15 NEWLY-INDEPENDENT STATES

ARMENIA

ARMENIA WITH IAEA

9/93

An IAEA inspection team concludes that, on the whole, Armenia's nuclear power plant is no more dangerous than others like it in Eastern Europe, and warrants IAEA assistance with its reopening. Armenian ecologists object to the reconstruction of the plant.
Segodnya (Moscow), 9/93, p. 1 ***(10340)****. Snark (Yerevan), 9/17/93; in JPRS-TND-93-025, 10/25/93, p. 39* ***(10367)****.*

10/93

The Armenian Foreign Department declares that Armenia has become "a full member of the IAEA."
Snark (Yerevan), 10/5/93; in FBIS-SOV-93-192, 10/6/93, p. 24 ***(10373)****.*

11/93

The Armenian government establishes the Petatom Inspection Directorate, which will work to ensure the safety of atomic power production and the implementation of IAEA safeguards.
Radio First Program Network (Yerevan), 11/4/93; in FBIS-SOV-93-213, 11/5/93, p. 76 ***(10364)****.*

12/93

IAEA Director General Hans Blix promises to request aid from the European Bank (EBRD) in reequipping the Armenian nuclear power plant. Armenian plant director S. Azatyan states that the station will be able to resume operations in 12/94.
Mayak Radio Network (Moscow), 12/14/93; in FBIS-SOV-93-239, 12/15/93, p. 97 ***(10363)****. Ostankino Television (Moscow), 12/18/93; in FBIS-SOV-93-243, 12/21/93, p. 64* ***(10656)****.*

BELARUS

INTERNAL DEVELOPMENTS

1/94

A group of Belarusian research institutes, which are studying proposals for a nuclear power plant construction program, will consider a final proposal in 3/94. The Russian VVER-440 PWR model is not being considered.
ENS NucNet, 1/25/94 ***(10365)****.*

1/94

Aleksandr Grebenkov, who heads the laboratory section of the Institute of Energy Problems at the Belarusian Academy of Sciences, states that burial sites will have to be created for the nuclear waste which will be produced by Belarus' new power plants. Several places are being considered, with one confirmed site in Homel Oblast, near Khatki. According to Grebenkov, Belarus' disposal sites were well equipped to handle radwaste until the Chernobyl accident, the clean-up of which filled the Belarusian sites to capacity.
Yevgeniy Rostikov, Respublika (Minsk), 12/18/93, p. 11; in JPRS-TND-94-003, 1/31/94, p. 25 ***(10419)****.*

BELARUS WITH CANADA

9/93

Belarusian Minister of Power Valentin Gerasimov announces that, because Belarus needs a nuclear power plant as a source of clean energy, his country is discussing with Canada the possible construction of a nuclear reactor using natural uranium and heavy water. The Belarusian government is interested in vendors who can supply an affordable, turnkey plant to be in operation by 2005. Fifteen sites are currently being considered for the plant, which would have a generating capacity of 500 to 1,000 MW.
Nuclear Engineering International, 11/93, p. 8 ***(10426)****.*

BELARUS WITH JAPAN

11/93

Japan and Belarus sign a preliminary agreement to dismantle strategic nuclear missiles in a $100 million Japanese-funded program. Japan will destroy the missiles and propellant, and Belarus will dismantle the warheads.
Defense News, 11/15/93, p. 4 ***(10370)****.*

BELARUS WITH RUSSIA

11/93

Russia and Belarus begin negotiations on establishing a nuclear attack early warning station in Belarus, for which the incomplete "Baranovichi junction" station may be finished and maintained by Russia.
ITAR-TASS (Moscow), 11/18/93; in FBIS-SOV-93-221, 11/18/93, p. 5 ***(10422)****.*

The number listed in parentheses following the bibliographic references refers to the identification number of the document in the Emerging Nuclear Suppliers Project Database, from which the news summaries were abstracted. Events listed in this issue of The Nonproliferation Review are abstracted from documents published between September 1993 and January 1994. Because of the rapidly changing nature of the subject matter, we are unable to guarantee that the information reported herein is complete or accurate, and we disclaim liability to any party for any loss or damage caused by errors or omissions.

