry of Energy and Resources and the Ministry of Commerce were merged and became the Ministry of Trade and Industry. In 1998, when the Ministry of Foreign Affairs became the Ministry of Foreign Affairs and Trade, the Ministry of Trade and Industry changed its name to the Ministry of Commerce, Industry and Energy.]

April 1997
The Korea Electric Power Corporation (KEPCO) hires a US law firm, Hogan & Hartson to lobby on its behalf to allow South Korea to reprocess spent nuclear fuel abroad.

April 1997
The Ministry of Science and Technology (MOST) overrules the decision by the Korea Electric Power Corporation (KEPCO) to begin reprocessing spent fuel. MOST officials want KEPCO to wait until market uranium prices fall, and to look for non-US Department of Energy origin uranium to make South Korea less dependent on the US. The US maintains the right to prevent South Korea from reprocessing US based uranium through a bilateral nuclear cooperation agreement between the two countries signed after the Korean War, and a classified document stating US nonproliferation objectives created in 1994 under the Clinton administration. [Note: Under the terms of the 1992 "Joint Declaration on the Denuclearization of the Korean Peninsula", South Korea agreed not to reprocess spent fuel. Furthermore, the US-ROK bilateral agreement concerning civilian uses of atomic energy signed in 1972 prohibits South Korea from reprocessing without permission from the United States.]

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12 March 1997
The third Permanent Coordinating Group (PCG) meeting between the Ministry of Science and Technology (MOST) and the US Department of Energy is held in South Korea. During the meeting, MOST officials inform the US that South Korea will soon begin its national safeguard inspection program for nuclear transparency in 1997 and requests continued US support. The two countries discuss the MOST-DOE Arrangement, the US-Korea Scientific and Technology Cooperation Agreement, and progress made on DUPIC (Direct Use of spent PWR fuel in CANDU reactors) safeguards.


11 March 1997
Kwŏn Yong Hae, director of South Korea's Agency for National Security Planning, says that "it is believed North Korea is trying to import Taiwan’s nuclear waste as a means of camouflage for the disposal of its own nuclear waste."


6 March 1997
The South Korean Foreign Ministry announces that the United States and South Korea will cancel the Team Spirit combined military exercise for the fourth consecutive year.


5 March 1997
Delegates from the United States, South Korea and North Korea meet in New York to discuss the proposed four-party peace talks. The US, South Korean, and North Korean delegations are respectively headed by Charles Kartman, Principle Deputy Assistant Secretary of State for East Asian and Pacific Affairs, Song Yong Shik, South Korean Assistant Foreign Minister, and Kim Kye Kwan, North Korean Vice Foreign Minister. The South Korean delegation suggests that North Korea could receive economic assistance, food aid, and more cooperation on the light water reactor project if Pyongyang participated in the four-party talks. During the five-hour meeting, described by all sides as "serious and sincere," the North Korean delegation listens to the US and South Korean proposal for the peace talks, which would also include China. After the briefing, the North Korean delegation expresses interest in the proposal and returns to Pyongyang for consultations.

27 February 1997
Wŏlsŏng-2 nuclear power reactor temporarily shuts down due to a leak of 18 tons of heavy water. The leak occurs around 7:00 pm during a trial test of the reactor, which is expected to be completed by June.

19 February 1997
A cargo ship carrying 15 tons of equipment to be used by the seventh KEDO site inspection team departs Pusan, South Korea on its way to Najin [Nasŏn], North Korea. From Najin the equipment will be transported by rail to the proposed light water reactor construction site near Shinp'o. The equipment reportedly includes five drilling machines and 11 pumps.

18 February 1997
The Korea Electric Power Corporation (KEPCO) and Hyundai Construction Company agree to delay construction of the Yŏnggwang-5 and -6 nuclear power reactors due to temporary cancellation of the construction permits by the local government in Yŏnggwang-kun, South Chŏlla Province. The original date to complete construction was June 2000 and June 2002, but this will extend the completion dates to April and December 2002.

17 February 1997
The chairman of the Korea Electric Power Corporation (KEPCO) announces the desire to use nuclear fuel reprocessed in other countries as fuel for South Korea's power plants. In addition, the chairman mentioned France and the UK as possible suppliers.

17 February 1997
In response to a North Korean letter assuring the safety of a 27-member South Korean KEDO team, Pan Ki Mun, South Korea's Senior Presidential Security Secretary, announces that South Korea intends to send the survey team to [Kŭmho-chigu], Shinp'o as planned. Pan adds that the KEDO light water project is not related to the current political tension that resulted from the attack on North Korean defector Lee Han Yŏng because the KEDO project is an international agreement. However, the negotiations between the two Koreas on the safety of the KEDO team's trip to North Korea are still underway, and no final decision has been made. [Note: The target date of 22 February
is delayed to 1 March as KEDO officials await an official reply from Pyongyang that it will strictly abide by the protocol signed in 1996 granting immunity and consular protection to all personnel working on the light water reactor project.]

16 February 1997

After an attempt on the life of North Korean defector Lee Han Yong in Seoul on 15 February, the South Korean government decides to suspend the seventh visit of a reactor survey team to [Kŭnho-chigu], Shimp'o, until North Korea guarantees the team's safety. The Ministry of Unification makes the decision during an emergency meeting called by Unification Minister Kwŏn O Ki after the attack on Lee Han Yong.

4 February 1997

Lee Sŭng Kon, South Korean ambassador to Austria, meets with IAEA Director General Hans Blix to discuss the planned shipment of Taiwanese nuclear waste to North Korea. Blix expresses concern and says that "South Korea and the IAEA need to discuss closely what they could do to thwart Taiwan's bid to export nuclear waste to North Korea from legal and moral viewpoints."

1 February 1997

Ulchin-1 and -2 nuclear power reactors are temporarily shut down due to the clogging of the rotating drum filters caused by shrimp swimming into the inlet pipes. The reactors are expected to be operational by 6 and 14 February.

31 January 1997

South Korea threatens to abandon the KEDO light water reactor project if North Korea takes delivery of nuclear waste from Taiwan. Protesting the recently signed contract between Taipower and North Korea, South Korean Prime Minister Lee Su Sŏng warns that if the contract is realized, "it would be difficult for the National Assembly to

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approve the necessary expenditures to provide the reactors to the North." [Note: Since the contract was signed on 11 January, South Korea has protested the deal, contending that North Korea does not have the necessary facilities to safely dispose of the waste.]


27 January 1997
Wŏlsŏng-2 nuclear power reactor begins trial operations. It is expected to begin commercial operation by late June.


22 January 1997
South Korean Foreign Minister Yu Chong Ha warns Taiwan that Seoul will take economic and political measures to cancel a deal by which North Korea agreed to dispose of up to 200,000 barrels of Taiwanese nuclear waste in P’yŏngsan-kun—approximately 90km from the DMZ. Seoul contends that North Korea lacks the necessary technical facilities to properly dispose of the waste, and thus might cause environmental damage to the Korean Peninsula for many years to come.


21 January 1997
The head of South Korea’s mission to the United Nations, Sŏn Chun Yŏng, is appointed president of the UN Conference on Disarmament.


17 January 1997
Ulchin-2 nuclear reactor is shut down for eight hours due to a breakdown of the main breaker.

15 January 1997
South Korean officials demand that North Korea reject plans to store nuclear waste from Taiwan in exchange for $227 million. According to the Taiwan Power Company, the nuclear wastes are "only slightly radioactive."

15 January 1997
Yŏnggwang-3 nuclear power reactor is temporarily shut down due to an employee’s mishandling of the gauge. The Korea Electric Power Corporation (KEPCO) announces that this incident is a grade 0 according to the International Atomic Energy Agency’s safety standards.

14 January 1997
Dong Ah Construction Industrial Corporation partners with Samsung Corporation's construction division, and with Korea Heavy Industries & Construction Company (Hanjin) to bid for the construction of the Ulchin-5 and -6 nuclear power reactors. The Korea Electric Power Corporation is expected to request bids for pre-qualified candidates on 14 March.

11 January 1997
The Taiwan Power Company (Taipower) and North Korea sign a contract allowing Taipower to ship up to 200,000 barrels of low-grade radioactive waste to North Korea for an estimated cost of $1,151/barrel. [Note: Seoul strongly objects to the deal out of concerns that North Korea will dump the waste in abandoned mines near the DMZ.]

9 January 1997
The Nuclear Environment Technology Institute (NETEC) is established under the Korea Electric Power Corporation (KEPCO). NETEC is responsible for managing nuclear waste, a task originally undertaken by the Korea Atomic Energy Research Institute (KAERI).

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**7 January 1997**

The Ministry of Science and Technology (MOST) approves 17 Accounting and Control & Physical Protection Regulations (AC&PP) submitted by domestic nuclear facilities. National inspections will have to be performed throughout the year that confirm and verify the inventory of nuclear materials at each facility.


**1996**

**Late 1996**

Researchers at the Korea Atomic Energy Research Institute (KAERI) hope to test the Direct Use of spent PWR fuel in CANDU (DUPIC) program by 1998-99. DUPIC is a joint project by South Korea, the US, and Canada to resolve the conflict between the US and South Korea over reprocessing spent fuel from Korean power reactors. Korean researchers estimate the cost of using DUPIC fuel to be $15 million less than using natural uranium fuel.


**30 December 1996**

South Korea returns the remains of 24 North Korean commandoes that were killed after their submarine ran ashore near Kangnūng, South Korea on 18 September. After the remains are returned, North Korea further eases tension on the peninsula by expressing its "willingness to listen...to a 'joint explanation' of the proposed 'four-way (peace) talks'" aimed at replacing the Korean War Armistice with an official peace treaty.


**17 December 1996**

China's vice premier asks South Korean officials for more investments in China's nuclear power plants, and more technology transfers during a four day visit to South Korea.


**December 1996**

The Korea Electric Power Corporation (KEPCO) announces it will not participate in the Direct Use of Spent PWR Fuel in CANDU Reactors (DUPIC) program to reduce spent fuel inventories at the Kori nuclear power station. The DUPIC program involves re-fabricating spent PWR fuel and burning it in the Wŏlsŏng reactors. According to KEPCO officials, South Korea would prefer to have another country such as France or Britain reprocess Kori's spent fuel. However, the US is against such a move and any efforts by South Korea to reprocess fuel supplied by the US or any

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other country.


**Early December 1996**

The South Korean National Assembly approves new legislation calling for an independent Nuclear Safety Commission that is to take over the responsibility of regulatory activities from the Atomic Energy Commission. The new legislation also requires nuclear operators to inform the public on the environmental impact of nuclear power plants. In addition, nuclear fuel design activities will be transferred from the Korea Atomic Energy Research Institute (KAERI) to the Korea Nuclear Fuel Company (KNFC). Furthermore, the Korea Electric Power Corporation (KEPCO) will be responsible for the funding and management of radioactive waste.


**Late November 1996**

The US government decides to hold talks with South Korean officials about signing Part II of the 93+2 enhanced International Atomic Energy Agency (IAEA) safeguards. Part II of the 93+2 safeguards include more intrusive IAEA inspections and require states to submit an expanded declaration of nuclear activities. South Korea recently joined Germany and Japan in voicing opposition to these enhanced safeguards.


**25 November 1996**

ABB Combustion Engineering Nuclear Systems is awarded an engineering design and components contract by the Korea Electric Power Corporation for the Ulchin-5 and -6 nuclear power reactors. Construction for the two 1,000MW(e) reactors will begin in early 2003 and 2004.


**24 November 1996**

US President Bill Clinton and South Korean President Kim Young Sam issue a joint statement reassuring North Korea that the KEDO light water reactor project "will be implemented." Referring to the 18 September submarine incident, the statement also calls on North Korea to "take acceptable steps...to reduce tension and avoid such provocations in the future."


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22 November 1996
In Manila, South Korean Foreign Minister Yu Chong Ha says that South Korea cannot proceed with the four-party talks and the KEDO light water reactor project until North Korea apologizes for the 18 September submarine infiltration into South Korea. However, US Secretary of State Warren Christopher says it is important to continue the talks and the reactor project.

20 November 1996
South Korea and Vietnam sign a cooperation agreement on researching peaceful uses of nuclear energy. The two countries agree to conduct research on the peaceful uses of nuclear energy, to abide by International Atomic Energy Agency safety regulations, and to obtain approval from one another prior to transferring nuclear material to a third country.

20 November 1996
Paul Cleveland, chairman of the Board of Directors of the Korean Peninsula Energy Development Organization (KEDO) and US ambassador-at-large in charge of nuclear affairs, meets in Seoul with Chang Sŏn Sŏp, director commissioner of the ROK Light-Water Reactor Office. Cleveland stresses that resumption of the KEDO light water reactor project is vital to security on the Korean Peninsula, but Chang says that Seoul's position is that activities relating to the reactor project will not resume until Pyongyang apologizes for the 18 September submarine incident. Chang says that South Korea cannot guarantee the safety of technicians working on the project while tension on the peninsula is so high.

16 November 1996
The Ministry of Science and Technology (MOST) authorizes the Technology Center for Nuclear Control (TCNC) of the Korea Atomic Energy Research Institute (KAERI) to be the nation’s technical assistant agency for national safeguards implementation, which is to begin in 1997.

12 November 1996
China and South Korea agree to promote twelve joint research projects in science and technology. The two countries also agree to establish a nuclear consultative council.
9 November 1996
South Korean President Kim Young Sam announces that South Korea will not participate in the Korean Peninsula Energy Development Organization (KEDO) light water reactor project until North Korea apologizes for the incursion of a North Korean submarine into South Korea on 18 September. In an interview with the Washington Post, Kim says, "The implementation of the nuclear agreement on our part will be suspended for the time being."

5 November 1996
Asia’s first conference on the safety of nuclear power is held in Tokyo. The conference is hosted by Japan, and participants include officials from South Korea, China, Australia, Indonesia, Malaysia, the Philippines, Thailand, and Vietnam. The participating states agree to closer cooperation and exchanges on safeguards and the management of radioactive waste.

1 November 1996
Samsung Heavy Industries announces it has independently developed a fuel cell for use in nuclear power reactors. This development makes South Korea the third country in the world to have independently manufactured a galvanic battery.

Early November 1996
The Korea Institute of Nuclear Safety (KINS) completes construction of a new building that has nuclear safety control facilities and a radiation prevention center in the Taedŏk Science Town in Taejŏn. In the new building, approximately 300 experts will be in charge of nuclear power plant safety evaluations and safety controls for isotope-related facilities.

Early November 1996
British Nuclear Fuels, Ltd. (BNFL) and the Korean Atomic Energy Research Institute (KAERI) sign an agreement to jointly investigate the possibility of Korea's CANDU reactors using recycled uranium from fuel processed at BNFL's

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**Early November 1996**

South Korean officials announce Kori and Ponggil as two possible sites for eight additional power reactors. These reactors are expected to be completed by 2010, and officials hope to decide by 1997 whether they will be PWR or PHWR reactors.


**November 1996**

South Korean officials announce plans to re-negotiate its bilateral nuclear cooperation agreement with the US. South Korean officials hope to lift the indefinite ban on South Korea from reprocessing spent fuel that originates in the US.


**November 1996**

The Korea Atomic Energy Research Institute (KAERI), and Atomic Energy of Canada, Ltd. (AECL) begin negotiating with the Point Lepreau power station to conduct tests on a CANDU-6 unit. AECL and KAERI have been conducting a joint research project to reduce the usage of spent fuel by the four PHWR reactors in Wŏlsŏng by developing a modified CANDU fuel bundle. Officials at KAERI hope to test-load the fuel at the Wŏlsŏng-1 nuclear power reactor in four years. This research project is part of a plan to reduce South Korea's spent fuel storage problem. South Korea is avoiding projects that reprocess spent fuel due to US prior consent rights and pressure not to reprocess. [Note: The "Joint Declaration on the Denuclearization of the Korean Peninsula" of 1992 prohibits spent fuel reprocessing].


**November 1996**

South Korean officials decide to take additional precautionary measures to protect its coastal power plants and nuclear reactor sites after North Korean submarines were discovered off the coast of the Ulchin nuclear power plant in September.


**31 October-1 November 1996**

US Defense Secretary William Perry and South Korean Defense Minister Kim Dong Jin meet in Washington for an annual security meeting. Perry and Kim issue a joint security communiqué condemning "the submarine infiltration of armed North Korean commandoes" as a breach of the armistice agreement. In addition, the communiqué

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reaffirms the need for a "robust schedule" of combined military maneuvers, but it puts off until next year any decision on whether or not to resume the contentious Team Spirit exercise. [Note: Pyongyang condemns the Team Spirit exercise as a preparation for nuclear attacks against North Korea. Team Spirit has been cancelled since 1994 in order to reduce tension on the peninsula, but after the 18 September North Korean submarine incident, South Korea has recommended resuming the maneuvers.]


20 October-17 November 1996
The 4th Nuclear Cooperation Policy Course is held in Washington, DC for South Korean managers in the field of nuclear energy. The course covers an overview of non-proliferation policy, the international non-proliferation regime, the US nuclear export control regime, US views on nuclear fuel cycle technologies, US policy on nuclear technology, and a technical perspective of international nuclear cooperation. South Korean officials requested the arrangement of this course during the US-ROK Joint Standing Committee on Nuclear and Other Energy Technologies meeting in 1996.


19 October 1996
An opening ceremony is held for the Yŏnggwang-3 and -4 nuclear power reactors.

17 October 1996
The European Union (EU) agrees to provide funding over a five-year period to the Korean Energy Development Organization (KEDO). In addition, the EU holds talks with KEDO in hopes of gaining a seat on the executive board, which would allow European companies to compete for contracts associated with the KEDO project.


11 October 1996
US Assistant Secretary of State Winston Lord and South Korean Foreign Minister Kong Ro Myŏng meet in Seoul to discuss bilateral security issues following the mid-September incursion of a North Korean submarine into South Korea and the subsequent deaths of the North Korean crew. Despite the rising tension on the peninsula, Lord and Kong agree that the Korean Peninsula Energy Development Organization (KEDO) project should move ahead as scheduled.

9 October 1996
South Korean President Kim Young Sam announces that construction on the light water reactor project in North Korea will be delayed due to the mid-September incursion of a North Korean submarine into South Korea.

4 October 1996
The Korea Atomic Energy Research Institute (KAERI) announces a plan for the development and construction of the Korean Advanced Liquid Metal Reactor (KALIMER). According to the plan, KAERI will begin construction in 2005 and the reactor is expected to be completed in 2010. In addition, KAERI plans to complete the production of nuclear fuel for the KALIMER by 2006 and complete construction of a nuclear fuel production facility by 2010.

3-4 October 1996
The 5th South Korea-International Atomic Energy Agency Joint Review Meeting on Safeguards Implementation is held in Vienna. South Korean and IAEA officials discuss the inspection results of 1995, review the status of facility attachments and design information questionnaires, safeguards implementation at each facility, the strengthening of safeguards, notification of imports and exports, and the exemption and non-exemption of nuclear materials.

1 October 1996
The South Korean National Assembly releases a report on the number of nuclear accidents that have occurred since the first nuclear power plant was constructed in 1978. The report reveals 288 incidents since 1978, with Kori-1, -2 and -3 nuclear power reactors as the plants with the most accidents. However, since 1995, the Yŏnggwang power plants are reported to have the most accidents, accounting for 57.8 percent of the total.

October 1996
Korea Nuclear Fuel Company (KNFC) announces it will expand its fuel fabrication capacity by the end of 1997 to meet the demands of the additional reactors South Korea plans to bring into operation between now and 2010. KNFC has already begun construction of a new fabrication plant with assistance from Fragema of France and GE Canada. The plant is expected to be operational by January 1998 with the capacity to produce 400 metric tons of PWR fuel (the current fabrication plant produces 200 metric tons). In addition, KNFC is building a plant to make natural uranium fuel for South Korea's three CANDU-6 reactors. The plant is expected to be operational by early 1998 and will produce 400 metric tons of uranium per year.

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30 September 1996
The Korea Atomic Energy Research Institute (KAERI) announces it has developed an improved nuclear fuel for heavy water reactors. The research was conducted jointly with Canada and will be tested on a model reactor in Canada in November 1997. According to researchers, the development of this improved fuel gives South Korea the ability to independently produce nuclear fuel for heavy water reactors.

24 September 1996
Construction begins for the Yŏnggwang-5 and -6 nuclear power reactors.

24 September 1996
The South Korean Ministry of National Defense issues a statement proposing the resumption of the combined US-South Korean military exercise Team Spirit. According to the statement, Seoul will make the recommendation to Washington during bilateral security consultative talks scheduled for 31 October to 1 November. [Note: Condemned by Pyongyang as preparations for a nuclear conflict, the annual Team Spirit exercise was canceled in 1994 in order to ease tension on the Korean Peninsula in the months leading up to the Agreed Framework. The proposed resumption of the exercise comes in the wake of the mid-September incursion of a North Korean submarine into South Korea.]

18 September 1996
A North Korean submarine runs ashore in the northeastern region of South Korea. According to South Korean reports, the submarine carried 26 North Korean agents, 24 of whom are later killed by South Korean soldiers or their fellow agents. The incident sparks inflamed rhetoric from both the North and South and threatens the success of ongoing North Korea- KEDO negotiations on the light water reactor supply contract. Following the incident, South Korea cancels a planned visit to [Kŭmho-chigu], Shinp'o by a site survey team.
17 September 1996
Local government officials from Yŏnggwang-kun, South Chŏlla Province grant the Korea Electric Power Corporation (KEPCO) a license to construct the Yŏngkwang-5 and -6 nuclear power reactors. In exchange, the Ministry of Trade and Industry and KEPCO agree to legalize and install environmental monitoring facilities around the plants, and to increase compensation for the damages caused by the warm water emissions from the plants.

16 September 1996
Local government officials from Yŏnggwang-kun, South Chŏlla Province reject for the second time the Board of Audit and Inspections demand to approve the construction license for the Yŏnggwang-5 and -6 nuclear power reactors.