Belarus with Russia and United States

1/94

An advisor to Belarusian Parliamentary Chair Stanislav Shushkevich states that Belarus will seek $500 million from the proceeds of the Russian sale of uranium retrieved from dismantled tactical nuclear weapon warheads returned to Russia from Belarus. The U.S. supports Belarus' claim. Russia has agreed to compensate Belarus for returned tactical nuclear weapons and ICBM warheads now in the process of being returned to Russia.

Reuter, 1/17/94 ***(10362)****. RFE/RL News Briefs, 1/10/94, p. 2* ***(10361)****.*

Belarus with United States

11/93

It is reported that Belarus formally joined the NPT as a non-nuclear weapon state on 7/22/93, when it presented its instruments of ratification to U.S. President Bill Clinton in Washington, D.C. As a result of this and of Belarus' ratification of START-1, Belarus received $65 million dollars from the U.S. to aid disarmament.

Foreign Policy Bulletin, 11/93, p. 58 ***(10369)****.*

ESTONIA

Internal Developments

1/94

Estonia begins writing nuclear liability laws which will absolve companies performing safety improvements at Lithuania's Ignalina nuclear power plant from liability in case of an accident. Many western companies have been reluctant to perform such work in the absence of such laws.

Ariane Sains and Ann MacLachlan, Nucleonics Week, 1/20/94, p. 7 ***(10652)****.*

Estonia with Multi-Country Group

1/94

An international meeting is held to discuss the technical problems of dismantling the nuclear reactors at Paldiski, the former Soviet submarine training base in Estonia. Participants include Russia, Sweden, the E.C., Finland, the IAEA, Germany, and the U.S., with the latter four iterating their support for the dismantlement. Russia and Estonia are said to be "close to concluding an agreement" on the base. Once the nuclear fuel is removed, Finnish and Swedish specialists will aid Estonia in the dismantlement of the reactors.

ETA News Release (Tallinn), 1/26/94; in FBIS-SOV-94-018, 1/27/94, p. 1. Mayak Radio Network (Moscow), 2/19/94; in FBIS-SOV-94-035, 2/22/94, p. 55 ***(10330)****. BNS (Tallinn), 1/5/94; in FBIS-SOV-94-004, 1/6/94, p. 69* ***(10642)****.*

Estonia with Russia

1/94

An advisor to the Estonian Foreign Ministry states that Russia has agreed to remove all nuclear fuel from Paldiski by 6/30/94, and is already shipping equipment needed to dismantle Russian nuclear installations in Estonia. However, Estonian Environment Minister Andres Tarand later states that the removal of nuclear fuel will begin in 3/94 or 4/94, and will take approximately four months. This schedule is confirmed by Russian naval representatives. Colonel Raul Luks is appointed commandant for the Paldiski and Pakri regions to aid in the dismantlement and in the withdrawal of Russian troops.

ETA News Release (Tallinn), 1/3/94; in FBIS-SOV-94-002, 1/4/94, p. 52 ***(10643)****. BNS (Tallinn), 1/5/94; in FBIS-SOV-94-004, 1/6/94, p. 69* ***(10642)****. Radio Tallinn Network, 1/7/94; in FBIS-SOV-94-006, 1/10/94, p. 89* ***(10374)****.*

GEORGIA

Internal Developments

9/93

The Itar-Tass news agency reports that Goergian president Eduard Shevardnadze is evacuated to a military facility in Gaulripshi, on the Black Sea coast, that has been used to store radioactive waste since the 1950s. A Georgian government source describes the base as safe against enemy attack, because "the Abkhazians know full well that if one bomb hits the headquarters it will cause a nuclear catastrophe worse than Chernobyl."

Reuter, 9/27/93; in Executive News Service, 9/29/93 ***(10356)****.*

Georgia with Turkey

1/94

Turkish police arrest three Georgians who were carrying 4.5 kg of uranium apparently for the production of nuclear weapons. The source of the uranium is uncertain. The smugglers were asking $150,000 per kg.

Anatolia (Ankara), 11/27/93; in JPRS-TND-94-001, 1/6/94, p. 33 ***(10645)****.*

KAZAKHSTAN

Internal Developments

11/93

A radioactive source, emitting over 200 roentgen per hour, is discovered buried under "a thin layer of road-metal" on the grounds of a "metal and concrete constructions" plant in Aktyubinsk, Kazakhstan. The source material and how it came to be buried there is unknown.

ITAR-TASS (Moscow), 11/4/93; in FBIS-SOV-93-213, 11/5/93, p. 68 ***(10657)****.*

11/93

Nuclear weapon experts are examining the options for removing a small nuclear device which was supposed to be detonated in a test explosion at Semipalatinsk in 1989. The device was left buried in an underground shaft after Kazakh President Nursultan Nazarbayev declared an end to nuclear testing. As soon as an additional access shaft has been sunk, specialists from Kazakhstan and Russia will determine the device's condition and decide which of the proposed methods of destruction will be used.

Fedor Ignatov, ITAR-TASS (Moscow), 11/4/93; in JPRS-TND-93-036, 11/17/93, p. 27 ***(10658)***.

Kazakhstan with European Community

9/93

Some of the low-enriched uranium fuel pellets found to have been illegally exported to Western Europe are traced to two fuel fabrication facilities in the former Soviet Union: Elektrostal near Moscow, and Ulbinski Chemical Combine in Ust-Kamenogorsk, Kazakhstan. Minatom has not revealed the details of these thefts. Reports claim that several metric tons of UO2 were stolen from the two facilities. There are also concerns that plutonium may have been stolen from a pilot mixed-oxide (MOX) fuel fabrication facility.

Mark Hibbs, Nuclear Fuel, 9/13/93, pp. 3-5 ***(9643)***.

Kazakhstan with IAEA

9/27/93

Kazakhstan applies for membership in the IAEA.

Steve Pagani, Reuter, 9/27/93; in Executive News Service, 9/29/93 ***(10164)***.

Kazakhstan with Kyrgyzstan

11/93

Uranium Institute senior researcher Robin Bhar reports that the Kara Balta uranium mill in Kyrgyzstan is still operating. The mill is currently working at one-third of its 3,600 ton capacity, processing uranium slurries from in situ leaching mines in Kazakhstan. The mill is undergoing reconstruction, which will reduce uranium production capacity by 50% to 1,800 MTU/year. Kara Balta has a contract with the Kazakh National Joint Stock Company of Atomic Power Engineering and Industry (Katep) which will remain in effect for the next several years. Kyrgyzstan's 1993 request for uranium export quotas from the U.S. Department of Commerce indicates that it has uranium stored or intends to reopen its mines. The U.S. Department of Commerce replied to the request with an offer starting at 188,000 lbs. of U308 per year.

Uranium Institute Briefing, No. 93/7, 11/93. Pearl Marshall, Nuclear Fuel, 11/22/93, p. 6 ***(10633)***.

Kazakhstan with Lithuania

10/93

Kazakhstan offers to provide nuclear fuel in exchange for use of Lithuania's oil-refining facilities after Russia announces the cancellation of its contract to supply Lithuania with nuclear fuel.

Nucleonics Week, 10/7/93, p. 4 ***(10640)***.

Kazakhstan with PRC

8/30/93

Kazakh President Nursultan Nazarbayev says that there is "a vast field for cooperation" between his country and China in cleaning up the effects of nuclear explosions at China's Lop-Nur test site. China dismisses the need for clean-up, asserting that the test site is downwind of Kazakhstan, and therefore poses no threat to the country.

Reuter, 8/30/93; in Executive News Service, 9/1/93 ***(10298)***. *Reuter, 9/2/93* ***(9997)***.