14 September 1996
The Korea Atomic Energy Research Institute's (KAERI) Atmospheric Nuclide Monitoring System (ANMS) project team fabricates and installs the ANMS on top of the Radiation Application Research Building. The ANMS can detect an atmospheric nuclear test and substances released from a nuclear reactor or other nuclear related facilities. The ANMS is a joint research project between KAERI and Pacific Sierra Research.

9-12 September 1996
A workshop on the physical protection of nuclear materials is held at the Nuclear Training Center of the Korea Atomic Energy Research Institute. Forty participants from seven different organizations attend. The purpose of the workshop is to develop awareness of the physical protection against radiological sabotage and theft of nuclear materials.

1 September 1996
South Korean officials offer to provide $1 million worth of nuclear waste disposal equipment to persuade Russia from dumping radioactive waste into the ocean. The equipment is expected to be available in late October.

Related content is available on the website for the Nuclear Threat Initiative, www.nti.org.
31 August 1996
The Yŏnggwang-2 nuclear power reactor resumes operation after being shut down due to leaks in the steam generating tubes. The leaks were first identified on 18 July, and the reactor was shut-down on 7 August after technicians discovered cracks in three tubes.

24 August 1996
Japan's Sankei Shimbun, quoting a Japanese government official, reports that the Korean Peninsula Energy Development Organization (KEDO) will begin construction on the first light water reactor as early as November.

22 August-27 September 1996
Representatives from North Korea and the Korean Peninsula Energy Development Organization (KEDO) meet in New York for the second round of talks concerning protocols on management of the [Kŭmho-chigu], Shinp'o reactor site and the provision of North Korean labor and services to the light water reactor project. On 27 September, the two sides agree to the terms of the protocols. North Korea agrees to provide 3.3 square miles for the construction site and related facilities. However, the most contentious issue, the wages of North Koreans working on the project, remains unresolved as the two sides decide to pass the issue on to KEPCO, the prime contractor for the project.

27 August 1996
The Ministry of Science and Technology announces the decision to establish a nuclear safety commission and a nuclear research fund. Under the plan, the nuclear safety commission will act independently of the Nuclear Commission in order to eliminate any conflict of interest when the International Nuclear Safety Convention goes into effect on 24 October 1996. In addition, the South Korean government transfers the responsibility of managing nuclear waste from the Korea Atomic Energy Research Institute (KAERI) to the Korea Electric Power Corporation (KEPCO). The decision comes after KAERI's failure to confirm a site to store nuclear waste.

Related content is available on the website for the Nuclear Threat Initiative, www.nti.org.
11 August 1996
A Korean Peninsula Energy Development Organization (KEDO) official announces that KEPCO has selected Duke Engineering & Services as its technical consultant for the light water reactor project in North Korea. The US based Duke Engineering will provide technical support for various aspects of the project including expenses, design and construction. [Note: KEPCO and Duke Engineering & Services sign a contract in May 1997.]

2 August 1996
Russia concludes an agreement with South Korea to repay overdue debts and interest with $90 million worth of enriched uranium and helicopters. South Korea provided the Soviet Union with $1.4 billion in loans in the early 1990s, and Russia has so far repaid $40.4 million.

29 July 1996
The Kori Nuclear Power Plant and the Korean Electric Power Corporation (KEPCO) announce that they will build the Kori-5 and Kori-6 nuclear reactors in Pihak-ri, Sŏsaeng-Myŏn, Ulchu-ku, Ulsan, South Kyŏngsan Province and in Hyoam-ri, Chang’an-úp, Kijang-kun, Pusan, respectively.

26 July 1996
The Korean Peninsula Energy Development Organization (KEDO) announces that it has selected the Korea Exchange Bank, Citibank, the Bank of Tokyo and Mitsubishi Bank to handle the financial services for the light water reactor project in North Korea.

22 July 1996
South Korea’s Ministry of Finance and Economy informs the Office of Planning for the Light-Water Reactor Project that South Korea will not finance more that 60 percent (approximately $3.5 billion) of the Korean Peninsula Energy Development Organization (KEDO) project.

20-29 July 1996
Representatives from the Korean Peninsula Energy Development Organization (KEDO) and North Korea meet near

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Mt. Myohyang, north of Pyongyang, to discuss additional follow-up protocols to the light water reactor supply agreement. The protocols under discussion will cover the management of the construction site in Kŭmho-chigu, near Shinp'o, and the provision of North Korean labor, goods and services for the project. The North Korean delegation reportedly demands "special" wages for North Koreans working on the project. The two sides fail to initial an agreement, but talks resume in New York on 22 August. [Note: The KEDO delegation had originally planned to visit the proposed reactor site, but due to torrential rains, the trip was cancelled.]


20 July 1996
South Korea's National Unification Board announces its approval of a plan for the Korea Electric Power Corporation (KEPCO) to be the prime contractor for the Korean Peninsula Energy Development Organization (KEDO). According to the plan, KEPCO will construct two 1,000 MW(e) light water reactors in North Korea and the scale and cost of the project will be determined after negotiations between KEPCO and KEDO are concluded.


17 July 1996
The Korea Heavy Industries and Construction Company (Hanjung) announces it has won an international bid in cooperation with Atomic Energy Canada, Limited (AECL) to provide steam generators, pressurizers and heat exchangers for Phase III of China's Qinshan nuclear power plant. The contract is worth approximately $150 million and Hanjung is expected to deliver all the components to China by 2000.


16 July 1996
The Korea Electric Power Corporation (KEPCO), primary contractor for the light water reactor project in North Korea, submits a cost estimate to the Korean Peninsula Energy Development Organization (KEDO). KEPCO estimates that the construction will cost at least $5 billion, but KEDO officials say the figure is subject to further negotiations.

11 July 1996
North Korea and the Korean Peninsula Energy Development Organization (KEDO) officially sign three protocols related to the light water reactor supply agreement. The protocols, which were initialed on 22 May and 14 June, provide diplomatic protection for KEDO and KEPCO personnel, regulate satellite communications, and designate two transportation routes for reactor materials. [Note: Talks on the protocols were held in New York from April to June.]


6-29 July 1996
The sixth Korean Peninsula Energy Development Organization (KEDO) inspection team travels to North Korea to inspect the proposed light water reactor construction site in [Kŭmho-chigu], Shinp'o.


9 July 1996
South Korea remits $6 million to the Korean Peninsula Energy Development Organization (KEDO) for pre-project service costs. South Korea's donation completes the estimated $9 million required by KEDO for this purpose; in 1995, Japan donated $3 million.


5 July 1996
South Korea's Board of Audit and Inspection declares that the local government of Yŏnggwang-kun, South Chŏlla Province cannot reject the construction license for the Yŏnggwang-5 and -6 nuclear power reactors.


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4-6 July 1996
The 6th Korea-Australia Nuclear Policy Consultations meeting is held in Seoul. During the meeting, South Korea and Australia agree to cooperative studies on remote surveillance monitoring.

July 1996
An international joint research and development project begins to develop cold crucible vitrification methods for Korean low and intermediate level waste. The project plans to use a pilot cold crucible melter and a multi-step program. [Note: According to the Taehan Maeil, the contract for the international R&D project was signed on 22 May 1997 and participants include the Korea Electric Power Corporation (KEPCO), SGN and the Korea Fiber Group. KEPCO cites the participants as SGN of France, Hyundai Precision & Industry, and Kumho Engineering. Nuclear Engineering International does not specify the participants but says the program started in July 1996 "with the support of SGN and Mobis."]

July 1996
The South Korean Board of Audit and Inspection clears the construction of Yŏnggwang-5 and -6 nuclear power reactors. The South Korean government declared the attempt by Yŏnggwang-kun officials in January 1996 to block the construction as illegal.

July 1996
The Korea Heavy Industries and Construction Company (Hanjung) loses a contract to supply pressure vessels for Phase I of China's Qinshan nuclear power plant due to a lack of government financial credits. The contract was originally awarded in 1995 and the new contract is given to Japan's Mitsubishi Heavy Industries.

25 June 1996
The South Korean government decides to transfer all atomic energy-related affairs from the Ministry of Science and Technology to the Ministry of Trade and Industry. At the 245th Atomic Energy Commission meeting, the government passes a resolution that the Korea Electric Power Corporation (KEPCO) and the Korea Power Engineering Company (KOPEC) take over radioactive waste operations and the design work for nuclear reactors and nuclear power plant fuel, respectively. These tasks had previously been under the control of the Korea Atomic Energy Research Institute (KAERI). The government also decides to establish the "Atomic Energy Research and Development Fund." Under the government’s plan, KEPCO is expected to donate 1.2 won per 1KW of energy

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generated each year over the previous year’s total to this newly established fund.

24 June 1996
South Korean Ministry of Trade and Industry issues "a Guide for Environmental Assessments around Nuclear Power Plants" that requests all nuclear power plants to report regular base environmental assessments of the region to the government.

14 June 1996
North Korea and the Korean Peninsula Energy Development Organization (KEDO) initial two more protocols related to the light water reactor supply agreement. One protocol calls for the establishment of two transportation routes, one by sea and one by air, to facilitate the transfer of reactor materials. The other protocol establishes rules for the use of satellite communications by KEDO personnel while they are in [Kŭmho-chigu], Shinp'o. Talks on these protocols began in New York on 16 April.

31 May 1996
Korean Peninsula Energy Development Organization (KEDO) Executive Director Stephen Bosworth announces that site preparation work in [Kŭmho-chigu], Shinp'o will begin by the end of the year. According to Bosworth, the proposed location for the reactors "fully meets international standards [of safety]." However, due to disputes over the type of reactor to be supplied, the target completion date of 2003 for the first reactor will be delayed at least one year. [Note: North Korea later establishes Kŭmho-chigu as a special district in the area of Shinp'o for the reactor project].

28 May 1996
The South Korean government announces plans to increase spending on nuclear energy research by 21% each year until the year 2010. According to the plan, the share of nuclear energy in domestic electricity production will increase from a current level of 30 percent to 40 percent. The number of South Korean nuclear power plants will increase from 11 to 23 by 2007, and to 28 by 2010. The plan consists of developing methods to reduce nuclear waste and build a nuclear waste facility. In addition, the South Korean government plans to explore ways to use thorium instead of uranium for nuclear reactor fuel.
—"Government Increases Spending for Nuclear Research," Chosun Ilbo, 27 May 1996, english.chosun.com; Mo

17 May 1996
The Korea Atomic Energy Research Institute announces that it has developed a new nuclear safety system called "Sonata 4," which prevents melted reactor cores from leaking.

6 May 1996
The Korea Atomic Energy Research Institute announces that it will conduct research on technology to deal with nuclear waste by using TRIGA Mark II and TRIGA Mark III research reactors that were shut down in 1995.

28 April-6 May 1996
A 13-member Korean Peninsula Energy Development Organization team travels to Shinp'o to conduct an infrastructure design assessment for the proposed light water reactor site. Upon returning to Seoul, one of the team members says that due to the lack of a stable power supply, generators may have to be shipped to the construction site.

16 April 1996
US President Bill Clinton and South Korean President Kim Young Sam propose four-party talks to replace the current armistice agreement with a peace treaty officially ending the Korean War. The proposed talks would include North and South Korea, the United States and China. North Korean ambassador to Moscow Song Sung Pil dismisses the proposal, saying, "At present other countries have no role to play in this area...There is no need for an international conference on this question." However, on 18 April, the North Korean Foreign Ministry announces that it is "examining the proposal of the US side to see whether it seeks another purpose and whether it is feasible."
April 1996
Representatives from the Korean Peninsula Energy Development Organization (KEDO) and North Korea begin negotiations in New York to resolve issues relating to the light water reactor supply agreement. The two sides discuss issues such as the protection of foreign engineers working on the project (8 April-22 May) and the transportation of reactor components (16 April-14 June). The talks in New York and later talks to be held near Mt. Myohyang in North Korea are aimed at concluding protocols necessary for implementing the reactor supply agreement.


26-30 March 1996
A Korean Peninsula Energy Development Organization delegation, headed by Executive Director Stephen Bosworth, meets with North Korean officials in Shinp'o to inspect the proposed construction site and discuss details of the light water reactor project. The two sides agree to hold further consultations in New York and Mt. Myohyang to conclude necessary follow-up protocols for implementing the reactor supply agreement.


20 March 1996
Korean Peninsula Energy Development Organization Executive Director Stephen Bosworth and Korean Electric Power Corporation (KEPCO) President Lee Chŏng Hun sign the agreement commissioning KEPCO as the prime contractor for the light water reactor project.


19 March 1996
The Korean Peninsula Energy Development Organization executive board officially names the Korea Electric Power Corporation (KEPCO) as the prime contractor for the light water reactor project. At the meeting held in Seoul, delegates from South Korea, the United States and Japan also discuss funding for the heavy oil shipments and the admission of the European Union to the executive board.


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5 March 1996
British Nuclear Fuels (BNFL) and South Korea's Hanjung sign a cooperative agreement whereby BNFL will supply South Korea with the technology to manufacture spent fuel storage canisters. BNFL will provide the design, licensing, quality control, and implementation of safety controls, while Hanjung will be responsible for manufacturing as BNFL's sub-contractor.

2 March 1996
According to the Japanese newspaper Asahi Shimbun, the European Union (EU) requests membership on the KEDO executive board as a condition for its recent decision to pledge funds. The Asahi Shimbun says if the EU is granted membership, South Korea's influence over KEDO's decision making process will be weakened.

14 February 1996
The South Korean Ministry of National Defense announces that the combined US-South Korean military exercise Team Spirit will be cancelled for the third year in a row. According to a Ministry spokesman, "The decision has been made to create a more positive atmosphere for the security situation on the Korean Peninsula and as a confidence-building measure for North Korea's implementation of the Geneva nuclear agreement." However, the Ministry claims that the exercise will resume in 1997 if North Korea does not adhere to the Agreed Framework or threatens military aggression against South Korea.

10 February 1996
The Ministry of Science and Technology (MOST) pre-approves the construction site for Yŏnggwang-5 and -6 nuclear power reactors. The decision allows the Korea Electric Power Corporation (KEPCO) to break ground for construction at the site prior to obtaining official approval.

February 1996
The US and South Korea conduct 10-day combined naval exercises off South Korea's east coast and a combined bombing exercise north of Seoul. Pyongyang claims that the military exercises are preparations for war and

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condemns the bombing tests as target practice for dropping nuclear bombs on North Korea. While the United States and South Korea have refrained from holding the highly contentious Team Spirit exercise since the signing of the Agreed Framework, North Korea has warned that any US-South Korean joint military exercises threaten the success of the agreement.

31 January 1996
Yŏnggwang-kun, South Chŏlla Province rescinds permission for the Korea Electric Power Corporation (KEPCO) to build two more nuclear power reactors in the region. KEPCO built four reactors in Yŏnggwang-kun and planned to build two more 1000 MW(e) reactors by 2002. The local kun (county) government permitted the construction of the reactors on January 22, but revoked the permit after protests from residents and environmental activists.

23 January 1996
A spokesman for the Daewoo Corporation announces it has signed an agreement with Cogema to cooperate in manufacturing nuclear fuel and to develop a uranium mine. Under the agreement, the two companies will engage in joint projects in Southeast Asia and China and set a sales goal of $500 million by 2000. [Note: The Daewoo Group went bankrupt in 1999].

16 January-23 February 1996
The fourth Korean Peninsula Energy Development Organization (KEDO) survey team travels to Shimp'o, North Korea. The 20-member team, consisting of 17 South Koreans, two Americans and one Japanese, conducts various geological tests at the proposed site for two light water reactors. During the month long mission, the team tests the quality of the earth using seismological and drilling equipment.

13 January 1996
A South Korean official announces that Pyongyang will allow seven members of the third Korean Peninsula Energy Development Organization (KEDO) survey team to remain in North Korea for an additional 38 days. The team was unable to complete the necessary geological survey work, including measuring the depth of the sea off the coast of Shimp'o, within the scheduled time. The third KEDO survey team arrived in North Korea on 16 December, but

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instead of departing on 16 January as scheduled, the seven members who were granted extensions will remain in Shinp’o until 23 February and work with the fourth survey team, which is scheduled to arrive on 16 January.

1 January 1996
The Yŏnggwang-4 nuclear reactor begins commercial operation with a generating capacity of 1,000MWe.
—Korea Hydro & Nuclear Power (KHNP), "Han’guk Suryŏg’wŏnjaryŏk (Chu) Yŏnggwang’wŏnjaryŏk Ponbu; Wŏnjaryŏk Anjŏnbaeksŏ (Seoul: Ministry of Science and Technology, 2001), p. 376.

1995

29 December 1995
According to the Korea Electric Energy Corporation, it is considering Kŏje Island in South Kyŏngsang Province as a possible site to construct four 1MW(e) Kori-model light water reactors.

28 December 1995
The Ministry of Trade and Industry announces plans to liberalize the energy sector. Since 1990, a government regulation has restricted the construction of power generating facilities to Korea Heavy Industries and Construction Corporation (Hanjung). The government plans to deregulate the sector to increase competition. In addition, the guidelines of the World Trade Organization (WTO) require the energy sector to be open to foreign competition by 1997.

15 December 1995
The Korea Heavy Industries and Construction Corporation (Hanjung) announces it has developed a 700MW(e) pressurized heavy water reactor called Calandria. The only other company in the world to have developed this type of reactor is Atomic Energy Canada, Ltd. (AECL). Hanjung is the only company with the technology to develop both light and heavy water reactors. The Wŏlsŏng-4 nuclear power plant will be equipped with a Calandria reactor.

15 December 1995
The Korean Peninsula Energy Development Organization (KEDO) signs a contract with North Korea to supply two
light water reactors. According to the contract, construction of the light water reactors will begin in early- to mid-1996. North Korea is expected to bear the cost of building its own power transmission grid and a plant to process fuel rods. KEDO will bear the costs of providing the reactors and a training simulator, as well as the costs for improving port facilities and roads.


14 December 1995
South Korea’s Ministry of Trade and Industry (MOTI) announces that MOTI and the Korea Electric Power Corporation (KEPCO) will build an additional 19 nuclear power plants by 2010.


12 December 1995
The UN General Assembly adopts a resolution cosponsored by 40 countries including South Korea urging the Nuclear Weapons States to cease nuclear testing.


Early December 1995
Asea Brown Boveri, Ltd. (ABB) is awarded a contract by the Korea Electric Power Corporation (KEPCO) to provide 10 steam turbines for South Korea's nuclear power plants.


December 1995
China's official five-year plan outlines four new nuclear power projects. South Korea will be involved in the second stage of the plan by supplying reactor pressure vessels for the Qinshan-2 and -3 power reactors.


30 November 1995
South Korea’s Ministry of Environment cancels plans to build its first nuclear waste dump site on Kurŏp Island. This site was supposed to be constructed in seven years with a storage capacity of one million drums of nuclear waste. The Ministry of Environment decided to cancel the plans after finding two active fault lines about three kilometers off the island. In addition, North Korea has voiced opposition to the plan because the island is near its western sea border.

—"South Korea Scraps Plan to Build Nuclear Waste Plant," Associate Press, 30 November 1995, in Lexis-Nexis,

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Late November 1995
A spokesman for the South Korean Foreign Ministry announces that South Korea is no longer obligated to gain approval prior to transferring enriched uranium under 20% or processed nuclear fuel obtained from Australia to third countries. The Australian government lifted this requirement during a recent nuclear energy conference.

14 November 1995
South Korea and China agree to cooperate in the construction of nuclear power plants, the joint development of mid-sized passenger planes, and the exploitation of natural gas in Siberia.

12 October 1995
A former employee at Canada’s Communications Security Establishment (CSE) reveals that the Canadian government has spied on its allies and trading partners, such as South Korea, Mexico and Japan. According to the employee, the Canadian government eavesdropped on a secret discussion by South Korean officials on the three-billion-dollar purchase of Canadian nuclear reactors for the Wŏlsŏng-3 and Wŏlsŏng-4 nuclear plants.

17 October 1995
South Korea becomes the 32nd member of the Nuclear Suppliers Group (NSG). As a member of the NSG, South Korea will abide by its rules and regulations in implementing the 1994 Agreed Framework, and will gain access to advanced nuclear technology.

22 September 1995
South Korean officials announce that South Korean companies will not supply the pressure vessel for a 300MW(e) nuclear power reactor that China is constructing in Pakistan. South Korea's decision comes after a government decree to seek admission to the Nuclear Suppliers Group (NSG). Under the NSG, member states are not permitted to transfer any nuclear equipment to states that have not put all nuclear facilities under IAEA safeguards. South Korea plans to submit an application to join the Nuclear Suppliers Group in October.

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18 September 1995
South Korean officials announce an agreement with China to provide the pressure vessel for a 300MW(e) power plant in Pakistan.

8 September 1995
Argentina's National Atomic Energy Commission announces that it has sold 30 tons of heavy water to the Korean Electric Power Corporation (KEPCO). This is the first time Argentina has exported heavy water to South Korea. [Note: According to the Kyunghyang Shinmun Argentina’s National Atomic Energy Commission makes this announcement on 22 September.]

Mid-Late 1995
South Korea expresses interest in obtaining mixed oxide (MOX) fuel, a mixture of plutonium and uranium, for their nuclear power plants. South Korea's interest in this comes after Canada's plan to burn US and Russian weapon plutonium for Candu reactors.

28 August 1995
South Korea’s Joongang Ilbo, quoting North Korean defector Kang Myŏng Do, reports that North Korea has a secret underground nuclear facility in Kimdan-gol, Tonghŭng-ri, Tongshin-kun, Chagang Province. The defector, Kang Myŏng Do, son-in-law of North Korean Premier Kang Sŏng San, claims that he witnessed construction of the facility and was told by the project coordinator that it was a nuclear facility. [Note: In July 1994, Kang, who defected in May 1994, claimed that North Korea possessed five nuclear bombs.]

1 August 1995
The Korean Peninsula Energy Development Organization (KEDO) opens its first general assembly at the US Mission to the United Nations. During the meeting, member states agree to send a fact finding mission to North Korea to

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survey the construction site by the end of August or September. In addition, the members plan to begin negotiations for the provisions of light water reactors with North Korea in August.


25 July 1995

President Kim Young Sam delivers a speech in San Francisco and unveils a government plan to develop nuclear fusion technology. According to the plan, the government will invest 120 billion won through 2001 to build research and development facilities, and to develop new technology.


21 July 1995

A South Korean government official announces that three US firms, Combustion Engineering, General Electric, and Sergent and Lundy will participate in the Korean Peninsula Energy Development Organization (KEDO) light water reactor project. Sergent and Lundy will provide technical support to Korea Power Engineering Company in designing the reactors. Combustion Engineering will provide technical assistance to Korea Heavy Industries Company (KHI) and to Korea Atomic Energy Research Institute (KAERI) in manufacturing and designing the reactor facilities. General Electric will provide technical assistance to KHI in constructing the turbine generators. The government official stresses that overall project management and infrastructural construction will be conducted exclusively by Korea Electric Power Cooperation (KEPCO).


21 July 1995

South Korea's Ministry of Science and Technology announces that the memorandum of understanding (MOU) signed between the Korea Electric Power Corporation (KEPCO) and Asea Brown Boveri-Combustion Engineering (ABB-CE) does not serve as an obstacle to providing North Korea with Korean Standard Nuclear Power plants (KSNP). The announcement comes after confusion over the wording of the MOU, which does not clearly state the specific type of reactors to be supplied to North Korea.


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19 June 1995
A leak is detected in the Kori nuclear power station. According to the Korean Ministry of Science and Technology the leak is confined to the area around the waste storage site. The Ministry of Science and Technology does not disclose this information until late July due to negotiation problems with North Korea over the type of nuclear reactors to be supplied by South Korea to the North.

13 June 1995
The Korean Peninsula Energy Development Organization (KEDO) officially decides to provide North Korea with two South Korean-designed light water reactors. The KEDO executive board determines that the "reference plants" for the project will be South Korea's Uljin-3 and -4 reactors, currently under construction by the Korea Electric Power Corporation (KEPCO).

13 June 1995
The Korean Energy Development Organization (KEDO) unofficially names the Korea Electric Power Corporation (KEPCO) as the lead company in providing light water reactors to North Korea. In addition, KEDO reaffirms that the reactors to be supplied will be the Korean Standard Nuclear Power Plants (KSNP).

20 May-13 June 1995
Officials from the United States and North Korea meet in Kuala Lumpur to resolve issues related to the Agreed Framework. The main topic of the negotiations is whether or not two light water reactors, promised to North Korea for giving up its graphite moderated nuclear program, will be provided by South Korea. North Korea, claiming that the South Korean reactor design is untested and unsafe, demands that the reactors come from another country, but the United States insists that since Seoul is financing more than three-quarters of the reactor project, South Korean reactors are the only option. On 13 June, after three weeks of talks, the two sides release a joint statement in which North Korea concedes that the Korean Peninsula Energy Development Organization (KEDO) retains the right to choose the provider of the reactors.

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Related content is available on the website for the Nuclear Threat Initiative, www.nti.org.
Ambassador-at-Large Robert Gallucci, and Japanese Nuclear Ambassador Tetsuya Endo meet and issue a joint statement on the KEDO light water reactor project. The joint statement reconfirms the principle of South Korea’s central role. During the joint press conference, Gallucci says that the Korea Electric Power Corporation (KEPCO) will certainly be the main contractor for the provision of the light water reactors to North Korea. He also warns that the upcoming US-North Korea talks will hit a deadlock if Pyongyang refuses to accept South Korean-made light water reactors.


2-6 May 1995
The 16th annual meeting of the US-ROK Joint Standing Committee on Nuclear Energy Cooperation (JSCNEC) is held in Washington. During the meeting, officials from the US and South Korea discuss nuclear safety, cooperation on nuclear energy development, and the reinforcement of nonproliferation regimes.


19 April 1995
At the Nuclear Non Proliferation Treaty (NPT) Review Conference, South Korean Ambassador to the UN Park Su Gil says that North Korea's noncompliance with its obligations under the NPT is a threat not only to the Korean Peninsula "but also to the whole world." Park also calls on North Korea to "faithfully implement" the Agreed Framework.


12 April 1995
South Korea officials offer 'maximum support' for Vietnamese development projects, including a plan to build their first nuclear power plant. Vietnamese officials ask South Korea for technology, personnel training and feasibility studies for the $2.7 billion nuclear power plant project.


8 April 1995
The South Korean Minister of National Unification announces that South Korea is ready to invite North Korean officials to visit Uljin-3, and -4 nuclear power reactors. According to the Minister, once North Korea sees the construction process of the nuclear reactors, they will realize the appropriateness of South Korea's position in recommending the Uljin reactors. North Korea recently refused to accept power reactors supplied by South Korea citing safety defects.

Related content is available on the website for the Nuclear Threat Initiative, www.nti.org.
7 April 1995
An inauguration ceremony is held for the High Flux Advanced Neutron Application Reactor (HANARO).

31 March 1995
Yŏnggwang-3 nuclear power reactor begins commercial operation.

29 March 1995
ABB-Combustion Engineering announces it has signed a $200 million contract with the Korea Electric Power Corporation (KEPCO) to provide engineering designs and parts for two 1000-MW(e) light water nuclear steam supply systems for Yŏnggwang-5 and -6 nuclear power reactors.

20 March 1995
Seoul warns that the United States, Japan, and South Korea will impose "immediate sanctions" and seek UN Security Council intervention if Pyongyang does not accept a South Korean reactor model for the light water reactors to be supplied under the Agreed Framework. The Korean Peninsula Energy Development Organization (KEDO) says that North Korea has until 21 April to accept the South Korean design.

20 March 1995
The president of the Korea Electric Power Corporation (KEPCO) discloses information regarding a Chinese proposal for coal to be substituted as payment for the construction of a nuclear power plant to be built in Shandong Province. The president announces that KEPCO is considering this proposal.

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9 March 1995
The Korea Electric Power Corporation (KEPCO) and the Asea Brown Boveri-Combustion Engineering (ABB-CE) sign a ten-year Memorandum of Understanding to construct nuclear power plants in other countries, including North Korea, and to exchange information and cooperation on market development. The MOU does not clearly state the type of nuclear power plants to be provided for North Korea.

8-9 March 1995
The United States, Japan and South Korea host a conference in New York for the establishment of the Korean Peninsula Energy Development Organization (KEDO). Twenty-three nations plus the European Union attend the conference. On 9 March, the United States, Japan and South Korea sign the Agreement on the Establishment of the Korean Peninsula Energy Development Organization, officially establishing KEDO. Of the other twenty-three nations, none sign on as members, but Australia, New Zealand, and Canada pledge funds amounting to approximately $7 million.

7 March 1995
The Nuclear Assurance Corporation and Samsung Engineering & Construction Corporation sign an agreement to develop and manufacture spent fuel storage and transportation systems. Under the agreement both companies will build and license spent fuel management technology in the areas of storage and transportation casks, dual purpose casks for storing and transporting spent fuel and other nuclear wastes, and multi-purpose tasks.

7 March 1995
The South Korean Defense Ministry announces that South Korean and the United States will hold a six-day combined military exercise beginning 3 April. A Defense Ministry spokesman says that these maneuvers should not be mistaken as a resumption of the annual Team Spirit military exercise that was postponed in order to relieve tension on the peninsula and encourage North Korea to abide by the Agreed Framework. North Korea has threatened to revive its frozen nuclear program if Team Spirit exercises resume.
— "South Korea and U.S. Forces to Hold New War Games," Deutsche Presse-Agentur, 7 March 1995, in Lexis-Nexis,
27 February—March 1 1995
The US, South Korea, and Japan hold a working-level conference to discuss the details of a draft contract between the Korean Peninsula Energy Development Organization (KEDO) and North Korea. During the meeting, the three countries decide to use a South Korean type of nuclear reactor for the KEDO to construct for North Korea. However, the US expresses pessimism in persuading North Korea to accept this reactor design.

12 February 1995
The Yomiuri Shimbun, quoting a diplomatic source in Seoul, reports that the United States and South Korea are making plans to conduct the annual Team Spirit military exercises from 28 March to 2 April. The military drill has reportedly been scaled down to one-fourth of the usual size, involving about 30,000 US and South Korean soldiers.

8 February 1995
The Korea Atomic Energy Research Institute's High Flux Advanced Neutron Application Reactor (HANARO) research reactor goes critical. HANARO is a 30MW research reactor to be used for irradiating nuclear fuel, conducting neutron physics research, and producing radioisotopes.

6 February 1995
Representatives from the China National Nuclear Corporation (CNNN) meet in Seoul to discuss the possibility of South Korea building nuclear power plants in China.

1 February 1995
US Senator Richard Lugar announces in a press conference that South Korea will pay approximately three quarters of the cost for the two light water reactors scheduled to be built in North Korea under the Agreed Framework. The total cost of the reactor construction project is estimated to be $4.5 billion.

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28 January-1 February 1995

Technical experts from the United States and North Korea meet in Berlin to work out details for the delivery of two light water nuclear reactors to North Korea. Pyongyang’s insistence that the reactors come from a country other than South Korea reportedly threatens the success of the talks and the survival of the Agreed Framework between the United States and North Korea. However, after the meeting, the two sides release a joint statement in which they "agreed that some progress had been made," but details such as financing, the type of reactor and safety considerations have yet to be resolved. During the talks the United States strongly conveys to North Korea that there is no other option for North Korea than to accept South Korean model light water reactors.


24 January 1995

The South Korean government officially announces that it supports the indefinite extension of the Nuclear Nonproliferation Treaty (NPT).


24 January 1995

The South Korean government officially inaugurates the Light Water Reactor Team to oversee the light water reactor project in North Korea. The team is composed of 43 bureaucrats and specialists who will be responsible for providing assistance in policymaking and technical support. The team will also seek international cooperation and financial support to build the reactors.


9-12 January 1995

Experts from the United States, Japan and South Korea meet in Washington to set up the framework for the Korean Peninsula Energy Development Organization (KEDO). KEDO is the consortium tasked with supplying two light water reactors and 500,000 tons/year of heavy fuel oil to North Korea in exchange for Pyongyang’s pledge to give up its graphite-moderated reactors and allow IAEA inspections of its nuclear facilities. The total cost is estimated at $4 billion. During the working-level talks, the three parties decide to use South Korea's Uljin-3 and Uljin-4 nuclear reactors as models for the light water reactors.

10 January 1995
The Korean Atomic Energy Research Institute (KAERI) announces that it will shut down the 250KW TRIGA Mark II and 2MW TRIGA Mark III research reactors. According to KAERI, the TRIGA Mark II reactor will be preserved at a memorial hall at KAERI in the Taedŏk Science Town near Taejŏn, and the TRIGA Mark III will be scrapped.

8 January 1995
An official from the South Korean Ministry of Foreign Affairs says that the government will provide Russia with materials and equipment for Russia's waste storage site construction. The materials and equipment is estimated to be worth approximately $100 million.

5 January 1995
The Korea Atomic Energy Research Institute (KAERI) announces that it has been awarded a contract with the Turkish Ministry of Energy and Natural Resources to provide consulting for the construction of Turkey's first nuclear power plant at Akkuyu.

1994

30 December 1994
The Korea Atomic Energy Research Institute (KAERI) signs a $350,000 contract with the Turkish Electricity Authority to evaluate bids from international vendors for the construction of Turkey's first nuclear power plant. In addition, KAERI will establish a consortium of Korean and Turkish engineers to provide technical support.

22 December 1994
South Korean officials announce Kurŏp Island as its new nuclear waste dump site. The storage facility to be constructed will have the capacity to hold one million drums of nuclear waste and is expected to be completed in six to seven years.
— "South Korea Chooses Tiny Island to Dump Nuclear Wastes," Associated Press, 22 December 1994, in Lexis-Nexis,
16 December 1994
The United States, Japan, and South Korea agree to form a consortium tasked with financing and constructing two light water nuclear reactors promised to North Korea in the Agreed Framework. The consortium is named the Korean Energy Development Organizations (KEDO) and will be based in New York.

13 December 1994
South Korea and China sign a formal protocol on the cooperation of nuclear safety. According to the protocol, South Korea and China will cooperate in monitoring radioactive emissions, exchange information and experts on nuclear safety and regulations, and carry out joint research. In addition, the two countries agree to establish an emergency system to notify one another of nuclear accidents.

6 December 1994
The former chairman of Korea Electric Power Corporation (KEPCO) is sentenced to three years in prison for receiving $1.1 million in bribes from the Daewoo Group, Dong Ah Group, and Samsung Construction Corporation for a $2 billion nuclear power project.

Early December 1994
South Korea's Honam Oil Refinery Corporation wins a bid from the US government to supply North Korea's power plants with heavy fuel oil. Under the contract, Honam will provide 50,000 tons of oil during the month of December.

December 1994
British Nuclear Fuels (BNFL) signs a contract with Korea Electric Power Corporation (KEPCO) to supply uranium hexafluoride. Deliveries of uranium hexafluoride are to start in 1996.

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**Late 1994**

Cegelec, a unit of the French electrical engineering company Alcatel-Alsthom, announces an order from South Korea to supply two turn-key nuclear power plants in Wŏlsŏng, North Kyŏngsang Province.


**30 November 1994**

An international consortium to oversee the construction of two light water reactors for North Korea will consist of the United States, Japan, and South Korea. This consortium will be named the Korea Energy Development Organization (KEDO) and will be established in January 1995. Russia, China, and other European Union nations were asked to join the consortium, but none of them have provided an official statement of interest or intent to join.


**30 November 1994**

During an expert-level meeting between North Korea and the United States, North Korea rejects the South Korean standard model of light water reactors citing safety concerns. According to North Korea, the South Korean standard model has never been exported and has not undergone international safety verification measures. In addition, North Korea argues that it has the right to select the contractors and to put the construction of the two light water reactors up for international bidding. The United States tells North Korea that the international consortium consisting of South Korea, Japan, and the United States has already decided upon the South Korean standard model and that this consortium holds the right to choose the construction contractors.


**29 November 1994**

South Korea's cabinet decides to establish the Light Water Reactor Team to oversee the light water reactor project. The team, which is expected to be composed of about 50 bureaucrats and specialists, will be responsible for providing assistance in policymaking and technical assistance in the construction of the light water reactors.


**25 November 1994**

South Korea, Japan, and the United States agree to have the international consortium Korean Energy Development Organization (KEDO) select the main contractor for the construction of two light water reactors for North Korea.

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**Related content is available on the website for the Nuclear Threat Initiative, www.nti.org.**
This decision is made to prevent North Korea from trying to select the contractor.

19 November 1994
The Korea Electric Power Corporation (KEPCO) and Atomic Energy of Canada (AECL) conclude an agreement to provide technical support for nuclear power projects in other countries.

18 November 1994
The United States, Japan, and South Korea agree that South Korea will play a "central role" in financing and constructing light water reactors for North Korea. In addition, the South Korean press reports that a Korean company will be chosen as the main contractor, which is expected to be Korea Electric Power Corporation (KEPCO).

3 November 1994
South Korea's Minister of Unification proposes a joint nuclear consultative body to be formed with North Korea. According to the minister, the purpose of this consultative body is to follow up on the provisions of the Agreed Framework, and to share information between the two Koreas.

November 1994
Specialists from the United States, Japan, and South Korea meet to discuss the details of the project to supply North Korea with two light water reactors. South Korea proposes the Uljin-3 and -4 reactors as reference designs.

31 October 1994
South Korea and China sign a cooperation agreement on the peaceful use of nuclear energy, as well as a provisional agreement on direct air service between the two countries and a memorandum on the joint development of civilian aircraft.

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29 October 1994
South Korean officials announce the discovery of a vein of uranium close to the demilitarized zone. The discovery was made by army troops undergoing a routine military exercise in early October. Tests are being done on the uranium to measure its degree of purity.

27 October 1994
South Korea's Minister of Foreign Affairs announces that the international consortium to provide North Korea with alternative sources of energy will need $4.5 billion. This includes the construction of two light water reactors, alternative sources of energy during construction of the power reactors, and dismantlement of the two graphite reactors. South Korea agrees to bear 65 percent of the cost.

22 October 1994
President Kim Young Sam states that South Korea has no intentions of funding the cost of heavy fuel oil for North Korea. This statement follows President Clinton's speech in which South Korea and Japan are mentioned as nations to "bear most of the cost of providing North Korea with fuel to make up for the nuclear energy it is losing." According to the accord signed by North Korea and the United States, North Korea will receive 500,000 tons of heavy fuel oil per year.

21 October 1994
The United States and South Korea announce the suspension of the annual Team Spirit joint military exercise.

21 October 1994
The United States and North Korea sign the Agreed Framework, an accord that specifies the actions both countries will take to resolve the North Korean nuclear issue. Under the terms of the agreement, a US-led international consortium will help North Korea replace its graphite-moderated reactors with two 1,000MW(e) light water reactors. The international consortium will compensate North Korea for the freeze on its graphite-moderated

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reactors by supplying 500,000 tons of heavy-fuel oil annually until the new reactors come online. Second, the United States and North Korea will make efforts to normalize their economic and political relations by reducing investment and trade barriers. Third, both countries will strive towards establishing a nuclear-weapon-free zone on the Korean peninsula. Finally, North Korea will help strengthen the nonproliferation regime by remaining a member of the NPT. It will also allow the IAEA to implement the safeguards agreement and monitor the freeze on its nuclear facilities. However, the United States makes a concession in allowing North Korea to retain possession of 8,000 spent fuel rods instead of sending them to a third country for storage, a condition on which the United States had earlier insisted.

In 1999, a source close to US-North Korean negotiations over a suspected nuclear facility in Kŭmch'ang-ri reveals that the 1994 agreement contains a supplementary 10-point memorandum of understanding by which North Korea agrees to forego any future construction of graphite-moderated reactors, and agrees that once a significant portion of the two light water reactors are completed, it will allow the IAEA access to any facility and information it deems necessary. In addition, according to Flight International, which later cites a "senior US DIA official," the agreement includes a secret clause that suspends the delivery of 150 North Korean Nodong missiles to Iran. [Note: It is later confirmed that the agreement includes no clause on missile deliveries.]

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20 October 1994

South Korean government officials announce the decision to form a committee to manage the construction of light water reactors for North Korea. The committee is to be comprised of officials from the Ministry of Foreign Affairs, Economic Planning Board, the Ministry of Unification, and the Korean Electric Power Corporation (KEPCO). The committee's responsibilities include financing for the reactors and managing the formation of an international consortium. According to a South Korean official, the United States, Japan and South Korea will discuss offering two light water reactors to North Korea based on South Korea's Uljin-3 and -4 nuclear power reactors. South Korea is expected to contribute 50-70 percent of the total expenses needed to construct the light water reactors. [Note: In December 1994, the Economic Planning Board became part of the new Ministry of Finance and Economy].

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Mid-October 1994
South Korea and China agree to cooperate in the field of nuclear energy. Under this agreement, South Korea will export nuclear technology and related equipment to China, and will conduct joint research projects and promote exchanges of nuclear scientists. An official signing of the agreement is expected to occur in late October when Premier Li Peng visits South Korea.

17 October 1994
Robert Gallucci, chief negotiator for the United States in high-level talks with North Korea, announces that the two sides have reached an agreement concerning North Korea's nuclear program. Gallucci does not mention any details of the agreement but says that "it is a broadly acceptable and very positive document."

12 October 1994
Yonhap News Agency reports that the United States submitted to South Korean officials a draft proposal to end the North Korean nuclear crisis. According to the news report, the US proposal differs from South Korea's in that it allows North Korea to receive two light water reactors prior to international inspections of its nuclear facilities.

7 October 1994
South Korean President Kim Young Sam criticizes the United States for compromising in negotiations with North Korea on its suspected nuclear weapons program. President Kim states that the United States is being naïve to believe North Korea will comply with any agreement reached on their suspected nuclear weapons program.

14 October 1994
South Korea's Ministry of Unification outlines the following five principles for ending the dispute over North Korea's suspected nuclear weapons program: (1) North Korea's nuclear development program must be suspended and frozen; (2) the nuclear question and other issues on the Korean Peninsula must be solved through peaceful
means; (3) talks must resume between North and South Korea to implement the Joint Declaration of the Korean Peninsula; (4) North Korea must guarantee nuclear transparency; and (5) South Korea must take a leading role in constructing light water reactors to replace the graphite-moderated reactors in North Korea.


3 October 1994
The South Korean Minister of Foreign Affairs calls for North Korea to cooperate with the International Atomic Energy Agency (IAEA) in implementing safe guards, and for transparency in their suspected nuclear program at a UN General Assembly meeting. In addition, the Minister states that South Korea is willing to provide technology and economic aid depending on the results of negotiations with the United States.


22 September 1994
South Korea agrees to participate in an international consortium to replace North Korea's graphite-moderated nuclear reactors with more efficient and proliferation resistant light water reactors.


20 September 1994
South Korea signs the International Convention on Nuclear Safety at the International Atomic Energy Agency (IAEA) general conference. The convention calls for members to submit reports on measures to implement the 16 obligations on their civilian nuclear power plants.


15 September 1994
The United States and North Korea conclude five-day talks in Berlin. During the talks, the two sides discussed issues relating to North Korea’s nuclear program including the proposed replacement of North Korea’s graphite-moderated reactors with light water reactors. The North Korean representative to the talks, Kim Chong U, says that for Pyongyang to consider such an option, the United States must finance the project and North Korea must be allowed to select the type of replacement reactor. With regard to the 8,000 spent fuel rods currently corroding in a cooling pond, North Korea agrees to store the rods in a dry place where they will not be subject to corrosion but refuses to allow the United States or any other country to assist in the process.


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7 September 1994
US Secretary of State Warren Christopher assures South Korean Foreign Minister Han Sŭng Ju that there will be no deal with Pyongyang unless Seoul is included in the negotiations. Speaking at the State Department, Christopher says, "We can't finally resolve the nuclear issue unless and until North Korea resumes the substantive dialogue with the Republic of Korea."