Kazakhstan with Russia

1/94

The Russian Defense Ministry denies a 12/27/93 ITAR-TASS report that said Lieutenant Yuri Konovalenko, Commander of the Semipalatinsk test site, had been removed from his post after being accused of "embezzlement and resale of especially valuable equipment and nonferrous metals." The Ministry points out that Kazakhstan has no jurisdiction over Russian military personnel, and states that Konovalenko is "currently on leave."

Krasnaya Zvezda (Moscow), 12/31/93, p. 3; in FBIS-SOV-94-001, p. 40. Izvestiya (Moscow), 12/28/93, p. 1; in FBIS-SOV-94-001, p. 31 ***(10647)***.

1/94

Kazakh Ambassador to Iran Myrzadai Zholdasbekov states that Kazakhstan has no plans to return any nuclear weapons to Russia until it receives a guarantee that the weapons would not be used. Russian First Deputy Foreign Minister Anatoliy Adamishin states that he has received no such information from Kazakh officials. Kazakh President Nursultan Nazarbayev states the next day that his country still intends to disarm and abide by all its international commitments.

ITAR-TASS (Moscow), 1/28/94; in FBIS-SOV-94-019, 1/28/94, p. 45. Interfax (Moscow), 1/28/94; in FBIS-SOV-94-020, 1/31/94, p. 21. Reuter, 1/29/94; in Executive News Service, 1/31/94 ***(10655)***.

Kazakhstan with United States

11/93

Petitioners in the anti-dumping case against former Soviet uranium exporters ask the U.S. Department of Commerce (DOC) to review its suspension agreements with Russia, Kazakhstan, Kyrgyzstan and Uzbekistan and resume anti-dumping investigations, in the hope that this will result in anti-dumping duties being levied against the former Soviet republics. Uranium from these republics is now entering the U.S. under a grandfather clause in the suspension agreements. On 11/17/93, DOC announces that it is beginning a review of the agreements with these countries, and will complete the review by 10/31/94. DOC says that, at this time, it has no evidence that these countries have violated any of the agreements.

Michael Knapik and Wilson Dizzard III, Nuclear Fuel, 11/8/93, pp. 1-4 ***(10472)***.

12/13/93

The U.S. and Kazakhstan sign a $1 billion agreement for the U.S. to purchase the uranium extracted from nuclear weapons deployed on Kazakh soil.

Anatoliy Martsynovskyy, Molod Ukrayiny (Kiev), 1/6/94, pp. 1, 3; in JPRS-TND-94-003, 1/31/94, pp. 33-34.

KYRGYZSTAN

Internal Developments

10/93

The Kyrgyz State Committee for Defense announces its support for the establishment of a nationwide nuclear-free zone.

ITAR-TASS (Moscow), 9/29/93; in JPRS-TND-93-031, 10/8/93, p. 31 ***(10490)****.*

Kyrgyzstan with European Community

12/93

Kyrgyzstan reports its uranium sales to the U.S. Department of Commerce, including a sale of 572,572 pounds of U308 to a "European entity" in 7/93. Unconfirmed reports state that Kyrgyzstan may have shipped as much as 2.5 million pounds of uranium through Nukem, Inc. to a utility in Sweden.

Michael Knapik, Nuclear Fuel, 12/6/93, p. 2 ***(10632)****.*

Kyrgyzstan with Kazakhstan

11/93

Uranium Institute senior researcher Robin Bhar reports that the Kara Balta uranium mill in Kyrgyzstan is still operating. The mill is currently working at one-third of its 3,600 ton capacity processing uranium slurries from in situ leaching mines in Kazakhstan. The mill is currently undergoing reconstruction, which will reduce uranium production capacity by 50% to 1,800 MTU/year. Kara Balta has a contract with the Kazakh National Joint Stock Company of Atomic Power Engineering and Industry (Katep) which will remain in effect for the next several years. Kyrgyzstan's 1993 request for uranium export quotas from the U.S. Department of Commerce indicates that it has uranium stored or intends to reopen its mines. The U.S. Department of Commerce replied to the request with an offer starting at 188,000 lbs. of U308 per year.