6 September 1994
South Korean Foreign Minister Han Sŭng Ju meets with Robert Gallucci, the head US negotiator in talks with North Korea. Han insists that South Korea play a larger role in resolving the nuclear crisis in North Korea. According to Seoul, North Korea's nuclear program is a North-South issue as well as an international issue and should be dealt with accordingly. Han also conveys Seoul's concern to the United States over the speed at which Washington is normalizing relations with Pyongyang.

16 August 1994
South Korea suggests setting up an international consortium to organize the replacement of North Korea's graphite-moderated reactor technology with the more efficient and more proliferation resistant light water reactor technology.

15 August 1994
South Korea formally offers to supply North Korea with light water reactor technology if Pyongyang opens all of its nuclear facilities to the International Atomic Energy Agency (IAEA) inspectors. President Kim Young Sam says, "If and when the North guarantees the transparency of its nuclear activities, we are ready to support their development of the peaceful use of nuclear energy, including light water nuclear reactor construction, by providing them with the necessary capital and technology."

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August 1994
The Korea Multi-Purpose Research Reactor (KMRR) is renamed Hi-Flux Advanced Neutron Application Reactor (HANARO).

Late July 1994
Fragema and FBFC agree to build a conversion plant for Korea Nuclear Fuel. The plant would have the capacity to convert 200 metric tons of UF6 to UO2, and it is expected to be operational by early 1998.

11 July 1994
North Korea indefinitely postpones the North-South summit scheduled for 25-27 July. In a one-sentence letter sent to South Korea, Kim Yong Sun, chairman of North Korea's Unification Policy Committee says, "Because of the unusual state of affairs on our side, which has already been made known through urgent reports, I have been instructed to inform you that the scheduled South-North summit meeting will have to be postponed."

8 July 1994
Kim Il Sung dies of heart failure at the age of 82. Kim's death comes during a period of bilateral negotiations with the United States to freeze the North Korean nuclear program, and shortly before a summit meeting with South Korean President Kim Young Sam that was scheduled to begin on 25 July 1994. His son, Kim Jong Il, later succeeds him as leader of North Korea.

7 July 1994
Officials in Seoul and Tokyo announce that the United States, Russia, and South Korea are currently working on a plan to supply North Korea with a light water nuclear reactor to replace its graphite-moderated reactor. Under the
proposal, Russia would provide North Korea with light water reactor technology, and South Korea would pay the costs by waiving part of the $1.47 billion in loans owed by Moscow to Seoul.


1 July 1994

Diplomats from North and South Korea meet to discuss the details of the upcoming summit between the leaders of the two countries to be held in Pyongyang on 25-27 July. The South Korean delegation will be allowed to bring 100 officials and 80 members of the South Korean press.


1 July 1994

Delegates from the United States, Japan, and South Korea hold a third round of consultations in Washington to discuss North Korea's suspected nuclear weapons program. The three countries reaffirm their commitment to solving the problem through cooperation and dialogue.


28 June 1994

North and South Korea agree to hold the first ever inter-Korean summit in Pyongyang on 25-27 July. The decision to hold the summit comes after hours of negotiations between officials from both Korea's in Panmunjom. South Korean President Kim Young Sam is expected to travel to Pyongyang during 25-27 July. The two sides are to discuss the possibility of extending the talks during the summit. The summit would mark the first meeting between leaders of the two Korea's since the Korean peninsula was divided on August 1945.


9 June 1994

Former US President Jimmy Carter announces that he will travel to North and South Korea in the coming week to discuss "important issues of the day with leaders." Carter claims that he "will have no official status relating to the US government" and thus will not be speaking on behalf of Washington.


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8 June 1994
South Korean President Kim Young Sam meets with his National Security Council and decides that economic sanctions should be used to deal with North Korea’s defiance of the IAEA. He says that South Koreans must prepare for Pyongyang’s response to the sanctions, which could include political turmoil or even military action.

4 June 1994
Delegates from the United States, Japan, and South Korea issue a joint statement in Washington calling on the UN Security Council to "urgently" consider economic sanctions against North Korea for defying IAEA inspectors.

26 May 1994
South Korean Deputy Prime Minister Lee Hong Ku hosts a conference on unification and security policy coordination at the Office of the South-North Dialogue under the Ministry of Unification. According to a South Korean Ministry of Unification spokesman Kim Hyŏng Ki, the South Korean government reaffirms during the conference that it is of vital importance to implement and to fulfill the Joint Declaration on the Denuclearization of the Korean Peninsula.

24 May 1994
In response to Deputy Prime Minister Lee Hong Ku’s announcement about reconsidering the Joint Declaration of Denuclearization of the Korean Peninsula on 23 May, South Korean Ministry of Unification spokesman Kim Hyŏng Ki says that Lee’s announcement was a remark stressing South Korea’s position that the Agreed Framework and the Joint Declaration must be fulfilled. Kim adds that Lee’s intention in making the announcement is to ask the International Atomic Energy Agency (IAEA) and the international community to continue their efforts in persuading Pyongyang to obey the Joint Declaration on the Denuclearization of the Korean Peninsula.

23 May 1994
South Korean Deputy Prime Minister and Minister of Unification Lee Hong Ku announces that South Korea has to reconsider the Joint Declaration of the Denuclearization of the Korean Peninsula from a new angle as long as North Korea possesses the Radiochemistry Laboratory, which is Pyongyang’s major reprocessing facility. He says that the

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Joint Declaration has been in fact nullified in a sense. However, the Prime Minister does not mention an alternative policy. Prior to the Deputy Prime Minister's announcement, South Korea National Assemblyman Lee Se Ki says that the South Korean government should announce nullification of the Joint Declaration of the Denuclearization of the Korean Peninsula and consider acquiring "a nuclear card."


May 1994
India's Department of Atomic Energy (DAE) signs an agreement with the Korea Electric Power Corporation (KEPCO) to provide 100 tons of heavy water in 1997-1998. The heavy water is to be used for the Wŏlsŏng-2 nuclear power reactor.


26 April 1994
The Korea Atomic Energy Research Institute (KAERI) submits a bid to assist the Turkish Electricity Authority to prepare bid documents and evaluate tenders for its planned nuclear power plant. [Note: According to a Kyŏnghyang Shinmun report on 30 April 1994, South Korea is in the process of preparing to bid for Turkey's planned nuclear power plant.]


20 April 1994
US Secretary of Defense William Perry and South Korea’s Defense Minister Lee Pyŏng T’ae hold a meeting to discuss issues related to the North Korean nuclear crisis. After the meeting, both officials announce that if North Korea does not accept the International Atomic Energy Agency’s (IAEA) inspections and do not resume inter-Korean talks by October, then the joint US-South Korea Team Spirit exercises will begin in November. North Korea has previously criticized plans for the Team Spirit exercises calling them a preparation for war against their country.


19 April 1994
Nuclear Electric, a UK utility company, signs a technical cooperation agreement with the Korea Electric Power Corporation (KEPCO).


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15 April 1994
South Korean Deputy Prime Minister and Minister of Unification Lee Yŏng Tŏk announces that South Korea has withdrawn its demand for an exchange of special envoys with North Korea as a condition for the resumption of high-level US-North Korean talks.

8 April 1994
The Indian Department of Energy and the Korean Electric Power Corporation (KEPCO) sign a contract for India to ship 100 metric tons of heavy water to South Korea for three nuclear power plants in Wŏlsŏng, North Kyŏngsang Province.

April 1994
According to a report in Jane's Defense Weekly, South Korea had plans to develop nuclear weapons as late as 1991. The report cites Sŏ Su Jong, the former chief secretary of the Agency for National Security Planning from 1987 to 1993, who stated that former President Roh Tae Woo had plans to develop nuclear weapons in 1991. According to Sŏ, Roh Tae Woo's decision came following reports that North Korea was suspected of developing nuclear weapons. The plans were cancelled due to US pressure in 1991.

27-29 March 1994
South Korean President Kim Young Sam travels to China in order to plead with Chinese leaders to place added pressure on North Korea to resolve suspicions about its nuclear program. On 28 March China's President Jiăng Zemin tells Kim that the only way to resolve the issue with North Korea is through dialogue.

22 March 1994
South Korean President Kim Young Sam places the South Korean military on high alert in response to a North Korean delegate's remark that North Korea could turn Seoul into a "sea of fire." Kim is scheduled to leave for Japan and China tomorrow. [Note: The remark is made during a meeting of North and South Korean officials at Panmunjom].

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21 March 1994
President Clinton announces that the United States will send Patriot missiles to South Korea in response to growing tensions on the Korean peninsula. Speaking to reporters in Florida, Clinton says, "We have agreed that it is our national interest and in the interest of the security of the people of South Korea and the security of our armed forces there to send Patriot missiles at this time." According to a Pentagon spokesman, the missiles will be transported by sea and reach South Korea in about 30 days.

18 March 1994
Lee Ch’ung Kuk defects to South Korea. Lee, a former analyst and translator for the Ministry of People’s Armed Forces Nuclear Chemical Defense Bureau, supplies South Korean officials with information about North Korea’s nuclear weapons and chemical weapons programs.

2 March 1994
General Gary Luck, commander of US forces in South Korea, announces to Congress that the joint US-South Korean Team Spirit military exercises will be cancelled. A few hours later (3 March), the South Korean Foreign Ministry announces the cancellation in Seoul. However, both the United States and South Korea state that the cancellation of the military exercises is contingent on North Korea allowing the completion of International Atomic Energy Agency (IAEA) inspections at seven declared nuclear facilities and the resumption of inter-Korea dialogue regarding nuclear issues on the peninsula.

March 1994
The Korea Atomic Energy Research Institute establishes the Technology Center for Nuclear Control (TCNC) with assistance from the United States. The TCNC is responsible for providing the government with technical support in accounting for nuclear material, import/export controls, physical protection, implementing International Atomic Energy Association (IAEA) safeguard inspections, and adhering to other international nonproliferation rules and guidelines.

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18 February 1994
US and South Korean officials reaffirm their position that the resumption of inter-Korean dialogue on the nuclear situation on the peninsula is a prerequisite for the next round of high-level talks between the United States and North Korea.

11 February 1994
South Korean Foreign Minister Han Sŏng Ju meets with senior US officials in Washington to discuss North Korea's refusal to allow IAEA inspections of its nuclear facilities. After meetings with US Vice President Al Gore and National Security Advisor Anthony Lake, Han announces that the United States and South Korea have "decided to exert all available efforts to settle the nuclear question through dialogue until the regular Board of Governors' meeting of the International Atomic Energy Agency (IAEA)." Speaking on the possibility of calling for economic sanctions in the UN Security Council, Han says that China may not oppose sanctions but is still reluctant to support such measures, believing that the international community must first give negotiations a chance.

2 February 1994
Addressing the annual meeting of South Korean diplomats, Foreign Minister Han Sŏng Ju says that the dispute over North Korea's nuclear program should be resolved through dialogue in order to prevent its development into a "worst-case" scenario.

26 January 1994
US officials announce that preparations are under way to deploy Patriot missiles in South Korea at the request of General Gary Luck, the commander of US forces in South Korea.

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25 January 1994
The South Korean Ministry of Unification announces its decision to establish an agency for possible mutual nuclear inspections with North Korea. The agency's tentative name is the Atomic Energy Control Center.

17 January 1994
The South Korean Minister of Foreign Affairs denies allegations that the United States has been pressuring the Koreas to formalize the North-South Korea Joint Declaration on the Denuclearization of the Korean Peninsula into a treaty. According to Han, after North Korea's announcement to withdraw from the Non-Proliferation Treaty (NPT) in March, other countries suggested formalizing the Declaration into an international treaty, but the United States said that would not be an effective method to solve the North Korean nuclear crisis. [Note: According to the Donga Ilbo, the South Korean Ministry of Foreign Affairs says on 17 January 1994 that the South Korean government is against the US plans to promote formalizing the Declaration into an international treaty because the denuclearization of the Korean peninsula does not involve the international community and should therefore only be handled by the concerned parties.]

16 January 1994
According to a high-ranking South Korean government official, the United States has been pressuring South Korea to formalize the North-South Joint Declaration on the Denuclearization of the Korean Peninsula into a treaty. The official says, the United States has suggested providing South Korea with material for the peaceful uses of atomic energy if South Korea agrees to formalize the Joint Declaration.

7 January 1994
Officials from the South Korean Foreign Ministry and the Ministry of Unification announce that North Korea and South Korea will exchange special envoys to discuss nuclear issues on the Korean Peninsula in the middle of this month. South Korean officials hope to use this opportunity to re-open the inter-Korean talks that were suspended in 1992.

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1993

Late 1993
South Korea joins the following three International Energy Agency cooperative research and information agreements: Energy Technology Data Exchange, Centre for the Analysis and Dissemination of Demonstrated Energy Technologies, and the Greenhouse Gas Technology Information Exchange.

21 December 1993
The Korea Electric Power Corporation (KEPCO) signs a two-year contract with China's Daya Bay Nuclear Power Plant to provide technical support and maintenance. In addition, the Uljin-1 nuclear power reactor and China's Guangdong plant conclude an agreement for technical cooperation.

13 December 1993
The Atomic Energy of Canada, Limited (AECL) announces that it has won a $270 million contract to supply heavy water for South Korea's nuclear power plants in Wŏlsŏng, North Kyŏngsang Province.

23 November 1993
US President Bill Clinton meets with South Korean President Kim Young Sam to discuss Clinton's "new approach" to deal with North Korea's nuclear program. After the meeting, Clinton states that if Pyongyang meets its demands, "the door will be open on a wide range of issues." At the request of President Kim, Clinton does not publicly announce the details of his proposed new approach. According to reports, the United States is prepared to call off the Team Spirit joint military exercise if North Korea allows IAEA inspections of its nuclear facilities.

12 November 1993
South Korea rejects North Korea's proposed "package deal" claiming that "what is important at this stage is to obtain a promise from North Korea that it will receive inspections." According to South Korean officials, North Korea must allow International Atomic Energy Agency (IAEA) inspections of its nuclear facilities and reopen dialogue with Seoul before the United States makes any concessions.

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3-4 November 1993

The 15th ROK-US military Committee Meeting (MCM) and the 25th ROK-US Security Consultative Meeting (SCM) are held in Seoul. At the MCM, both sides agree to transfer the peacetime Operational Control Authority (OCA) from the commander of the US-Korea Combined Forces Command (CFC) to the South Korean side on 1 December 1994. At the SCM, both countries reaffirm that the second phase drawdown of US troops in South Korea will be postponed until uncertainties surrounding North Korea's nuclear development program are thoroughly resolved.

[Note: MCM and SCM are annual meetings, which started in 1978 and 1968, respectively.]


1 November 1993

South Korean President Kim Young Sam announces that South Korea will neither possess nuclear weapons nor plan to facilitate nuclear weapons development. In response to the Norwegian Foreign Minister Jogen Holst's question on Seoul's nuclear policy, President Kim stresses that there is no change in South Korea's non-nuclear policy and the country will continue only the development of peaceful nuclear energy.


27 October 1993

South Korean Foreign Minister Han Sŭng Ju denies reports that South Korea and the United States are considering canceling Team Spirit military exercises. Han says, "There is no decision on it, there is no discussion at the moment between the Republic of Korea and the United States." South Korea and the United States are expected to make a decision concerning the joint military exercise in the 25th annual US-South Korean Security Consultative Meeting scheduled for 3-4 November.


16 October 1993

The Kori-3 nuclear reactor is temporarily shut down due to lowered water levels in the steam generator, which caused the turbine in the reactor to stop revolving.


14 October 1993

In response to a magazine report on Seoul’s nuclear weapons development under the Park Chung Hee government, South Korea’s Ministry of Defense announces "the South Korean government has neither intended to

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develop nuclear weapons since the Third Republic nor possessed related facilities and materials since the third republic."


12 October 1993
At a National Assembly hearing, Im Yong Kyu, President of the Korea Institute of Nuclear Safety (KINS), announces that the institute will establish three more radioactivity monitoring instruments this year. The instruments are to be established in Paengnyŏng Island, Kangnŭng, and Ullŭng Island, which are relatively close to the Military Demarcation Line (MDL), in order to monitor nuclear-related accidents in North Korea. KINS currently operates eight radioactivity monitoring centers in South Korea.


Late 1993
The Korea Electric Power Corporation awards a contract to Conax Buffalo Corporation, a subsidiary of the International Engineering Group (IMI), to supply equipment for two nuclear power plants in Uljin.


Late 1993
A subsidiary of ALCATEL-ALSTHOM, a French engineering group, is awarded a contract by South Korea to supply electric safety systems for the Wŏlsŏng nuclear power plant.


27 September 1993
At the 37th session of the International Atomic Energy Agency (IAEA) annual meeting, South Korea's Science and Technology Minister Kim Shi Chung proposes to form both an international regime and a regional regime to control nuclear material.


17 September 1993
South Korea's Ministry of Trade and Industry announces that the country has scheduled to build an additional 14 nuclear power plants by 2006. [Note: In 1998, the Ministry of Foreign Affairs became the Ministry of Foreign Affairs and Trade, and the Ministry of Trade and Industry changed its name to the Ministry of Commerce, Industry and Energy.]
In his meeting with South Korean President Kim Young Sam, the US Assistant Secretary of State for Politico-Military Affairs Robert Gallucci says that the United States will continue its efforts to persuade North Korea to abandon its nuclear development program and maintain close contact with Seoul over Pyongyang's nuclear development. Kim expresses regret that North Korea "has not shown sincerity" in negotiations with the International Atomic Energy Agency and is avoiding making a response to Seoul's proposals for inter-Korean dialogue. During the meeting, the United States and South Korea confirm that both nations have the same goals and strategies to deal with Pyongyang's nuclear issue.

9 August 1993
North Korea rebuffs South Korea's proposed resumption of the Joint Nuclear Control Commission (JNCC) talks. Citing the joint US-South Korean Team Spirit military exercise as the obstacle to resuming the JNCC talks, a Pyongyang spokesman says, "If the South side has the intention to resolve the nuclear problem through dialogue with us, it must discontinue nuclear war exercises incompatible with this."

4 August 1993
South Korean Unification Minister Han Wan Sang says that South Korean will not assist North Korea in acquiring light water nuclear reactors until the suspicions about its nuclear activities are resolved.

4 August 1993
South Korean Prime Minister Hwang In Sŏng proposes to his North Korean counterpart that the two countries resume meetings of the Joint Nuclear Control Commission, which was tasked with setting up an inter-Korean bilateral nuclear inspection regime. Hwang proposed the meeting be held on 10 August at the truce village of Panmunjom.

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**August 1993**

Construction begins on the Wŏlsŏng-3 and Wŏlsŏng-4 nuclear power reactors.

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**August 1993**

The Korea Electric Power Corporation (KEPCO) announces that it will request bids for two nuclear power reactors to be built in Yonggwang-kun, South Chŏlla Province. ABB Combustion Engineering and Nuclear Power International, a French-German partnership company, are expected to submit bids.

**24 July 1993**

After the meeting with Chinese Foreign Minister Qian Qichen in Singapore, South Korean Foreign Minister Han Sŭng Ju says that China has made a successful bid to provide 110 tons of heavy water for the Wŏlsŏng nuclear plants. This is one fourth of the total heavy water needed to operate the Wŏlsŏng nuclear reactors.

**22 July 1993**

South Korean Foreign Minister Han Sŭng Ju warns North Korea that if it does not allow international inspections within two months the United Nations will impose sanctions.

**19 July 1993**

The Korea Electric Power Corporation (KEPCO) confirms the basic construction plan for the Yonggwang-5 and Yonggwang-6 nuclear reactors. Construction of the two reactors is scheduled to begin in September 1995, and is expected to be completed in June 2001 and June 2002, respectively.

**16 July 1993**

South Korea's Atomic Energy Commission (AEC) decides to construct the Uljin-3 and Uljin-4 nuclear reactors, which will be South Korea's standard model of nuclear reactors. The two reactors are to be built in Pugu-ri, Puk-myŏn, Uljin-kun, North Kyŏngsan Province. The Korea Electric Power Corporation (KEPCO) is scheduled to begin the construction of the Uljin-3 and Uljin-4 reactors in June 1998 and in June 1999 respectively.

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12 July 1993
Korea Electric Power Corporation (KEPCO) President Lee Chong Hun announces that KEPCO will begin construction of the Yŏnggwang-5 and Yŏnggwang-6 nuclear reactors in September 1995. Residents in the Yŏnggwang area declare their opposition to the nuclear reactor construction plan.


10-11 July 1993
During his visit to Seoul, US President Bill Clinton meets South Korean President Kim Young Sam to discuss North Korea’s nuclear program and other economic and security issues. Both sides agree that North Korea should return to the Nuclear Non-Proliferation Treaty (NPT) regime, allow the International Atomic Energy Agency to inspect its nuclear-related facilities and fulfill the "Joint Declaration on the Denuclearization of the Korean Peninsula" through North-South joint inspections. President Clinton says that both nations will continue close cooperation for a full resolution of the nuclear issue and will take "additional steps" if necessary.


Early July 1993
The Korea Advanced Institute of Science and Technology (KAIST) begins operating a Tokamak, which is a magnetic plasma confinement device used in the research and development of magnetic fusion energy. The Tokamak is not a device that requires natural resources for its operations nor does it generate nuclear waste.


30 June 1993
The Korea Atomic Energy Research Institute (KAERI) completes the construction of the Irradiated Materials Examination Facility (IMEF).

—"Irradiated Materials Examination Facility," The Korea Atomic Energy Research Institute, nfcf.kaeri.re.kr.

Mid-1993
Canadian, US, and South Korean companies move into the second stage of developing the direct use of spent PWR fuel in CANDU reactors (DUPIC) program. In the first stage, researchers discovered that the DUPIC program

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reduces the quantity of spent fuel for disposal, improves uranium utilization, and increases power output. Researchers also assessed seven different options for dry processing PWR fuel. Oreox (oxidation, reduction of enriched oxide fuel) produced the most promising results and was chosen to be studied further in the third stage of the research project.