Uranium Institute Briefing, No. 93/7, 11/93. Pearl Marshall, Nuclear Fuel, 11/22/93, p. 6 ***(10633)****.*

Kyrgyzstan with United States

9/93

The U.S. Department of Commerce will allow Kyrgyzstan to sell 188,000 pounds of U308 to the U.S. when the market price reaches $13 per pound. Kyrgyzstan had no quota assigned to it under the suspension agreement of October 1992, but requested Ukraine's quota after Ukraine withdrew from the suspension agreement.

Michael Knapik, et al, Nuclear Fuel, 9/27/93, pp. 1, 14-16 ***(9509)****.*

11/93

Petitioners in the anti-dumping case against former Soviet uranium exporters ask the U.S. Department of Commerce (DOC) to review its suspension agreements with Russia, Kazakhstan, Kyrgyzstan and Uzbekistan and resume anti-dumping investigations, in the hope that this will result in anti-dumping duties being levied against the former Soviet republics. Uranium from these republics is now entering the U.S. under a grandfather clause in the suspension agreements. On 11/17/93, DOC announces that it is beginning a review of the agreements with these countries, and will complete the review by 10/31/94. DOC says that, at this time, it has no evidence that these countries have violated any of the agreements.

Michael Knapik and Wilson Dizzard III, Nuclear Fuel, 11/8/93, pp. 1-4 ***(10472)****.*

LATVIA

Internal Developments

10/93

Ukrainian nuclear physicist Nicolai Steinberg reports that the amount of radioactive waste deliveries from Latvia to appropriate disposal facilities is only 25 percent of what it should be; the remaining 75 percent is assumed to have been dumped illegally.

Annes Gamillschegg, Frankfurter Rundschau, 10/14/93, p. 1; in JPRS-TND-93-034, 10/27/93, p. 54 ***(10452)****.*

1/94

Latvia begins writing nuclear liability laws which will absolve companies performing safety improvements at Lithuania's Ignalina nuclear power plant from liability in case of an accident. Many western companies have been reluctant to perform such work in the absence of such laws.

Ariane Sains and Ann MacLachlan, Nucleonics Week, 1/20/94, p. 7 ***(10652)****.*

LITHUANIA

Internal Developments

9/93

Lithuania ratifies the Vienna convention, which requires "civil responsibility for nuclear damage," and the Paris Protocol, which requires national governments to take responsibility before third parties for the results of nuclear energy use. The lack of liability laws has delayed international technical assistance to the Ignalina nuclear power plant.

Tiesa (Vilnius), 9/8/93; in JPRS-TND-93-031, 10/8/93, p. 32. Ann MacLachlan, Nucleonics Week, 12/9/93, p. 12 ***(10652)****. Araine Sains, Nucleonics Week, 9/2/93, pp. 10-(. 11* ***(9691)****.*

9/93

Lithuanian authorities are investigating the alleged disappearance of approximately seven tons of nuclear fuel from the Ignalina nuclear power plant.
Mark Hibbs, Nuclear Fuel, 9/13/93, pp. 3-5 ***(9643)***.

11/93

Lithuania begins creation of a system of export and import controls for "strategic materials, goods, and technologies" based on the requirements of the COCOM export control system. The new system will enable Lithuania to import needed technologies for its civilian nuclear power program if it provides guarantees that the technologies will not be reexported to other countries or put to military use.
Radio Vilnius, 11/22/93; in FBIS-SOV-93-224, 11/23/93, p. 74 ***(10635)***.

12/93

Lithuania passes a law based on the Vienna Convention and the Paris Protocol which will limit third party liability, thus allowing western-backed safety renovations to begin at Ignalina.
Ariane Sains and Ann MacLachlan, Nucleonics Week, 1/20/94, p. 7 ***(10652)***.

Lithuania with Canada

1/94

A building contract for a fuel storage facility at Ignalina is currently under consideration and may be awarded to Ontario Hydro, which has stated its willingness to work without any liability laws.
Ariane Sains, Nucleonics Week, 10/14/93, p. 3 ***(10652)***.

Lithuania with European Community

9/93

The Lithuanian Nuclear Power Safety Inspectorate (Vatesi) and the Ignalina plant director have approved a comprehensive safety program for the plant's two RBMKs. Lithuania is using this plan to help it win financing from the European Bank of Reconstruction and Development (EBRD). Lithuania will commit approximately $5 million toward the upgrades.
Araine Sains, Nucleonics Week, 9/2/93, pp. 10-11 ***(9691)***.

11/93

Ignalina plant director Viktor Shevaldin states that a 32-million ECU loan will be used to implement safety measures at the plant.
Ariane Sains, Nucleonics Week, 11/18/93, p. 6 ***(10639)***.

1/94

It is reported that the EBRD was considering a 30-million ECU loan to the Lithuanian government for safety renovations at Ignalina, but Lithuanian officials turned it down when they learned that they would be required to shut down one of the reactors.
Ariane Sains, Nucleonics Week, 1/6/94, p. 1 ***(10653)***.

Lithuania with Germany

1/94

A building contract for a fuel storage facility at Ignalina is currently under consideration, and may be given to Gesellschaft fuer Nuklear-Behalter GmbH, which has stated its willingness to work without any liability laws.
Ariane Sains, Nucleonics Week, 10/14/93, p. 3 ***(10652)***.

Lithuania with Germany and Russia

11/93

It is reported that a Lithuanian trucking firm in Vievis had conveyed radioactive metals for the Russian firm Mars from near Moscow to Germany. A previous Mars shipment of 25 tons of "non-ferrous" metal had been transported by Lithuanian trucks via sea ferry to a "small metal factory" in Essenkei, Germany.
BNS (Tallinn), 11/17/93; in JPRS-TND-93-037, 12/8/93, p. 47 ***(10634)***.

Lithuania with IAEA

1/94

An IAEA panel of international consultants states that there "is no reason for closure" of Lithuania's RBMK reactors, provided that the recommended safety improvements are completed.
Ariane Sains, Nucleonics Week, 1/6/94, p. 1 ***(10653)***.

Lithuania with Kazakhstan

10/93

After Russia announces the cancellation of its contract to supply Lithuania with nuclear fuel, Kazakhstan offers to provide nuclear fuel in exchange for use of Lithuania's oil-refining facilities.
Nucleonics Week, 10/7/93, p. 4 ***(10640)***.

Lithuania with Poland

11/93

Polish police arrest M. Yanchenkov, who was found to be in possession of a "suspicious metal flask" emitting a high level of radiation. Yanchenkov had worked at the former Soviet army base in Siauliai, Lithuania.
Elta (Vilnius), 10/22/93; in JPRS-TND-93-035, 11/10/93, p. 68 ***(10649)***.

Lithuania with Russia

10/93

Russia cancels a contract to supply nuclear fuel to Lithuania because of nonpayment of the $30 million debt that Lithuania owes on earlier shipments of supplies.
Nucleonics Week, 10/7/93, p. 4 ***(10640)***.

Lithuania with Sweden

11/93

Sweden's Vattenfall AB begins installing rescue and fire safety equipment at the Ignalina nuclear power plant. ABB Atom AB is also to assist the safety effort by providing robotic equipment to carry out upgrades.
Ariane Sains, Nucleonics Week, 11/18/93, p. 6 ***(10639)***.
Ariane Sains, Nucleonics Week, 10/14/93, p. 3 ***(10652)***.

1/94

The deputy head of a Swedish nuclear safety project at the Ignalina nuclear power plant states that a small radiation leak caused the plant to close temporarily.
Washington Times, 1/22/94, p. A9 ***(10648)***.

LITHUANIA WITH UNITED STATES

10/93

The visit of U.S. Nuclear Regulatory Commission (NRC) Chair Ivan Selin to Lithuania results in an agreement under which the U.S. will provide aid to help safety efforts at the Ignalina plant.
Radio Vilnius, 10/15/93; in FBIS-SOV-93-199, 10/18/93, p. 105 ***(10659)***.