11 June 1993
North Korea announces to suspend its withdrawal from the Nuclear Non-Proliferation Treaty (NPT). The announcements comes after the conclusion of the fourth round of talks between North Korea and the United States in New York in which the two countries issue a joint statement to agree on the principles of "assurances against the threat and use of force including nuclear weapons, peace and security in a nuclear-free Korean peninsula, mutual respect for each other's sovereignty, and noninterference in each other's internal affairs." The South Korean government reacts positively to this announcement and says it plans to actively push for inter-Korean dialogue.


29 May 1993
The intergovernmental Russia-South Korean Committee for Scientific and Technical Cooperation is held. The agenda includes joint research projects, exchanges in fundamental science, and nuclear power engineering.


22 April 1993
Operation of the Kori-4 nuclear reactor is temporarily suspended due to a malfunction of the main steam line. The Korea Electric Power Corporation (KEPCO) estimates it will take five days to resume reactor operations.


21 April 1993
South Korean foreign Minister Han Sŭng Ju meets Chinese Foreign Minister Qian Qichen after the opening session of the UN regional commission for Asia in Bangkok. Both sides confirm that the current nuclear situation in North Korea is in a serious phase. South Korea and China agree that both nations will make a joint effort to resolve the nuclear issue and that the Korean Peninsula should be declared a nuclear-free zone.


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20 April 1993
South Korea announces that it will not resume dialogue or economic cooperation with North Korea until the suspicions of its nuclear activity are resolved. In addition, South Korea will cancel all visits of its representatives to Pyongyang if North Korea does not cooperate in resolving its nuclear issues. This decision is made during a meeting of the heads of seventeen heads of ministries and government departments.

17 April 1993
A South Korean government official announces that South Korea and the United States have agreed to consider high-level US-North Korean talks in order to persuade Pyongyang not to withdraw from the Nuclear Non-Proliferation Treaty (NPT) and allow International Atomic Energy Agency (IAEA) inspections of its nuclear facilities.

29 March 1993
In his interview with the New York Times, South Korean Foreign Minister Han Sŭng Ju indicates that Seoul would support a compromise allowing United Nations inspectors to search US military facilities in South Korea in return for North Korea's acceptance of international inspections of its nuclear-related sites. He says that South Korea will support the imposition of United Nations sanctions, if North Korea continues to be in noncompliance into late May. However, he also says that he hopes "the threat of sanctions plus certain face-saving inducements will help them comply."

25 March 1993
South Korean Foreign Minister Han Sŭng Ju meets with the Chinese representative to the UN Chen Jian in order to persuade China to support dealing with North Korea's nuclear issue in the UN. Representative Chen says that China shares South Korea's goal of a nuclear free Korean Peninsula, but it feels that North Korea's nuclear issue should be resolved first through the IAEA.

25 March 1993
The Tokyo Shimbun reports that North Korea begins dialogue with South Korea and the United States over its nuclear program. According to the report, the secret contacts begin during a European trip by Korean Workers Party Secretary Kim Yong Sun. The purpose of the trip is to make contact with the United States and South Korea.

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12 March 1993
North Korea announces it is withdrawing from the Nuclear Non-Proliferation Treaty (NPT). It cites the treaty's escape clause on defending supreme national interests. North Korea's two reasons for withdrawing are: (1) the Team Spirit "nuclear war rehearsal" military exercises; and (2) the IAEA demand for special inspection of two suspect sites. North Korea attaches a statement to its withdrawal notice that is sent to the three NPT depository states and the 154 NPT member states, in which it accuses the IAEA of violating its sovereignty and interfering in its internal affairs, attempting to stifle its socialism, and of being a "lackey" of the United States. According to North Korea, the United States influenced officials of the IAEA Secretariat and member states at the IAEA Board of Governors meeting on 25 February 1993 to adopt a resolution requiring North Korea to open military sites to inspection that are not nuclear related.


24-27 February 1993
The Korea Electric Power Corporation (KEPCO) provides residents in Uljin, North Kyŏngsan Province, where Uljin reactors are located, with free medical consultation services. From 1993, KEPCO will provide the itinerant medical service four times a year for people living in Uljin and Wŏlsŏng, North Kyŏngsan Province, in Yŏnggwang, North Chŏlla Province, and in Kori, South Kyŏngsan Province.


23 February 1993
In a commentary appearing in the *Rodong Sinmun*, the official daily of the Korean Workers Party, North Korea states that South Korea is currently developing nuclear weapons and that Seoul's nuclear development is in a "dangerous stage." The claim follows a report in the South Korean *Wolgan Chosun* magazine that South Korea had secretly worked to develop nuclear weapons, but canceled the project after the assassination of former President Park Chung Hee. The commentary accuses the United States and South Korea of "advertising the fiction of 'nuclear development' by the North" in order to justify the policy of turning South Korea into a nuclear base and the nuclear development by South Korea.


2 February 1993
Son Sŏng P'il, North Korea's ambassador to Russia, claims that South Korea is covertly conducting nuclear research. He says, "South Korean authorities are so actively trying to accuse the North of attempting to have its own nuclear

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weapons because they want to conceal their own efforts in the sphere." He urges the international community "to pay special attention to secret nuclear research in South Korea."


February 1993

The Wolgan Chosun magazine publishes the diary of the former assistant to President Park Chung Hee that exposes South Korea's plans to develop nuclear weapons in the 1970s. According to the former assistant, Park Chung Hee received information from the Defense Ministry's Defense Science Technology Research Center that South Korea can develop nuclear weapons by the first half of 1981. In addition, Park was considering disclosing this information during the Armed Forces Day celebration in October 1979. South Korea's plan to develop nuclear weapons was eventually cancelled after Park was assassinated in late 1979. [Note: The Japan Economic Newswire report states that President Park planned to announce the completion of the development of nuclear weapons in 1981 along with his resignation as president.]


February 1993

Russia's Foreign Intelligence Service publishes a report on the proliferation of weapons of mass destruction. The report lists both North and South Korea as countries capable of producing nuclear weapons, but concludes that neither country possesses nuclear bombs at this time. The agency estimates that South Korea has about 4,800 "nuclear energy specialists, of which over 500 have received training abroad."


29 January 1993

Son Sŏng P’il, North Korea's ambassador to Russia, warns that the US and South Korean Team Spirit joint military exercise scheduled for March 1993 may force North Korea to close its nuclear facilities to International Atomic Energy Agency (IAEA) inspections. Son says that North Korea views the exercises as preparation for a potential nuclear war and that they are incompatible with the basic clauses of the Nuclear Non-Proliferation Treaty (NPT). Additionally, the situation does not allow North Korea "to normally fulfill its commitments" to IAEA inspections.


25 January 1993

During a meeting of the chairs of the Joint Nuclear Control Commission (JNCC), South Korean Director-General of the Foreign Ministry's American Affairs Bureau Chŏng Tae Ik formally notifies North Korea that it will resume the Team Spirit combined military exercise in March. Chŏng claims that "the Team Spirit resumption is a clear..."
indication of Washington's continued determination to deter North Korea's nuclear development." The two sides left the meeting without setting a date for the next JNCC session.


19-20 January 1993

Japan and South Korea hold the third round of Japan-South Korea Consultations on Nuclear Issues at the South Korean Ministry of Foreign Affairs. Given the rising international concerns over Japan's plutonium transport from Europe, the South Korean delegate Cho Wŏn Il says that Seoul expects Japan to maintain Japan's three principles on non-nuclear and peaceful uses of nuclear energy. Japan conveys to South Korea that Tokyo will not establish diplomatic relations with North Korea unless Pyongyang's nuclear issue is resolved. Both sides agree to promote cooperation in research on materials for fuel rods, vessels and other component of fast breeder and light water reactors.


Early 1993

Korea Heavy Industries & Construction Corporation (KHIC) awards GEC Alsthom Electromachanique, Inc. a contract to supply a nuclear reactor for the Wŏlsŏng-4 nuclear power reactor.


Early 1993

The Korean Nuclear Engineering Laboratory, Ltd. (KONEL) signs a 15-year agreement with Wyle Laboratories for technology transfers. Wyle agrees to provide KONEL with the following: equipment inspection and qualification testing, nuclear-grade spare parts for power plants, seismic analysis and testing, aging analysis, and nuclear plant maintenance. KONEL will be South Korea's first nuclear engineering laboratory, and is expected to be operational by mid-1993.

1993. The North and South Korean delegations fail to even agree on the date of the next meeting.

10 December 1992
The 12th session of the Joint Nuclear Control Commission (JNCC) fails to produce any progress towards mutual nuclear inspections on the Korean Peninsula. The US-South Korean decision to resume Team Spirit in spring 1993 continues to be the main point of contention. The North Korean delegation insists that Seoul and Washington cancel Team Spirit by 15 December, while the South Korean delegation claims that Team Spirit will be cancelled if Pyongyang agrees to allow the first mutual inspection before the prime ministers' talks scheduled for 21-24 December.

28 November 1992
During a meeting of the Joint Nuclear Control Commission (JNCC), North Korea repeats its demand that South Korea cancel the US-South Korean joint military exercise Team Spirit before Pyongyang will discuss any specifics on a inter-Korean nuclear inspection regime. Chairman of the South Korean delegation Kong Ro Myŏng insists that North Korean must open at least one site to inspections before Seoul will consider cancellation of the military exercises.

18 November 1992
The Joint Nuclear Control Commission (JNCC) once again fails to make any progress on mutual nuclear inspections between North and South Korea. North Korea continues to threaten suspension of all negotiations between the two countries, including the prime ministers' talks in December, if South Korea does not cancel the Team Spirit military exercises scheduled for spring 1993.

3 November 1992
South Korea announces that it will consider canceling the upcoming Team Spirit military exercises scheduled for spring 1993 if inter-Korean nuclear inspections occur before the December round of prime ministers' talks.
According to Kong Ro Myŏng, the South Korean spokesman for negotiations with North Korea, "if mutual nuclear inspection is realized before the coming round of the South-North [sic] Prime Ministers' talks scheduled to start in Seoul on 21 December, we could consider shelving Team Spirit again next year. If the deadline is to be met,

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regulations for mutual inspection must be worked out by the end of this month. If the North does not respond it will be inevitable for us to conduct the exercise."


29 October 1992
During working-level talks of the Joint Nuclear Control Commission (JNCC), North Korea reiterates the threat to withdraw from all inter-Korean dialogue unless Seoul cancels preparations for the Team Spirit military exercises by December. Due to this impasse, the two sides fail to make any progress on setting up a bilateral nuclear inspection regime on the Korean Peninsula.


22 October 1992
A meeting of the Joint Nuclear Control Commission (JNCC) fails to make any progress on setting up a mutual nuclear inspection regime between North and South Korea. According to the Chairman of the South Korean delegation Kong No Myong, the two sides do "not even mention" specifics about the inspections regime. Instead, discussions focus on the US-South Korean decision to resume the Team Spirit joint military exercises. The North Korean delegation demands that South Korea cancel Team Spirit before it will discuss mutual inspections, and the South Korean delegation insists that they will continue to make preparations for the military exercise unless the JNCC makes substantial progress in setting up an inter-Korean inspections regime.


14 October 1992
A working-level meeting of the Joint Nuclear Control Commission fails to make any substantive progress on inter-Korean nuclear inspections. The two sides continue to disagree on what type of facilities will be subject to inspections. According to a South Korean official, Seoul is prepared to take other measures if Pyongyang continues with its "delaying tactics."


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8 October 1992
At a press conference following the US-South Korean Security Consultative Meeting held 7-8 October in Washington, DC, US Secretary of Defense Dick Cheney says that there is intelligence of "sufficient quality" to suggest that North Korea is close to developing a nuclear weapon. Cheney adds that the United States will not remove any more of the 37,400 troops from South Korea until the North stops developing nuclear weapons. After Cheney's statements, South Korean Lieutenant General Kim Chae Ch'ang says that previous IAEA inspections of North Korean nuclear facilities have raised "serious and clear" suspicions that North Korea is nearing completion of a reprocessing plant that would supply enough nuclear material for a bomb.

Late September 1992
South Korea requests fuel reprocessing technology designed at the Argonne National Laboratory for the Department of Energy's Integral Fast Reactor (IFR). The US government denies this request.

18 September 1992
Canada's Minister of International Trade announces that the Atomic Energy of Canada Limited (AECL) will provide South Korea with two more 700MW, CANDU nuclear power reactors (Wŏlsŏng-3 and -4). The contract is worth approximately half a billion dollars.

14 September 1992
A South Korean official announces that Seoul is willing to go ahead with limited economic cooperation with North Korea before the two countries resolve the issue of mutual nuclear inspections. This announcement signifies a change in the previous South Korean principle of "nuclear solution first, economic cooperation later."
31 August 1992
The eighth Joint Nuclear Control Commission (JNCC) meeting fails to make significant progress towards a mutual nuclear inspections regime on the Korean Peninsula, but the North Korean delegation changes its position and agrees to discuss inspection regimes before anything else. The North Korean delegation also expresses interest in inspections of military installations. However, disagreements persist over the reprocessing plant located in Yŏngbyŏn-kun. South Korea continues to demand that North Korea dismantle the facility immediately, but North Korea claims that recent International Atomic Energy Agency (IAEA) inspections have cleared up any remaining suspicions.


21 July 1992
The seventh meeting of the Joint Nuclear Control Commission (JNCC) fails to make any progress in establishing an inter-Korean nuclear inspections regime. North Korean delegates continue to complain about the South’s insistence on resolving the suspicions of the North’s nuclear activities, but Kong Ro Myŏn, South Korean chairman to the JNCC, states that South Korea will not alter its principle of “nuclear solution first, economic cooperation later.” This issue is highlighted by the fact that North Korean Deputy Premier Kim Dal Hyŏn is currently touring industrial facilities in the South. The next JNCC meeting is set for 31 August.


17 July 1992
The Canadian company, Dominion Bridge announces that it has won a $10 million (Canadian dollars) contract with Korea Heavy Industries and Construction Co. Ltd. (KHIC) to supply the upper and lower feeders for the Wŏlsŏng-2 nuclear power reactor.


30 June 1992
North and South Korea meet for the sixth round of the Joint Nuclear Control Commission (JNCC) talks and once again fail to make any progress on an inter-Korean nuclear inspection regime. Insisting that suspicions of North Korean nuclear activities had grown since IAEA inspections, the South Korean delegates claim that inter-Korean relations cannot improve until North Korea resolves remaining questions about its nuclear program. The two sides do agree to meet again on 21 July.

—Yonhap News Agency, 30 June 1992, in "North Reacts 'Fiercely' to Linkage of Nuclear And Other Issues," BBC

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19 June 1992
A South Korean source claims that South Korea is considering omitting military facilities as subjects of challenge inspections in the proposed inter-Korean nuclear inspections regime. According to the source, South Korea will present a revised proposal at the upcoming meeting of the Joint Nuclear Control Commission (JNCC).

19 June 1992
South Korean Foreign Minister Lee Sang Ok announces that until North Korea accepts inter-Korean bilateral nuclear inspections, South Korea will not give it any nuclear-related technical assistance. "Pyongyang's acceptance of ad hoc inspections by the International Atomic Energy Agency (IAEA) is positive, but it must accept inter-Korean inspection as well in order to completely dispel the global suspicion and concern about its nuclear arms development."

17 June 1992

16 June 1992
The South Korean government decides not to provide light water reactor technology with North Korea because Pyongyang's establishment of a reprocessing capability at the "Radiochemistry Laboratory" is in violation of the "Joint Declaration of the Denuclearization of the Korean Peninsula."

11 June 1992
South Korea announces that it is willing to share nuclear technology with North Korea if Pyongyang accepts South Korean nuclear inspectors and abandons its reprocessing facility. According to Kim Chae Sŏp, director-general of international organizations at the Foreign Ministry, "The Government policy is that Seoul will promote exchanges and cooperation with Pyongyang depending on the progress of inter-Korean relations and nuclear negotiations."

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27 May 1992
The fifth meeting of the Joint Nuclear Control Commission fails to produce any agreement between North and South Korea on mutual nuclear inspections. The two sides even fail to set the date for the next meeting, making it practically impossible to conduct mutual inspections by the original deadline of mid-June. The South Korean delegation proposes that the next meeting be held on 29 May in order to keep alive the possibility of conducting mutual inspections by mid-June. The North Korean delegation, however, rejects the proposed date because of the on-going IAEA inspections, and proposes the next JNCC meeting be held on 16 June. South Korea does not agree to this, and the two sides decide to set the date through contacts between the inter-Korean liaison offices in Panmunjom.


12 May 1992
The Joint Nuclear Control Commission (JNCC) meets for the fourth time. Unlike past meetings, North and South Korea make progress in finalizing a document of procedures for mutual inspections by the set date of 19 May. North Korea withdraws its demand that the two sides adopt a separate protocol based on the pledges to denuclearize the Korean Peninsula before negotiating an inspections regime. South Korea agrees to alter the language regarding the subjects of inspections from "sites suspected of nuclear capabilities" to "nuclear weapons and nuclear bases." The two sides agreed to begin drawing up the text of the agreement on 15 May.


May 1992
Construction for the Ulchin-3 and -4 nuclear power reactors begin.


May 1992
The Korea Nuclear Fuel Company (KNFC) announces plans to build a new fuel fabrication plant at Kongchu. This plant will have a design capacity of 200 MTU of PWR fuel per year and 400 MTU per year of Candu-type heavy water reactor fuel.

Late April 1992
During the 7th annual Korea Atomic Industrial Forum, Russian officials offer to sell nuclear technology and to conduct a joint research project with South Korea.

21 April 1992
A meeting of the Joint Nuclear Control Commission (JNCC) between North and South Korea breaks down without even an agreement on when to meet next. According to a South Korean official, the North Korean delegation "opposed our offer for inspections based on reciprocity and demanded unilateral full inspections. They further refused special inspections." The official also claimed that the North Korean delegation introduced the demand that the two countries "jointly cope with external nuclear threats." The North Korean delegation did not respond to the South Korean proposal for more JNCC meetings to be held on 24 and 28 April.

1 April 1992
North and South Korea hold the second meeting of the Joint Nuclear Control Commission (JNCC). South Korean Co-Chairman Kong Ro Myŏng claims that South Korea cannot accept the North Korean demand that in return for inspections at its facility in Yŏngbyŏn, North Korean inspectors should have full access to US military bases located in South Korea. Kong says, "We have already offered the North a comprehensive idea on mutual nuclear inspection that the North could easily agree to if only it really meant to denuclearize the Korean Peninsula."

27 March 1992
The Ministry of Energy and Resources announces that South Korea surpassed Japan in 1991 as the world's largest importer of energy resources. Japan's dependence on imported energy resources have fallen below 90 percent while South Koreas increased to 91.2 percent. [Note: In 1993, the Ministry of Energy and Resources and the Ministry of Commerce were merged and became the Ministry of Trade and Industry. In 1998, when the Ministry of Foreign Affairs became the Ministry of Foreign Affairs and Trade, the Ministry of Trade and Industry changed its name to the Ministry of Commerce, Industry and Energy.]

26 March 1992
According to South Korean Prime Minister Chŏng Wŏn Shik, the issue surrounding international inspections of North Korean nuclear facilities cannot be resolved solely through pressuring North Korea; countries must also engage Pyongyang through dialogue.

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19 March 1992
North and South Korea hold the first meeting of the Joint Nuclear Control Commission (JNCC) at P'annunjŏm. The commission, consisting of seven delegates from each country, is headed by North Korean Foreign Ministry Ambassador at large Ch'oe U Jin and South Korean Institute of Foreign Affairs and National Security Chancellor Kong Ro Myŏng. At the meeting, South Korea presents a proposal calling for regular inspections of declared nuclear sites in addition to challenge inspections of undeclared sites. The North Korean proposal focuses on getting international guarantees for a nuclear-free Korean Peninsula and calls for inspections of US military bases located in South Korea. The two sides fail to reach an agreement on the procedures of mutual inspection and decide to meet again on 1 April.


17 March 1992
South Korea announces that it will urge North Korea to accept expanded powers of the Joint Nuclear Control Commission (JNCC) when the commission convenes for the first time on 19 March. South Korea wants the JNCC to be able to conduct forced inspections of facilities suspected of hiding nuclear-related material or technology even if the facility is not declared.


14 March 1992
North and South Korea reach an agreement to conduct mutual inspections of their nuclear facilities. The agreement, reached after three months of negotiations at the border village of P'annunjŏm, marks the first time North Korea accepts a specific timeframe for the implementation of inter-Korean nuclear inspections. The agreement stipulates that the two countries will create a Joint Nuclear Control Commission on 19 March at which they will "make joint efforts" to work out the details and procedures for mutual inspections by 19 May. According to the agreement, the two countries will commence mutual inspections within 20 days of finalizing a document on the procedures.


4 March 1992
South Korean government officials suggest that Korea is considering asking Japan to reprocess the spent nuclear fuel from its nine power plants.

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20 February 1992
The Ministry of Energy and Resources announces its decision to invest 180 billion won to develop second-generation nuclear reactors. The ministry plans to establish a body that conducts research and development of second-generation reactors. [Note: In 1993, the Ministry of Energy and Resources and the Ministry of Commerce were merged and became the Ministry of Trade and Industry. In 1998, when the Ministry of Foreign Affairs became the Ministry of Foreign Affairs and Trade, the Ministry of Trade and Industry changed its name to the Ministry of Commerce, Industry and Energy.]

19 February 1992
In the sixth round of high-level talks in Pyongyang, the South-North Basic Agreement on Reconciliation, Nonaggression and Exchange-Cooperation, and the Joint Declaration on the Denuclearization of the Korean Peninsula come into force. [Note: The Basic Agreement and the Joint Declaration were signed by North and South Korea on 13 December 1991 and 31 December 1991, respectively.]

18 February 1992
The President of the Korean Electric Power Corporation (KEPCO) An Pyŏng Hwa is booked on charges of illegal reclamation of nuclear waste between December 1985 and 1986. According to the local prosecutor, KEPCO is suspected of having illegally filled up some private land in South Kyŏngnam Province with approximately 45,000 tons of nuclear waste, which was generated from the Kori nuclear reactors.

11 February 1992
The South Korean government opposes the US participation in the Joint Nuclear Control Commission (JNCC) that is scheduled to be established in March. However, South Korea decides to accept the US participation in the North-South mutual inspection as a technical expert.