MOLDOVA

INTERNAL DEVELOPMENTS

10/93

It is reported that Moldovan President Mircha Snegur may have entered into an agreement with Boris Birshtein, the head of the Siyabeko Group of joint-stock companies, to bury western nuclear waste in mines near the city of Krikov. The agreement is apparently part of the formation of the joint-stock company Siyabeko Moldova. It seems that Birshtein and Siyabeko have been involved in the past in some shady deals, and there is some speculation that the formation of Siyabeko Moldova is not entirely legal.
Tatiana Vorontsova, Moskovskiye Novosti, 10/17/93, p. A13 ***(10359)***.

MOLDOVA WITH ROMANIA

1/94

Customs officials in Leuseni, Romania, apprehend five Moldovans attempting to enter the country with 1.7 kg of uranium and two kg of red mercury which originated in Russia. The smugglers apparently intended to sell the materials on the black market.
AFP (Paris), 12/23/93; in JPRS-TND-94-003, 1/31/94, p. 27 ***(10423)***.

MOLDOVA WITH UKRAINE

1/94

Authorities confiscate 3.3 pounds of radioactive materials found in Kishinev, Moldova. The material allegedly belonged to a group of six people attempting to smuggle it out of Ukraine.
Philadelphia Inquirer, 12/24/93; in International Security Digest, 1/94, p. 5 ***(10377)***.

RUSSIA

INTERNAL DEVELOPMENTS

9/93

Russian Minister of Atomic Energy Viktor Mikhailov states that Russia intends to expand its nuclear energy industry into an export capability. Minatom plans to double Russia's nuclear energy capacity from 20 to 40 gigawatts by 2020.
Theo Westerwoudt, NRC Handelsblad (Rotterdam), 9/23/93, p. 19; in JPRS-TND-93-031, 10/8/93, p. 27 ***(10506)***.

9/93

A Russian governmental official states that the nuclear armed torpedoes on the sunken submarine Komsomolets will be "sealed in a special tomb" to limit plutonium leakage, which could start by late 1994. The sealing is scheduled for the summer of 1994, after which the Russian government may consider raising the torpedoes.
International Herald Tribune, 9/17/93 ***(9712)***. *Reuter, 9/17/93* ***(9712)***.

9/93

Russian President Boris Yeltsin signs an executive order naming the Federal Supervision of Nuclear Radiation Safety Agency (Gosatomnadzor) as the supervisory agency for the Russian Atomic Energy Industry, the Committee of Defense Industries, and those units under the Russian Defense Ministry responsible for safety in handling nuclear warheads, weapons systems, and naval nuclear reactors.
Interfax (Moscow), 9/21/93; in FBIS-SOV-93-182, 9/22/93, p. 15 ***(9762)***.

10/93

The director of the Limited Liability Partnership Konform in St. Petersburg is arrested in Moscow as he attempted to sell a container with 4.5 kg of U-235 and U-238. That amount could be enough to make a nuclear device if the U-235 content were sufficient.
Mikhail Fedotov, Kommersant-Daily (Moscow), 8/28/93, p. 21; in JPRS-TND-93-031, 10/8/93, p. 25 ***(10464)***.

11/93

Russian Minister of Atomic Energy Viktor Mikhailov states that Russia has 1,500 to 2,000 tons of highly enriched uranium. U.S. estimates had placed the figure at 800-900 tons, due to flawed assumptions about Soviet enrichment facilities.
Novaya Gazeta, 11/25/93, p. 1; in Russia and CIS Today, 11/26/93, pp. 4-5 ***(10576)***. *Mark Hibbs and Michael Knapik, Nuclear Fuel, 10/25/93, pp. 2-3* ***(10493)***.

11/93

Russia publishes its new military doctrine, which allows for the first-use of nuclear weapons for self-defense, but reaffirms the country's oblibation under the NPT not to use nuclear weapons against a non-nuclear weapon state.
Col. Mykola Bilovil, Ukrayinskaya Hazeta (Kiev), 12/16/93-12/31/93, p. 8; in FBIS-SOV-93-247, 12/28/93, pp. 27-28 ***(10433)***.