2 February 1992
The Ministry of Energy and Resources announces that it is studying the possibility of importing enriched uranium from China to use for South Korea’s nuclear power reactors. According to the Ministry, businessmen from the China Nuclear Energy Industry Corporation (CNEIC) recently visited the Korea Electric Power Corporation (KEPCO)
and the Ministry, and proposed enriched uranium sales. [Note: In 1993, the Ministry of Energy and Resources and the Ministry of Commerce were merged and became the Ministry of Trade and Industry. In 1998, when the Ministry of Foreign Affairs became the Ministry of Foreign Affairs and Trade, the Ministry of Trade and Industry changed its name to the Ministry of Commerce, Industry and Energy.]

30 January 1992
North Korea signs the International Atomic Energy Agency (IAEA) safeguards agreement. North Korea’s Deputy Minister for Atomic Energy Industry Hong Gŭn P’yo says that North Korea will abide by the agreement fully. [Note: North Korea’s Supreme People’s Assembly does not ratify the agreement until 9 April 1992. The IAEA inspections process comprises four distinct phases. The first requires North Korea to submit an official report of its existing nuclear facilities. During the second phase, the IAEA will conduct a series of ad hoc inspections to verify the aforementioned list, as well as gather some initial data about the nuclear program. Third, North Korea and the IAEA will sign various subsidiary agreements and attachments to the accord describing inspection procedures for specific facilities. And fourth, the IAEA will begin routine inspections designed to ensure that the nuclear facilities are not being used for military purposes.]

28 January 1992
The South Korean government announces that it is promoting a joint North-South construction of two 1MW(e) nuclear power reactors in the Demilitarized Zone (DMZ) for nuclear power uses in both nations.

23 January 1992
The Hyundai Heavy Industries Co. Ltd. enters into a licensing agreement with the US company, Pacific Nuclear Systems to allow for the manufacturing and selling of Pacific Nuclear System’s spent fuel storage in South Korea.

16 January 1992
The Ulchin-1 nuclear power reactor is temporarily shut down due to a breakdown of the control rods.

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14 January 1992
North and South Korean officials exchange each side's documents related to the Joint Declaration of Denuclearization on the Korean Peninsula. The documents require the signature of both nation's prime ministers. Both sides will exchange the documents once again on the 21st after receiving the prime ministers' signatures. The Joint Declaration is to enter into force on 19 February 1992.

7 January 1992
The Ministry of Energy and Resources announces that it will establish a foundation in the end of February, which manages nuclear energy-related public information as a third party. [Note: In 1993, the Ministry of Energy and Resources and the Ministry of Commerce were merged and became the Ministry of Trade and Industry. In 1998, when the Ministry of Foreign Affairs became the Ministry of Foreign Affairs and Trade, the Ministry of Trade and Industry changed its name to the Ministry of Commerce, Industry and Energy.]

6 January 1992
During the US-South Korea Summit in Seoul, US President George Bush and South Korean President Roh Tae Woo announce that they will cancel the Team Spirit joint military exercises if North Korea "fulfills its obligation" to the International Atomic Energy Agency (IAEA) and South Korea for inspections of its nuclear facilities.

1991
31 December 1991
During the third round of North-South Korea delegation talks, both nations signs the Joint Declaration on the Denuclearization of the Korean Peninsula, whereby both sides promised to "not test, manufacture, produce, receive, possess, store, deploy, or use nuclear weapons." The agreement also prohibits the two sides from possessing "nuclear reprocessing and uranium enrichment facilities." The agreement also provides for a joint inspections regime, but both sides files to agree on its implementation. [Note: The Joint Declaration on the Denuclearization of the Korean Peninsula enters into forces on 19 February 1992 during the sixth round of high-level talks in Pyongyang.]

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28 December 1991
The two Koreas hold the second round of North-South Korea delegation talks in P'anmunjom, south of the 38th parallel. Both sides agree with most of the articles in the draft of the Denuclearization of the Korean Peninsula. South Korea agrees to form a North-South Joint Nuclear Control Commission that North Korea has proposed. Both nations decide to have a meeting to discuss this commission in mid January 1992. —"Pihaeksŏn'ôn' Sashilang T'agyŏl/P'anmunjŏm 2 Ch'a Chŏpch'ok," Kukmin Ilbo, 28 December 1991, p. 1, in KINDS, www.kinds.or.kr; "Nambuk Haekt'ongje Kongdongsŏn' Habŭi/P'anmunjŏm 2 Ch'a Haekhoedam," Donga Ilbo, 28 December 1991, p. 1, in KINDS, www.kinds.or.kr.

26 December 1991

18 December 1991

13 December 1991
During the fifth round of high-level talks in Seoul between North and South Korea, both sides sign the South-North Basic Agreement on Reconciliation, Nonaggression and Exchange-Cooperation. According to the agreement, the

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two nations officially recognize each other’s existence and pledge non-aggression. The two nations remain divided on the nuclear issue, but both state the goal of a nuclear-free Korean Peninsula. Bilateral talks on nuclear issues are set for later in December. [Note: the South-North Basic Agreement on Reconciliation, Nonaggression and Exchange-Cooperation is also known as the “Basic Agreement.” The Basic Agreement enters into forces on 19 February 1992 during the sixth round of high-level talks in Pyongyang.]


11 December 1991
The prime ministers of North and South Korea make separate proposals for a nuclear-free Korea. The proposals are the first to be introduced at an official meeting and are more similar than any past proposals. Both call for the elimination of weapons of mass destruction and a ban on manufacture, possession, or deployment of nuclear weapons. There remain, however, some points of contention. The South Korean proposal calls for the destruction of nuclear reprocessing plants and uranium enrichment facilities in North Korea. The North Korean proposal demands a ban on US nuclear protection of South Korea and calls for the withdrawal of all US troops and a halt to the annual Team Spirit joint military exercises. Despite the differences, North Korean Prime Minister Yŏn Hyŏng Muk describes South Korea’s willingness to denuclearize as "a step forward."


2 December 1991
South Korea and the Soviet Union hold the first seminar on Peaceful Uses of Atomic Energy in Moscow.


27 November 1991
The South Korean government announces its plans to accept simultaneous nuclear facility inspections with North Korea if they sign an international safeguard accord.


27 November 1991
South Korea and the United Kingdom sign an agreement calling for cooperation in the peaceful uses of nuclear energy, and announce the island of Anmyŏng in addition to 6 others as possible radioactive waste disposal sites. According to the agreement, the two countries will transfer technology, material, and equipment in the areas of

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nuclear management, storage and disposal of irradiated fuel, radioactive wastes, and the transport of radioactive materials. In addition, the UK Secretary of Energy states that the agreement may provide an opportunity to reprocess South Korea's spent fuel in the UK.


13-14 November 1991

South Korea and Japan hold talks and add issues related to radiation monitoring technology to their bilateral cooperation in nuclear energy. Japanese officials deny recent reports of South Korean requests to reprocess spent nuclear fuel.


9 November 1991

South Korea's Minister of Science and Technology Kim Chin Hyŏk announces that South Korea will not have nuclear spent fuel reprocessing facilities in accordance with the Denuclearization of the Korean Peninsula. He adds that if reprocessing becomes necessary, nuclear spent fuel will be reprocessed in the United Kingdom, France, or Soviet Union.


8 November 1991

South Korean President Roh Tae Woo declares the Denuclearization of the Korean Peninsula. He announces that "South Korea will not manufacture, possess, store, deploy or use nuclear weapons." In addition, President Roh states that South Korea will not possess facilities for nuclear fuel reprocessing or refining.


19 October 1991

The South Korea Ministry of Foreign Affairs says that it was unaware of the US decision to remove all nuclear weapons from South Korea.


19 October 1991

The United States announces its decision to remove all its nuclear weapons, including land- and sea-based, tactical

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short-range, and air- or bomber-delivered weapons from South Korea. The United States hopes this decision will pave the way for North Korea to accept international inspections on their nuclear facilities.


9 October 1991
Construction work for Wŏlsaeng nuclear power reactor #2 begins.


4 October 1991
South Korean President Roh Tae Woo warns North Korea that if it continues with its nuclear weapons program and refuses international inspections, international sanctions may be imposed on North Korea.


September 1991
The Korea Electric Power Corporation (KEPCO) announces South Korea's plan to build 13 more power reactors by 2006. This includes 8,950MW light water reactors and 5,629MW heavy water reactors.


3 August 1991
South Korea announces a three-step plan that includes asking North Korea to sign a joint declaration to make the Korean Peninsula a nuclear-weapon-free zone. First, North Korea would accept inspections of its nuclear facilities, and then North and South Korea would jointly issue a declaration to establish a nuclear-free Korean Peninsula. The third step would include high-level talks and multilateral support from countries in the region. The proposal may suggest simultaneous IAEA inspections, or a system by which the two Koreas may conduct bilateral inspections.


3 August 1991
South Korean Foreign Minister Lee Sang Ok says that South Korea has no plan to develop nuclear weapons, and no plan to use military force against North Korean nuclear facilities, even if Pyongyang refuses to accept full nuclear safeguards inspections.


5 August 1991
South Korean Foreign Minister Lee Sang Ok says that South Korea has no plan to develop nuclear weapons, and no plan to use military force against North Korean nuclear facilities, even if Pyongyang refuses to accept full nuclear safeguards inspections.


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22 July 1991
The Korea Electric Power Corporation (KEPCO) awards a contract to Combustion Engineering (C-E) to supply two 1000MW reactors worth over $200 million. Under the contract, C-E is to supply South Korea with two 1,000MW advanced light water reactors which are expected to go into operation by 1998 and 1999.


10 July 1991
South Korean Defense Minister Lee Chong Ku tells the National Assembly that if North Korea accepts international inspections of its nuclear facilities and proves that it has abandoned its nuclear weapons program, South Korea will consider simultaneous inspections of both countries’ military facilities.


Early July 1991
The Kori and Yŏnggwang nuclear power plants are temporarily shut down due to a breakdown of the cooling system. In response, the South Korean government launches an energy conservation campaign to avoid a power shortage.


10 June 1991
A senior South Korean Foreign Ministry official denies as "unfounded" a 9 June Los Angeles Times article that reported that the United States is consulting with Seoul about removing its nuclear weapons from South Korea in order to entice North Korea into allowing international inspections of its nuclear facilities and giving up any possible nuclear weapons capabilities. The official claims that the position of South Korea is to deal with the issue of US nuclear weapons separately form "North Korea's liability as a signatory of the Nuclear Non-proliferation Treaty."


Related content is available on the website for the Nuclear Threat Initiative, www.nti.org.
10 June 1991
South Korean officials announce that South Korea will seek an International Atomic Energy Agency (IAEA) resolution calling on North Korea to sign a safeguards agreement "immediately" despite Pyongyang's recent pledge to sign an agreement by 1 September 1991. The officials claim that there need to be further diplomatic effort at the IAEA Board of Governors meeting beginning on 17 June because "there remain some problems that make it hard to trust North Korea."


20-21 April 1991
During the third round of USSR-ROK Summit, South Korea and the Soviet Union conclude an agreement on economic cooperation and a joint natural gas development project in the Soviet Far East. The Soviet Union also reaffirms their position to halt nuclear fuel and supplies to North Korea if they do not sign the Nuclear Safeguard Treaty. President of the Soviet Union Mikhail Golvachov proposes a Bilateral Friendship Treaty and South Korean President Roh Tae Woo suggests studying the treaty through dialogue between both countries' Foreign Ministers. Both sides agree to make efforts to fulfill the treaty.


16 April 1991
The Korea Atomic Industrial Forum concludes a memorandum of cooperation with the USSR Nuclear Society.


12 April 1991
South Korean Defense Minister Lee Chong Ku says that South Korea is prepared to respond with force if North Korea does not accept nuclear safeguards inspections. He says North Korea is expected to acquire nuclear weapons by 1995 or 1996, and that strong counter-proliferation measures would be appropriate. The remarks are later retracted by the Defense Ministry, but North Korean President Kim Il Sung says that the announcement is a "virtual declaration of war."


25 March 1991
The first Korea-Soviet Union Atomic Energy Joint Coordinating Committee meeting is held.

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8 March 1991
South Korea and Japan agree to a wide range of bilateral cooperation in nuclear safety. The agreement covers annual meetings and information exchange on issues related to nuclear safety, and on the operation of nuclear power plants, and to exchange nuclear energy experts.

January 1991
The Korea Atomic Energy Research Institute (KAERI) and the Atomic Energy of Canada Limited (AECL) sign an agreement to jointly develop CANFLEX (CANDU Flexible Fueling Natural Uranium) heavy water reactor fuel. [Note: Taehan Maeil cites the agreement was signed on 19 February 1991.]

1990
28 December 1990
The Atomic Energy of Canada Ltd. (AECL) signs a $535 million contract with the Korea Electric Power Corporation (KEPCO) to construct the Wolsong-2 nuclear power reactor. The Wolsong-2 will be identical to the Wolsong-1, which is a 629MWe heavy water reactor. According to the contract, the AECL will provide the reactor while Korea Heavy Industries & Construction and General Electric (GE) will jointly manufacture the turbine generator. Wolsong-2 is expected to begin commercial operations in June 1997.

23 November 1990
Daewoo and the Soviet Union’s Ministry of Nuclear Power Engineering and Industry sign an agreement to establish a joint project on developing and applying advanced materials and special technologies in nuclear power engineering.

22 November 1990
The South Korean minister of Foreign Affairs asserts the idea of a nuclear free Korean peninsula as "unrealistic"
after a member of the Soviet presidential Council proposes this during a lecture in Seoul.

9 November 1990
South Korean President Roh Tae-Woo fires the minister of the Ministry of Science & Technology after riots erupt on the island of Anmyon after it is chosen as the site for low- and intermediate-level nuclear waste.

September 1990
The Korea Atomic Energy Research Institute (KAERI) establishes the Nuclear Environment Management Center (NEMAC).

31 August 1990
Combustion Engineering Inc. (C-E) submits an application to the Nuclear Regulatory Committee (NRC) to export two 950MW nuclear reactors to South Korea.

21 June 1990
At a symposium sponsored by the Cato Institute in Washington, DC, Selig Harrison of the Carnegie Endowment for International Peace says that the United States has 60 nuclear weapons for F-16s fighter-bombers stored at Kunsan Air Base in South Korea. Harrison says the United States has also deployed 21 "nuclear mines," 40 eight-inch nuclear artillery pieces, thirty 155mm nuclear artillery pieces, and 20 Lance missiles with nuclear warheads in South Korea.

14-15 June 1990
During his visit to Washington on his way back from the International Atomic Energy Agency (IAEA) Board of Governors held in Vienna, South Korea's Minister of Science and Technology Chong Kun Mo says that North Korea has notified the IAEA that it will send a delegation to the IAEA in mid July 1990 to discuss signing the IAEA safeguards agreement. He estimates that North Korea is likely to sign the safeguards agreement before August when the Nuclear Non-Proliferation Treaty (NPT) Review Conference is to be held in Vienna. He also announces that the USSR cancelled the sale of four nuclear reactors to North Korea.

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25 May 1990
South Korea and Japan sign a nuclear cooperation agreement. The agreement consists of cooperation in nuclear power plant safety, protection and monitoring of radiation, utilization of radioisotopes and radiation, and matters related to nuclear energy. Implementation of the agreement is not expected to go into effect until South Korea completes procedures to join the International Atomic Energy Agency (IAEA) convention on nuclear accidents, and notification and assistance in the case of nuclear accidents.

7 May 1990
South Korea signs a contract with the Soviet Union to import 390 tons of enriched uranium by 1999. [Note: According to the Mining Journal and Nuclear Fuel, the contract calls for 400 tons of enriched uranium (these sources cite approximately 40 tons per year for the next ten years).]

18 April 1990
During the fifth annual joint conference of the Korean Atomic Industrial Forum held in Seoul, Boris Semenov, Deputy Director General of the International Atomic Energy Agency (IAEA), says that North Korea will probably sign the IAEA safeguards agreement by September 1990. Semenov says that the IAEA and North Korea have been negotiating over the agreement and that three or four paragraphs have been completed to the satisfaction of both parties.

12 March 1990
Japan's Atomic Energy Commission hosts the first international conference for nuclear cooperation in Asia. Senior officials from China, Indonesia, Malaysia, the Philippines, South Korea, and Japan are present to discuss nuclear cooperation. During the conference, South Korea proposes to establish a standing committee for nuclear cooperation in Asia with subcommittees for nuclear safety, power reactors, public acceptance, radioisotope application, and nuclear policy.

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5 March 1990
A South Korean government committee agrees to allow Korea Electric Power Corporation (KEPCO) to purchase 40 metric tons of enriched uranium from the Soviet Union per year. The Soviet Union is expected to sell uranium at a significantly lower price, and will accept consumer electronic goods as partial payment. [Note: The Ministry of Commerce, Industry and Energy (MOCIE) cite 390 tons of enriched uranium.]

27 February 1990
A dedication ceremony is held for the completion of the Ulchin-1 and Ulchin-2 nuclear power plants.

23 February 1990
South Korean Defense Minister Lee Jong Hun tells the National Assembly's National Defense Committee that North Korea is building nuclear facilities in Yongbyon-kun on a large scale and that North Korea could produce nuclear weapons in the mid-1990s. Minister Lee also says that North Korea is extending the range of its Scud missiles to over 500km.

17 February 1990
The Kori-2 nuclear reactor is loaded with 52 bundles of domestically manufactured light water reactor fuel for the first time.

14 February 1990
The Korea Institute of Nuclear Safety (KINS) is established as an independent organization from the Korea Atomic Energy Research Institute.

11 January 1990
According to sources in the South Korean Ministry of Defense, the South Korean government will propose a four-step disarmament program with North Korea that would include the suspension of any North Korean nuclear weapon production, as well as North Korea joining and adhering to nuclear safety agreements.

Early 1990
The Korea Power Engineering Company (KOPEC) concludes a contract with Societe Generale Pour les Techniques
Nouvelles (SGN) for a spent fuel storage facility with a capacity of 3,000 metric tons. South Korea's at-reactor spent fuel storage is expected to run out within the next five-six years.


1989-1980

1989

Late 1989

South Korea and Indonesia sign an agreement calling for cooperation in developing mineral and energy resources, including nuclear power. The Korea Electric Power Corporation (KEPCO) agrees to provide information on the management of nuclear power plants with the Indonesian utility company PLN.


December 1989

The Korea Advanced Energy Research Institute changes its name to the Korea Atomic Energy Research Institute.

[Note: In February 1973, the Atomic Energy Research Institute and the Radiological Research Institute and the Radiation Research Institute in Agriculture merged, and become the Korea Atomic Energy Research Institute. In December 1980, KAERI merged with the Korea Nuclear Fuel Development Institute and become the Korea Advanced Energy Research Institute. However, in December 1989, the Korea Advanced Energy Research Institute is renamed to the Korea Atomic Energy Research Institute (KAERI).]


12 November 1989

The Ulchin-2 nuclear power plant is temporarily shut-down due to cracks in the blades of the turbine. Officials from the Korea Electric Power Corporation plan to seek compensation from Alsthom, the French firm that manufactured and supplied the turbine.


17 October 1989

South Korea's Minister of Foreign Affairs states that North Korea may be developing nuclear weapons, and refuses to allow international inspections of their facilities.


10 October 1989

The Korea Electric Power Corporation (KEPCO) announces its decision to build three more nuclear power plants.

**October 1989**

According to *Nuclear Fuel*, reports of a reprocessing plant in North Korea are causing South Korea to consider developing its own reprocessing technology. South Korea is interested in co-processing and according to the *Nuclear Fuel*, there have been informal discussions to work out a trilateral arrangement involving South Korea, Canada and the United States.


**October 1989**

Pakistan announces plans to seek South Korea’s cooperation in building a nuclear power plant.

**October 1989**

South Korea and Japan conduct a bilateral science and technology committee meeting, and agree to carry out seven joint projects to secure the safety of nuclear power plants.

**17 October 1989**

South Korea’s Minister of Foreign Affairs states that North Korea may be developing nuclear weapons, and refuses to allow international inspections of their facilities.

**30 September 1989**

The Ulchin-2 nuclear power plant begins commercial operation. Ulchin-2 is 950MW(e) PWR.

**28 September 1989**

A ceremony is held for the completion of a light water nuclear fuel fabrication processing plant.

**August 1989**

Eleven countries, including South Korea join to create the Asian Energy Institute (AEI) in New Delhi, India.

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Mid-Late 1989
South Korea, the United States, and Canada engage in informal talks over a possible trilateral arrangement to use a co-processing technique to reprocess South Korea's spent fuel. Co-processing involves using a mixture of uranium and plutonium to reprocess spent fuel.

Mid-1989
The Korea Nuclear Fuel Company (KNFC) takes over operation of the fuel fabrication plant in Taejon.

5 July 1989
The Kyunghyang Shinmun, a South Korean daily newspaper, publishes a report confirming the existence of nuclear facilities in North Korea. According to the report, US intelligence agencies spotted nuclear facilities and a suspected testing ground for nuclear detonations through satellite images, and shared this information with South Korean officials during a meeting in late June.

1 June 1989
Construction begins on the Yong'gwang-3 and Yong'gwang-4 nuclear power plants.

June 1989
South Korean researchers present a semi-official long-term forecast for the nation's energy sector. According to the report, South Korea will need an additional 55 nuclear power reactors by the year 2031. The researchers recommend that South Korea acquire 100 percent self-sufficiency in nuclear technology in order to gain more public support. In addition, the report recommends advanced pressurized water reactors to be installed at all nuclear power plants from the year 2006.

18 May 1989
The Korean Atomic Industrial Forum (KAIF) signs a cooperation memorandum with the Forum Atomique Francais.
—Korea Atomic Industrial Forum (KAIF), www.kaif.or.kr.

May 1989
Holtec International announces it has won a $3.5 million contract with the Korea Electric Power Corporation (KEPCO) to supply high density storage racks for the Ulch'on-2 nuclear power reactor.

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25 March 1989
The Korea Advanced Energy Research Institute starts constructing the Korean multi-purpose research reactor (KMRR). [Note: 1) The KMRR is re-named HANARO (High-flux Advanced Neutron Application Reactor) in August 1994; 2) In February 1973, the Atomic Energy Research Institute and the Radiological Research Institute and the Radiation Research Institute in Agriculture merged, and become the Korea Atomic Energy Research Institute. In December 1980, KAERI merged with the Korea Nuclear Fuel Development Institute and become the Korea Advanced Energy Research Institute. However, in December 1989, the Korea Advanced Energy Research Institute is renamed to the Korea Atomic Energy Research Institute (KAERI).]

Early 1989
The CIA informs South Korean officials that North Korea is constructing a nuclear fuel reprocessing plant in Yongbyon-kun, North P'yong'an Province, North Korea. According to the CIA, North Korea will have the ability to develop nuclear weapons once the reprocessing plant is complete.

31 December 1988
The Korea Nuclear Fuel Company completes construction of its nuclear fuel fabrication plant.

December 1988
The Soviet Union offers to sell enriched uranium to South Korea at lower prices than their current suppliers. South Korea receives uranium ore from Australia and Canada, and has it processed by the United States and France.

December 1988
Local residents and environmental activists allegedly find 54 drums of nuclear waste near the Kori nuclear power plants. Prosecutors begin investigations to determine whether the Korea Electric Power Corporation is to blame for burying waste that gives off four times as much radioactivity as the permissible limit.

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### Late 1988

NuTrans, the Korea Nuclear Fuel Company's uranium provider, receives a Nuclear Regulatory Commission (NRC) export license to transport 9,200kg of enriched uranium.


### 1 November 1988

The Korea Advanced Energy Research Institute (KAERI) begins constructing the Irradiated Materials Examination Facility (IMEF).

—Irradiated Materials Examination Facility, The Korea Atomic Energy Research Institute, nfcf.kaeri.re.kr.

### 30 October 1988

The Ulchin-1 nuclear power plant is temporarily shut-down due to a short-circuit in the generator.


### 23 September 1988

Construction is completed on a nuclear fuel fabrication processing plant in Taejon. The plant will produce fuel for light-water power reactors.


### 10 September 1988

The Ulchin-1 nuclear power plant begins commercial operation with a generating capacity of 950MW(e).


### 16 August 1988

The Wolsong-1 nuclear power plant shuts down for three days due to a puncture in the monitoring line that causes the cooling heavy water to leak.


### 13 June 1988

The president of the Korea Electric Power Corporation (KEPCO) says at the Canadian Nuclear Association Conference that South Korea is aiming to be self sufficient in nuclear technology by 2000. In addition, he says that the Yong’gwang-3 and Yong’gwang-4 nuclear power reactors, which are expected to be operational by 1995-1996, will be 79 percent domestically designed and contain 72 percent Korean-made equipment and materials.


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11 May 1988
The South Korean government's Board of Audit and Inspections (BAI) begins investigating the Korea Electric Power Corporation (KEPCO) for allegations of bribery and unfair business practices, especially during the bidding of nuclear power plants No. 11 and No. 12.

14 March 1988
The Canadian Export Development Corporation (EDC) announces its decision to provide $20.6 million for South Korea's purchase of a Canadian nuclear reactor. [Note: The Financial Post cites $16.5 million; the higher figure is likely quoted in Canadian dollars.]

1 February 1988
The Korea Advanced Energy Research Institute (KAERI) signs a $28 million contract with Atomic Energy of Canada, Ltd. (AECL) to build a 30MW(e) nuclear research reactor in Taedok.

9 November 1987
The Korea Electric Power Corporation (KEPCO) signs a contract with Hyundai Engineering and Construction for the construction of South Korea's nuclear power plants No. 11 and No. 12. The original contract with Hyundai was overturned by the South Korean government for lack of competition in the bidding process.

7-11 September 1987
The sixth annual Pacific Basin Nuclear Conference is held in Beijing, China. The Korean Nuclear Society presents a paper on the steps taken by South Korea to achieve self-sufficiency. According to the paper, South Korea experienced three stages and is currently undergoing the third stage. The first stage involved nuclear power plants based on turnkey contracts with Westinghouse and Atomic Energy of Canada, Ltd. (AECL). In the second stage, the Korea Electric Power Corporation (KEPCO) took charge of the projects and contracted directly for the equipment and engineering services. In the third stage, South Korean companies will be the main contractors and will be allowed to subcontract to foreign firms. The main goal of the third stage is for Korean firms to gain total technology transfer from the subcontracting foreign firms.

Related content is available on the website for the Nuclear Threat Initiative, www.nti.org.
18 June 1987
A dedication ceremony is held for the completion of Yong'gwang-1 and Yong'gwang-2 nuclear power plants. [Note: Sources have conflicting dates. The Korea Electric Power Corporation (KEPCO) cites 18 June 1987, whereas Nucleonics Week cites 23 June 1987.]

10 June 1987
The Yong'gwang-1 nuclear power plant begins commercial operation with a generating capacity of 950MW(e).

June 1987
The president of Korea Electric Power Corporation (KEPCO) resigns after the South Korean government cancels a $350 million construction contract with Hyundai because the contractor was selected without competitive bidding.

15 April 1987
The Korean Atomic Industrial Forum (KAIF) exchanges a cooperation memorandum with the Japan Atomic Energy Relations Organization (JAERO).
—Korea Atomic Industrial Forum (KAIF), www.kaif.or.kr.

9 April 1987
The Korea Electric Power Corporation (KEPCO) signs contracts with reactor vendor Combustion Engineering, turbine supplier General Electric, and architect engineer Sargent & Lundy for South Korea’s 11th and 12th nuclear power plants.

13 November 1986
The Pentagon announces it has decided to deploy Lance missiles in South Korea due to North Korea moving its troops closer to the Demilitarized Zone. The Lance is a medium-range missile capable of carrying a nuclear warhead. The Pentagon and Army refuse to discuss whether the missiles being sent to South Korea would carry conventional or nuclear warheads. In addition the Pentagon will send two launchers to South Korea within the next two months but did not specify the exact date or the number of missiles to be sent.

Related content is available on the website for the Nuclear Threat Initiative, www.nti.org.
11 November 1986
Construction of Korea’s first nuclear fuel fabrication plant begins at Taedok near the city of Taejon. The plant is being built by the Korea Nuclear Fuel Company and is expected to be completed by 1988.

30 September 1986
Korea Electric Power Corporation (KEPCO) officials announce that Combustion Engineering with General Electric, and Sargent & Lundy have been selected as contractors for South Korea’s 11th and 12th nuclear power plants [Note: Nuclear News cites these three companies as KEPCO’s top choices, with negotiations towards a contract pending until February 1987.]

September 1986
The US Nuclear Regulatory Commission (NRC) approves the export of 50,000kg of uranium to the Korea Advanced Energy Research Institute (KAERI). The uranium is to be used for research and development on spent fuel manufacturing and conversion of UF6 to UF2.

25 August 1986
The Yonggwang-1 nuclear power plant enters commercial operation with a generating capacity of 950MW(e). [Note: Nucleonics cites 900MW(e) as the generating capacity.]

July 1986
A US House subcommittee hearing on US Air Force plans to build ammunition storage facilities capable of storing nuclear weapons at 26 bases overseas including South Korea is released. The facilities will be built underground adjacent to F-15 and F-16 fighter-bombers allowing the air force to respond quickly to an attack with nuclear weapons.

16 June 1986
The South Korean government announces its plans to delay the construction of its 11th and 12th nuclear power plants due to the current power surplus.

Related content is available on the website for the Nuclear Threat Initiative, www.nti.org.
9 June 1986
The Korean Atomic Industrial Forum (KAIF) exchanges a cooperation memorandum with the Canada Nuclear Association (CAN).
—Korea Atomic Industrial Forum (KAIF), www.kaif.or.kr.

2 June 1986
A formal dedication ceremony is held at Kori, Chang’an-up, Kijang-kun, Pusan for the completion of the Kori-3 and Kori-4 nuclear power plants.

29 April 1986
The first annual Korean Atomic Industrial Forum (KAIF)/Korea Nuclear Safety (KNS) conference is held.
—Korea Atomic Industrial Forum (KAIF), www.kaif.or.kr.

29 April 1986
The Kori-4 power plant enters commercial operation with a generating capacity of 950 MW(e) [Note: Nuclear News cites 895MW(e) as the generating capacity.]

1 April 1986
South Korea and Germany sign an agreement on nuclear energy cooperation.

31 January 1986
The Minister of Science and Technology says in a report to President Chon Du Hwan that South Korea will spend $56.72 million to build a 30MW(e) nuclear research reactor by 1990. In addition, the Ministry of Science and Technology plans to build a plant to produce 100 tons per year of nuclear fuel for heavy water reactors in 1987, and another plant to produce 200 tons per year for light water reactors in 1988. [Note: Nuclear News cites 1992 as the expected year to complete the construction of the 30MW(e) nuclear research reactor].
Late 1985
The Korea Advanced Energy Research Institute completes the construction of the Post Irradiation Examination Facility (PIEF). [Note: 1) The Ministry of Trade, Industry and Energy (MOTIE) cites 21 December 1985 as the construction completion ceremony date for both the irradiation and test facilities; 2) In February 1973, the Atomic Energy Research Institute and the Radiological Research Institute and the Radiation Research Institute in Agriculture merged, and become the Korea Atomic Energy Research Institute. In December 1980, KAERI merged with the Korea Nuclear Fuel Development Institute and become the Korea Advanced Energy Research Institute. However, in December 1989, the Korea Advanced Energy Research Institute is renamed to the Korea Atomic Energy Research Institute (KAERI).]

December 1985
The South Korean government expresses "deep concern" over an agreement between the Soviet Union and North Korea to construct a nuclear power plant. According to South Korean officials, North Korea, nervous about South Korea’s growing nuclear industry, requested aid from the Soviet Union to construct a commercial nuclear power plant. North Korea recently submitted its instrument of accession to the Nuclear Non-Proliferation Treaty (NPT).

November 1985
The Korea Electric Power Corporation (KEPCO) issues invitations to 23 countries to bid for the construction of South Korea’s 11th and 12th nuclear power plants.

30 September 1985
The Kori-3 power plant enters commercial operation with a generating capacity of 950 MW(e). [Note: Nuclear News cites 895MW(e) as the generating capacity.]

3 September 1985
South Korea and France agree to promote cooperation in aeronautics, nuclear energy, communication and other scientific and technical fields.

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September 1985
Japan and South Korea sign an agreement for joint technical research and cooperation in the following fields: emergency core cooling systems, radio active waste disposal, operator training, PWR incident interpretation, research reactor technology, and testing of irradiated fuel.


June 1985
Officials from the Korea Advanced Energy Research Institute report on the findings of a joint US-South Korean study of options for the back end of the fuel cycle. The study focused on the cost difference between thermal recycling and reprocessing. According to the findings, there are no major economic incentives for choosing thermal recycling unless the cost of yellowcake, enrichment, reprocessing, and spent fuel storage decrease.

[Note: In February 1973, the Atomic Energy Research Institute and the Radiological Research Institute and the Radiation Research Institute in Agriculture merged, and become the Korea Atomic Energy Research Institute. In December 1980, KAERI merged with the Korea Nuclear Fuel Development Institute and become the Korea Advanced Energy Research Institute. However, in December 1989, the Korea Advanced Energy Research Institute is renamed to the Korea Atomic Energy Research Institute (KAERI).]


June 1985
The South Korean government decides to build a nuclear fuel processing plant by 1986. Construction of the plant will be done by the Korea Nuclear Fuel Company and the technical know-how on the functional and mechanical designs of fuel assemblies containing uranium for light water reactors will be provided by the West German company, Kraftwerk Union. The plant is expected to be completed in three years, with the capability of producing 200 tons of nuclear fuel annually.


24 May 1985
The Korea Electric Power Corporation (KEPCO) signs a uranium enrichment contract with COGEMA (Compagnie Générale des Matières Nucléaires) of France.


19-23 May 1985
South Korea hosts the 5th Pacific basin Nuclear Conference. For the first time, suppliers of services and products for the nuclear power industry are invited to exhibit their products and services.

—"Suppliers Being Invited to Pacific Basin Conference," Nuclear News, July 1984, p. 60, in Lexis-Nexis, web.lexis-

Related content is available on the website for the Nuclear Threat Initiative, www.nti.org.
May 1985
The South Korean government approves the Korea Advanced Energy Research Institute's Korea Multi-Purpose Research Reactor (KMRR) project.

May 1985
US Ambassador-at-Large Richard T. Kennedy urges the South Korean government to cooperate in providing information regarding incidents at Korean nuclear power plants. South Korea's failure to inform the United States about the Wolsong-1 nuclear reactor's heavy water leak in November 1984 prompts the US decision.

May 1985
The chairman of the British Central Electricity Generating Board announces at a press conference that the British are willing to assist South Korea build a nuclear reprocessing plant.

March 1985
The Ministry of Science and Technology announces its plans to build a nuclear fuel fabrication plant by 1988. The ministry predicts the plant to process 200 tons per year of enriched uranium into fuel assemblies for pressurized water reactors.

Early 1985
Under a revised power program, the South Korean government says it will delay the construction of two nuclear power reactors until 1988. The government’s decision to delay is due to South Korea's growing foreign dept and sufficient energy reserves. The original plan was to construct four nuclear power reactors by the end of 1996. South Korea currently has three nuclear power reactors in operation with six more to be completed by 1996.

19 November 1984
Daewoo Corporation announces the discovery of high-grade uranium oxide in its joint venture with the Canadian subsidiary of West Germany's Urangesellschaft (UG) in Canada's Northwest Territories. Daewoo's portion of the uranium will be used to supply South Korea's nuclear power plants.

Related content is available on the website for the Nuclear Threat Initiative, www.nti.org.
November 1984
The Wolsong-1 nuclear power reactor is temporarily shut down due to a leak of approximately 24 tons of radioactive water. Company officials expect to restart the plant by mid-January 1985.

November 1984
The US Nuclear Regulatory Commission (USNRC) expands general licenses to export reactor components to countries including South Korea.

1 October 1984
The French Commissariat a l'Energie Atomique (CEA), Fragema, and the Korea Advanced Energy Research Institute (KAERI) sign an agreement to cooperate in the research and development of PWR fuel rods.

25 September 1984
The Korea Electric Power Corporation (KEPCO) renews a contract with the US Department of Energy for a 30-year supply of enriched nuclear fuel for South Korea’s nuclear power reactors.

8 September 1984
The Wolsong-1 nuclear reactor is loaded with domestically manufactured fuel for the first time.

5 June 1984
The Korea Electric Power Corporation (KEPCO) signs a contract with 10 banks to provide a $35 million loan over the next eight years for the construction of nuclear power plants.

June 1984
The Ministry of Energy and Natural Resources announces South Korea's decision to build a nuclear fuel fabrication plant near the city of Taejon. The plant will be built and operated by the Korea Nuclear Fuel Company (KNFC), and the estimated cost is approximately $75 million. The facility will have the capacity of around 200 metric tons of Uranium per year.

Related content is available on the website for the Nuclear Threat Initiative, www.nti.org.
April 1984
Bechtel Group, Inc. begins internal investigations of allegations that a former employee funneled bribes to the South Korean government to help win contracts to build nuclear power plants in Korea.

17 January 1984
The Ministry of Energy and Resources announces plans to delay construction of two nuclear plants until after 1986. The two 900MW(e) nuclear reactors will be built by the Korea Electric Power Corporation (KEPCO). The plan to delay comes after revisions in the government's energy program from 1984-86 which reduced the increase in energy needed from 7 to 5.2 percent.

25 July 1983
The Kori-2 nuclear power reactor begins commercial operation. Kori-2 is a 650MW(e) PWR.

15 July 1983
The Korea Electric Power Corporation (KEPCO) announces that Korea Heavy Industries and Construction Company (Han'jung) will become its subsidiary company.

Mid-June 1983
South Korea's Minister of Science and Technology announces at the American Nuclear Society meeting in Detroit that South Korea will face a shortage of spent fuel storage by 1992 at the earliest and 1997 at the latest. The minister adds that transporting spent-fuel assemblies from the Kori-1 to Kori-2 plants will temporarily relieve the problem, but after 1997, South Korea will have to construct an offsite storage facility or pursue reprocessing.

22 April 1983
A ceremony is held to mark the completion of construction on the Wolsong-1 nuclear power reactor. Wolsong-1 is a 679MW(e) pressurized heavy water reactor. [Note: Yonhap News Agency cites 14 August 1982 as the date construction was completed.]
May 1983
Daewoo Corporation announces that it will join the Canadian subsidiary of West Germany's Urangessellschaft (UG) to explore for uranium in Canada's Northwest Territories. Korea Electric Power Corporation (KEPCO) will receive Daewoo's portion of the project's uranium.

26 November 1982
Korea Advanced Energy Research Institute (KAERI) establishes the Korea Nuclear Fuel Company (KNFC). KNFC will produce nuclear fuel from imported enriched uranium starting in 1988.

July 1982
Korea Nuclear Engineering Co., Ltd. is renamed "Korea Power Engineering Co., Ltd." or, "KEPCO." [Note: The company was founded in October 1975 as "Korea Atomic Burns & Roe Co. Ltd." In September 1976, Burns & Roe left the joint venture and the firm was renamed "Korea Nuclear Engineering Co., Ltd." In July 1982, the firm is renamed "Korea Power Engineering Co., Ltd." or, "KEPCO."]

17 April 1982
The Korea Advanced Energy Research Institute (KAERI) completes construction of a uranium conversion and uranium ore refining pilot facility. [Note: Nuclear News cites 17 April 1982 as the inauguration date of the two facilities while the Ministry of Commerce, Industry and Energy (MOCIE) and the Korean Atomic Energy Research Institute (KAERI) cite the completion of only the uranium conversion facility.]

April 1982
Korea Electric Power Corporation (KEPCO) announces it will postpone international bidding for South Korea's next two nuclear power plants (10th and 11th units) for one year. KEPCO originally planned to issue bidding invitations this month to select the contractor by the end of the year. According to KEPCO officials, financial strains and reduced electricity requirements are the main reasons for the postponement. This postponement will also delay the bidding for the 12th and 13th nuclear units which was originally scheduled for 1983.

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7 March 1982
The French company Alsthom-Atlantique is awarded the $486 million contract for turbine generators and auxiliary components for South Korea’s 9th and 10th planned nuclear power reactors.

March 1982
Construction begins on the Ulchin-1 and Ulchin-2 nuclear power reactors.

1 January 1982
The Korea Electric Power Corporation (KEPCO) becomes a government-owned corporation.

Early 1982
South Korea and the US Nuclear Regulatory Commission (USNRC) renew their arrangement for the exchange of technical information and for cooperation in regulatory and safety research matters.

29 December 1981
—Korea Atomic Energy Research Institute (KAERI), Technology Center for Nuclear Control (TCNC), Nuclear Control Hand Book 1998 (Korea Atomic Energy Research Institute, 1998), p. 3-4.

22 April 1981
Korea Electric Power Corporation (KEPCO) and France sign a $1.24 billion credit arrangement to finance the construction of South Korea’s 9th and 10th nuclear power plants.

8 April 1981
The South Korean government and France sign an accord on scientific cooperation that requires South Korea to use all nuclear equipment and fuel for peaceful purposes.

April 1981
The French government denies reports that France is considering building uranium enrichment plants in South Korea.

Related content is available on the website for the Nuclear Threat Initiative, www.nti.org.

**3 March 1981**

South Korea and Belgium sign an atomic energy cooperation agreement.


**March 1981**

Six firms participate in the bidding called by Korea Electric Power Corporation and Korea Heavy Industries & Construction Corporation to supply turbine generators for South Korea's 9th and 10th nuclear power plants. Bidders include Westinghouse, and General Electric of the United States, General Electric of Britain, Alsthom Atlantique of France, and BBC of Switzerland, and Mitsubishi of Japan.


**1981**

The Korea Advanced Energy Research Institute (KAERI) begins constructing the Post Irradiation Examination Facility (PIEF). [Note: In February 1973, the Atomic Energy Research Institute and the Radiological Research Institute and the Radiation Research Institute in Agriculture merged, and became the Korea Atomic Energy Research Institute (KAERI). In December 1980, KAERI merged with the Korea Nuclear Fuel Development Institute and become the Korea Advanced Energy Research Institute. However, in December 1989, the Korea Advanced Energy Research Institute is renamed to the Korea Atomic Energy Research Institute (KAERI).]


**9 December 1980**

Construction begins on the Yong'gwang-1 and Yong'gwang-2 nuclear reactors.


**December 1980**

The Korea Atomic Energy Research Institute (KAERI) merges with the Korea Nuclear Fuel Development Institute (KNDFI) and the name is changed to the Korea Advanced Energy Research Institute. [Note: In February 1973, the Atomic Energy Research Institute and the Radiological Research Institute and the Radiation Research Institute in Agriculture merged, and became the Korea Atomic Energy Research Institute (KAERI). In December 1980, KAERI merged with the Korea Nuclear Fuel Development Institute and become the Korea Advanced Energy Research Institute. However, in December 1989, the Korea Advanced Energy Research Institute is renamed to the Korea Atomic Energy Research Institute (KAERI).]


**7 November 1980**

Two French companies, Framatome and Cogema, win a $926 million contract to supply South Korea with two

10 May 1980

19 March 1980

20 February 1980
South Korea signs an agreement with US Export-Import Bank for $1.1 billion in reduced-interest loans to build two nuclear power plants in Kyema-ri, Hongnong-up, Yong’gwang-kun, South Cholla Province, South Korea. —"South Korea Gets $1.1 Billion US Loan to Build Nuclear Plants," Associated Press, 20 February 1980, in Lexis-Nexis, web.lexis-nexis.com.

Early 1980s

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1979-1950

18 December 1979
The Korea Electric Power Corporation (KEPCO) signs an agreement with Bechtel to receive for construction technology for the Yŏnggwang-1 and Yŏnggwang-2 nuclear power reactors. [Note: KEPCO sources cite 19 December 1979 as the date the agreement was signed.]

26 October 1979
President Park Chung Hee is assassinated by the director of the Korean Central Intelligence Agency (KCIA).

2 May 1979
The South Korean government concludes an agreement with Australia to supply uranium for South Korea's nuclear power plants.

12 April 1979
The construction offices for the Yŏnggwang-1 and Yŏnggwang-2 nuclear power reactors open.
—Korea Hydro & Nuclear Power (KHNP), "Han'guk Suryŏg'wŏnjaryŏk (Chu) Yŏnggwang'wŏnjaryŏk Ponbu," www.khnp.co.kr.

11 April 1979
The South Korean government announces its decision to launch uranium exploration and processing projects in joint venture with Gabon and Paraguay in a bid to secure enough uranium supply for its local nuclear power plants.

9 April 1979
Construction for the Kori-3 and Kori-4 nuclear power reactors begins.

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April 1979
The Nuclear Regulatory Bureau is established under the Ministry of Science and Technology.

3 December 1978
A planeload of US troops from the 2nd Battalion of the 2nd Division's 9th Regiment leaves South Korea as part of President Carter's plan to withdraw all US ground troops from South Korea over the next four-five years. South Korean President Park Chung Hee opposes the plan to have US ground troops withdrawn.

7 November 1978
The United States and South Korea establish a new combined forces command in the UN command compound to prevent a possible North Korean attack. The new command will plan for South Korea's defense in peacetime and, if a war breaks out, will direct combat operations. The decision to establish the command was made last year when discussions were held over compensation for pulling out US ground troops in South Korea.

16 October 1978
The Korea Advanced Energy Research Institute (KAERI) completes the nuclear fuel fabrication processing complex at the Taedŏk Science Town in the City of Taejŏn.

September 1978
According to Kang Chang Sung, head of the Defense Security Agency, President Park Chung Hee says South Korea has completed 95 percent of the tasks to build an atomic bomb. [Note: Reports of South Korea's secret nuclear weapon development program are not disclosed to the public until the 1990s. According to former government officials under former President Park Chung Hee, South Korea's first atomic bomb was to be completed by early 1981. This information is confirmed by the former head of the Defense Security Agency who says that the Agency for Defense Development told him in 1979, that the first bomb would be finished by 1981.]

8 July 1977
South Korean officials announce that US Under Secretary of State Philip C. Habib will visit Seoul on 10 July. South Korean sources do not provide specific reasons for the visit, but other reports claim that Habib will discuss the withdrawal of US ground troops and South Korea's intention of developing nuclear weapons. South Korean officials have said that the development of nuclear weapons would be "inevitable" if its security is threatened by North Korea.

30 June 1977
South Korea's Foreign Minister Park Tong Jin makes a comment on the possibility of South Korea developing

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nuclear weapons. According to Park, although South Korea is a member of the Nuclear Non-Proliferation Treaty, it will make an "independent" decision if its security is threatened. Park makes this comment during a National Assembly meeting to discuss the withdrawal of 33,000 US ground troops from South Korea.


June 1977
President Park Chung Hee establishes the Enlarged Conference for Promotion of the Arms Industry, which consists of high-level cabinet and defense officials and industry leaders. The creation of this body is part of President Park's plans to make South Korea self-reliant and less dependent on the United States for defense. According to President Park, South Korea will be manufacturing all its own arms except nuclear weapons, advanced electronic gear, and combat aircraft by the end of 1980. This new plan coincides with the US plans to gradually withdraw troops from South Korea and limit arms exports.


May 1977
Construction for the Wŏlsŏng-1 Power Plant begins. [Note: Sources have conflicting dates. The Ministry of Science and Technology (MOST) cites May 1977, whereas the Korea Hydro & Nuclear Power Company (KHNP) cites June 1975.]


29 April 1977
The Kori-1 nuclear power plant begins commercial operation. The Kori-1 is a 587MWe PWR.


3 April 1977
Excavation for the construction of the Wŏlsŏng-1 power plant begins.


1 March 1977
Construction for the Kori-2 nuclear power plant begins.


29 January 1977
President Park Chung Hee announces at an annual inspection of the Defense Ministry that South Korea "will not go nuclear."


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10 December 1976
The South Korean and Spanish governments sign an agreement on atomic energy cooperation.

December 1976
The Korean Nuclear Fuel Development Institute (KNFDI) is established.

September 1976
Korea Atomic Burns & Roe Co. Ltd., is renamed Korea Nuclear Engineering Co., Ltd. after Burns & Roe leave the joint venture. [Note: The company was founded in October 1975 as "Korea Atomic Burns & Roe Co. Ltd. In July 1982, the firm is renamed "Korea Power Engineering Co., Ltd." or, "KEPCO." ]

18 August 1976
North Korean soldiers use axes to kill two US Army officers in the Joint Security Area at P'anmunjŏm. The confrontation between a United Nations Command (UNC) work crew and North Korean soldiers takes place as the crew is beginning to trim a tree that was blocking the view of a guard post. The tree-cutting operation is completed three days later after UNC forces go on full alert and the two sides go to the brink of war.

12 February 1976
The South Korean government signs subsidiary arrangements to the agreement with International Atomic Energy Agency for the Application of Safeguards in Connection with the Treaty on the Non-Proliferation of Nuclear Weapons (INFCRIR/153).

29 January 1976
The South Korean government cancels plans to purchase a nuclear reprocessing plant from France due to concern from the United States that it would raise suspicion that South Korea is developing nuclear arms. In addition, the United States warned that it would withhold the export license, and financing of the $292 million Westinghouse atomic power reactor program.

26 January 1976
South Korea and Canada sign an agreement on the peaceful use of nuclear technology that includes a provision for Seoul to purchase a Candu reactor similar to one used by India in building a nuclear explosive device. The agreement notes that Canada will not supply Korea with materials that might be used to develop and detonate nuclear weapons.

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nuclear devices.

31 October 1975
The South Korean government signs an agreement with the International Atomic Energy Agency for the Application of Safeguards in Connection with the Treaty on the Non-proliferation of Nuclear Weapons (INFCRIR/153). This agreement enters into force on 14 November 1975.

21 October 1975
The Wŏlsŏng-1 nuclear power plant's construction office opens.

October 1975
Korea Atomic Burns & Roe Co. Ltd., is established. [Note: Burns & Roe later leave the joint venture and the firm is renamed "Korea Nuclear Engineering Co., Ltd." in September 1976. In July 1982, the firm is renamed "Korea Power Engineering Co., Ltd." or, "KEPCO."]

26 June 1975
During an interview with the Washington Post, President Park Chung Hee denies reports from a Newsweek article reporting that he ordered South Korea's Defense Development Agency to study the development of nuclear weapons. However, Park tells the Washington Post that South Korea will do everything necessary, including developing nuclear weapons to defend itself if the United States withdraw its nuclear umbrella.

June 1975
President Park Chung Hee says that if US military support weakens, South Korea will have to develop nuclear weapons. In addition, Park announces that South Korea has "the capacity to do it."

28 May 1975
Korea makes an agreement with Canada to borrow $300 million towards the purchase of a $576.5 million Canadian nuclear power generating plant.

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12 April 1975
The Korea Advanced Energy Research Institute (KAERI) concludes a treaty with the French nuclear engineering company, SGN, to import nuclear fuel cycle-related technology. SGN agrees to provide information on research, supplies, and service equipment.

20 March 1975
The South Korean National Assembly ratifies the Nuclear Non-Proliferation Treaty (NPT).

19 October 1974
South Korea and France sign an agreement on the cooperation of peaceful uses of atomic energy.

24 May 1973
The Korea Atomic Industrial Forum (KAIF) exchanges a cooperation memorandum with the Japan Atomic Industrial Forum (JAIF).

12 October 1972
The Korea Atomic Industrial Forum (原子力産業議会; KAIF), a private and non-profit organization is established. KAIF is dedicated to the promotion of peaceful uses of nuclear energy in Korea. Also, KAIF is devoted to create a link between and among the organizations having an interest in the nuclear industry and establish a joint approach to the development of nuclear industry.

4 July 1972
North and South Korea sign a joint communiqué that declares three principles for Korean unification: 1) unification shall be achieved independently, without depending on foreign powers and without foreign interference; 2) unification shall be achieved through peaceful means, without resorting to the use of force against each other; and 3) a great racial unity as one people shall be sought first, transcending differences in ideas, ideologies, and systems. The communiqué also provides for the establishment of a direct telephone line between Seoul and Pyongyang to prevent the inadvertent outbreak of military conflict. [Note: Following the signing of the joint communiqué, both Kim Il Sung and Park Chung Hee are able to push through constitutional revisions that concentrate power in the executive.]

10 May 1972
Construction of the 2000kw TRIGA (Training, Research, Isotope, General Atomics) Mark III research reactor is completed.

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15 November 1971
Westinghouse begins construction of the first nuclear power plant, Kori-1.

12 July 1971
The United States and South Korea release a joint statement of "continued determination to maintain strong forces capable of deterring aggression" after a two-day consultative meeting on security. In addition, South Korean President Park Chung Hee requests additional and continuing support from the United States to help South Korea increase its own defense capabilities over the next five years.

August 1970
The Agency for Defense Development (ADD) is established. The ADD is responsible for research and development of advanced weapons systems, including nuclear weapons. [Note: The agency is established by Presidential Decree 5267.]

8 July 1970
The US State Department announces that it has officially informed the South Korean government of the US plan to gradually withdraw US troops starting in July 1971. The decision to slowly decrease US troops in South Korea is part of the Nixon Doctrine to reduce American presence overseas. The United States hopes to leave about 5,000 military personnel in South Korea and is considering providing $1 billion of additional military aid over the next five years. According to South Korean officials, this is the first time the United States has revealed its intentions to withdrawal troops.

23 June 1970
South Korean President Park Chung Hee says the presence of US troops is "absolutely necessary" until South Korea develops its own capabilities to defend itself from North Korean aggression. President Park's remarks are a response to the United States's reported plans under the Nixon Doctrine to withdraw US troops from South Korea starting in July 1971.

23 June 1970

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Late 1960's
The Park Chung Hee government establishes the Weapons Exploitation Committee (WEC). The WEC is responsible for managing the international search for advanced weapons systems which include nuclear weapons and related equipment. In addition, the WEC is responsible for obtaining highly enriched uranium (HEU) and working with the Korean Central Intelligence Agency (KCIA) to negotiate purchases of advanced weapons technologies and equipment with foreign governments and companies.

Late 1969
The Park Chung Hee government begins contemplating the possibility of developing nuclear weapons through both an indigenous program and by purchases through the international nuclear weapons market.

10 September 1969
South Korea obtains a $98,600,000 loan from the Export-Import Bank of United States for the construction of nuclear power plants.

12 April 1969
South Korea holds the ceremony of laying the cornerstone for a 2000kw TRIGA (Training, Research, Isotope, General Atomics) Mark III research reactor.

8 March 1969
The Korea Nuclear Society (韓國原子力學會) is established.

31 January 1969
The South Korean government signs a turnkey contract with Westinghouse for the construction of a nuclear reactor.

1 July 1968
South Korea signs the Nuclear Non-Proliferation Treaty. [Note: The National Assembly ratifies the treaty on 20 March 1975.]
9 June 1968
A US Atomic Energy Commission delegation, led by Commissioner Gerald F. Tape, arrives in South Korea to discuss the introduction of nuclear power reactors into South Korea.

3 June 1968
The South Korean government establishes the Atomic Energy Development Advisory Committee (原子力發展諮問委員會).

June 1968

April 1968
The Atomic Energy Development Committee decides to delegate the construction and operations of nuclear power plants to three agencies. The Economic Planning Board is placed in charge of managing nuclear energy development plans and negotiations to obtain foreign loans. The Office of Atomic Energy (OAE), with the assistance of the Korea Electric Power Corporation (KEPCO), is placed in charge of researching the practicality of implementing plans. The OAE is also given the responsibility for nuclear power technology R&D, the administration of nuclear power plant safety, the training of nuclear scientists and engineers, the control and use of nuclear fuel, and the provision of compensation in the case of accidents. KEPCO is given the responsibility of building nuclear power plants, concluding contracts for foreign debt related to reactor construction, and the operation of plants.

February 1968
South Korea establishes the Atomic Energy Development Promoting Committee (原子力開發展興委員會) with the deputy prime minister and economic planning minister as chairman. [Note: The economic planning minister also serves a deputy prime minister.] The committee later decides to construct two 500MW nuclear power reactors by the mid-1970s, and to hold international bids on the construction of light water reactors, heavy water reactors, advanced gas-cooled reactors, and high temperature gas-cooled reactors.

21 January 1968
Thirty-one North Korean commandos secretly cross the Demilitarized Zone (DMZ) on a mission to assassinate South Korean President Park Chung Hee. The commandos approach within about 800 meters of the presidential residence in Seoul, but fail to assassinate Park. All but one of the commandos is eventually killed or commits
suicide. Thirty-one South Koreans die in the fire fights, and 44 are wounded. North Korea later denies it is responsible for the attack, claiming the perpetrators are South Korean citizens rising up against the government.


June 1967
South Korea asks the IAEA to discuss and provide advice on site construction and on the financing of a nuclear power plant.


Mid-1967
The total number of US nuclear weapons deployed in the Pacific theater peaks at about 3,200 weapons, with about 2,600 of them in South Korea and Okinawa.


30 March 1967
The South Korean government transfers administrative functions of the Office of Atomic Energy (OAE) to the Atomic Energy Agency (原子力廳) established under the Ministry of Science and Technology (MOST). [Note: In 1973, "Atomic Energy Agency" was changed to a "bureau" (局).]


February 1967
The Nuclear Advisory Committee forms the Nuclear Power Plant Planning Committee to begin research on the possibility of developing a 200MW nuclear power plant by the mid-1970s.


1966-1968
South Korea sends engineers to advanced countries to learn about the construction and operations of nuclear power plants.


1965
The South Korean government establishes the Nuclear Advisory Committee. The committee is established under the director of the Office of Atomic Energy, and has about 20 members from the Atomic Energy Research Institute, the Korea Electric Power Corporation (KEPCO), the Ministry of Commerce and Industry, the Ministry of Construction, the Korean Coal Corporation, and scholars.


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1964
IAEA officials make their second visit to South Korea to assist with an evaluation of prospective construction sites for a nuclear reactor.

12 October 1963
The Atomic Energy Research Institute completes the construction of a nuclear waste disposal plant. [Note: In February 1973, the Atomic Energy Research Institute, the Radiological Research Institute, and the Radiation Research Institute in Agriculture merged to become the Korea Atomic Energy Research Institute. In December 1980, KAERI merged with the Korea Nuclear Fuel Development Institute and became the Korea Advanced Energy Research Institute. However, in December 1989, the Korea Advanced Energy Research Institute was renamed as the Korea Atomic Energy Research Institute (KAERI).]

October 1963
IAEA inspectors pay their first visit to South Korea.

30 June 1963
The South Korean and US governments sign an agreement for Seoul to borrow special nuclear materials from Washington.

30 March 1962
Operation of the 100kw TRIGA (Training, Research, Isotope, General Atomic) Mark II research reactor begins.

1962
The South Korean government completes the Atomic Energy Development Promotion Plan. The Office of Atomic Energy, the Ministry of Commerce, and the Korean Coal Corporation and other government agencies provide input to draft the plan. The plan proposes that South Korea acquire a 150MW nuclear power plant by 1971.

1 July 1961
The Korea Electric Power Corporation (KEPCO) is founded with the merger of Chosŏn Electric Industries, Kyŏngsŏng Electric and Namsŏn Electric.

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5 November 1960
South Korea completes construction of a nuclear reactor building for the 100kw TRIGA (Training, Research, Isotope, General Atomics) Mark II research reactor.

1959
The South Korean government establishes the Office of Atomic Energy (原子力廳) under the office of the president. The OAE consists of an Administrative Bureau, the Atomic Energy Committee, and the Atomic Energy Research Institute. The atomic energy committee consists of five members, including the chairman and vice chairman. The Minister of Education is named the chairman of the Atomic Energy Committee, but nuclear scientists manage the basic committee affairs. Pak Ch’ŏl Chae is named the director of the Atomic Energy Research Institute. [Note: In February 1973, the Atomic Energy Research Institute, the Radiological Research Institute, and the Radiation Research Institute in Agriculture merged to become the Korea Atomic Energy Research Institute. In December 1980, KAERI merged with the Korea Nuclear Fuel Development Institute and became the Korea Advanced Energy Research Institute. However, in December 1989, the Korea Advanced Energy Research Institute was renamed as the Korea Atomic Energy Research Institute (KAERI).]

1959
An IAEA delegation visits South Korea to assess the need for technical assistance.

1959
The US Air Force deploys a squadron of Matador ground-launched cruise missiles in South Korea. The missiles are capable of delivering nuclear warheads and have a range of 1,100km.
—Bruce Cumings, Korea’s Place in the Sun (New York: W.W. Norton & Company, 1997), p. 479.

14 July 1959
South Korean President Rhee Syngman attends a groundbreaking ceremony for construction of the TRIGA (Training, Research, Isotope, General Atomics) Mark II research reactor.

1 March 1959
The South Korean government establishes the Atomic Energy Research Institute under the Atomic Energy Academy.

21 January 1959
The South Korean government officially opens the Atomic Energy Academy. The academy is directly under the

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President's Office, and is placed in charge of research and development, production, utilization, and control of nuclear energy in South Korea. The academy consists of an Administrative Bureau, the Atomic Energy Committee, and the Atomic Energy Research Institute. Kim Pŏp Rin is named the first president of the academy.

3 December 1958
South Korea concludes a contract with General Dynamics and General Atomics to procure a 100kw TRIGA (Training, Research, Isotope, General Atomics) Mark II research reactor.

1 October 1958
The South Korean government announces the creation of the Atomic Energy Academy (原子力院).[Note: The academy was established by Presidential Decree 394.]

11 March 1958
South Korea's Atomic Energy Act is enacted. [Note: The National Assembly passed the legislation on 22 February 1958.]

1958
South Korea begins negotiations with the United States to acquire a research reactor.

1958
By 1958, South Korea has sent nuclear specialists abroad for training a total of 89 times.

1958
South Korean representatives participate in another International Conference on the Peaceful Use of Atomic Energy in Geneva.

Early 1958
The United States deploys nuclear weapons in South Korea for the first time. The weapons are in the form of "atomic artillery, Honest John rockets, bombs, and atomic demolition munitions."
January 1958
The United States deploys 280mm nuclear artillery and Honest John nuclear rockets to South Korea.

24 December 1957
President Dwight Eisenhower issues the order to deploy 280mm nuclear artillery and Honest John nuclear rockets to South Korea.

August 1957
The Eisenhower administration approves NSC 5702/2, which includes a provision for the deployment of nuclear weapons in South Korea.

April 1956
Two South Korean researchers in the field of nuclear energy visit the Argonne National Laboratory in the United States for the first time to receive training in the development of nuclear energy.

March 1956
The Atomic Energy Department is established in the South Korean Ministry of Education. Pak Ch’ŏl Chae, the head of the Technology Education Bureau in the Ministry of Education, plays an important role in drafting South Korea’s first atomic energy development plan.

3 February 1956
The United States and South Korea conclude a cooperative agreement for the peaceful use of nuclear energy. The agreement is signed in Washington, DC by US Assistant Secretary of State Robertson, US Atomic Energy Committee Chairman Straus, and South Korean Ambassador Yang Yu Ch’ŏn.

1 July 1955
South Korea and the United States reach a preliminary agreement on the peaceful use of nuclear energy.

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1955
South Korean representatives participate in the International Conference on the Peaceful Use of Atomic Energy in Geneva.

8 December 1953
President Eisenhower delivers his "Atoms for Peace" address before the UN General Assembly. There are four main points under Eisenhower’s proposal: 1) the exchange of nuclear information with the United States; 2) the transfer of resources, such as fuel; 3) the transfer of nuclear reactors; and 4) the development of a system of cooperation under the IAEA.

27 July 1953
The Korean War Armistice is signed, but South Korean President Rhee Syngman refuses to sign the document. Some people believe that President Eisenhower’s implicit threats to use nuclear weapons result in the armistice. North Korea later accuses the Eisenhower administration of developing "22 plots to use atomic weapons against North Korea and other socialist countries."

Mid-1952
The Joint Chiefs of Staff asks President Truman to authorize the deployment of "non-nuclear components to forward areas" in Pacific theater bases under US control (Alaska, Guam, Hawaii, and Okinawa) in case the security situation worsened in East Asia.

Late June 1951
B-29 bombers deployed to Guam return to the US mainland with their nuclear weapons.

7 April 1951
The 99th Medium Bomb Wing at Travis Air Force Base in California receives its orders to deliver atomic bombs to

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Guam.

6 April 1951
President Truman orders the transfer of "nuclear capsules" or "pits" to Guam following a major Chinese military offensive in Korea.

24 December 1950
General Douglas MacArthur sends a list of targets to the Pentagon and asks for 34 atomic bombs to create "a belt of radioactive cobalt across the neck of Manchuria so that there could be no land invasion of Korea from the north for at least 60 years."

30 November 1950
During a press conference, President Truman is asked if the United States would consider using the atomic bomb in Korea, and he replies, "There has always been active consideration of its use. I don't want to see it used. It is a terrible weapon, and it should not be used on innocent men, women and children who have nothing to do with this military aggression—that happens when it's used." The statement is very controversial, and draws strong international criticism, even from US allies.

17 July 1950
General Douglas MacArthur tells US Army Department officials in Tokyo about his plan for an amphibious invasion behind enemy lines and to "destroy North Korea." MacArthur also says he sees "a unique use of the atomic bomb—to strike a blocking blow" in case China entered the war.

25 June 1950
The Korean People's Army crosses the 38th parallel to start the Korean War.

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12 January 1950
Secretary of State Dean Acheson delivers a speech before the National Press Club in Washington, DC, and says that South Korea is outside the US defense perimeter in East Asia. Many people have interpreted the speech as a signal that the United States would not intervene in the case of a southward invasion on the Korean peninsula, and thus a "green light" to Kim Il Sung to launch the Korean War.

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