11/93

It is reported that Russia annually produces about 3,000 tons of uranium, while its annual requirement for its nuclear power industry is 4,200 tons. "Storehouse reserves" currently make up for the deficit.
Irina Konyakhina, Moscow News, 11/26/93, p. 7 ***(10499)***.

11/93

The Russian Ministry of Defense reports that three fuel rods for naval nuclear reactors are stolen from a strategic depot of the Northern Fleet outside Murmansk. The rods were

apparently spent fuel.
Radio Moscow, 12/16/93; in FBIS-SOV-93-241, 12/17/93, p. 62 ***(10545)***.

12/93

Labor collectives from the nuclear cities of Arzamas-16 and Chelyabinsk-70 demand government action to ensure timely financing of the centers, so as to improve living standards and defuse social tension there.
Nina Volkova, ITAR-TASS (Moscow), 11/30/93; in FBIS-SOV-93-229, 12/1/93, p. 44 ***(10542)***.

12/93

It is reported that Russian businessmen are continuing to seek licenses to export the mysterious substance "red mercury" to markets in Africa, Asia, and the Middle East.
Adi Ignatius, Wall Street Journal, 12/6/93, pp. A1, A5 ***(10502)***.

1/94

According to Stanislav Voronin, a "leading expert" at Arzamas-16, Russia has created safer detonators for nuclear warheads which are less sensitive to mechanical impacts. He also reports that Russia has developed technology which eliminates fallout from underground nuclear tests.
Krasnaya Zvezda (Moscow), 1/5/94, pp. 1-2; in Russia and CIS Today, 1/5/94, p. 25 ***(10564)***.

1/94

Nikolay Shapovalenko, a radiation safety expert with the Russian government, states that bureaucratic gridlock between the navy and the Ministry of Defense has crippled efforts to deal with the problem of storing liquid radioactive waste. Russia is conducting feasibility studies on burial sites on Novaya Zemlya and the Kola Peninsula.
Interfax (Moscow), 1/11/94; in FBIS-SOV-94-008, 1/12/94, p. 43 ***(10547)***.

Russia with Armenia

2/93

Talks between Russian First Deputy Prime Minister Oleg Soskovets and Armenian Prime Minister Hrant Bagratyan result in an agreement for Russia to provide equipment and technical expertise to Armenia to repair its nuclear power plant. Armenia will fund the renovation.
Liz Fuller, RFE/RL News Briefs 2/14/94 - 2/18/94, p. 9 ***(10656)***.

Russia with Belarus

11/93

Russia and Belarus begin negotiations on establishing a nuclear attack early warning station in Belarus, for which the incomplete "Baranovichi junction" station may be finished and maintained by Russia.
ITAR-TASS (Moscow), 11/18/93; in FBIS-SOV-93-221, 11/18/93, p. 5 ***(10422)***.

Russia with Belarus and United States

1/94

An advisor to Belarusian Parliamentary Chair Stanislav Shushkevich states that Belarus will seek $500 million from the proceeds of the Russian sale of uranium retrieved from dismantled tactical nuclear weapon warheads returned to Russia from Belarus. The U.S. supports Belarus' claim. Russia has agreed to compensate Belarus for returned tactical nuclear weapons and ICBM warheads now in the process of being returned to Russia.
Reuter, 1/17/94 ***(10362)***. *RFE/RL News Briefs, 1/10/94, p. 2* ***(10361)***.

Russia with Cuba

12/94

Lionel Soto, Vice-Chair of the Cuban Council of Ministers, states that the $350 million credit agreement between Russia and Cuba is being used to fund construction of Cuba's Juragua nuclear power plant.
Nezavisimaya Gazeta, 12/29/93, p. 4; in The Current Digest of the Post-Soviet Press, 1/26/94, pp. 19-20 ***(10284)***.

Russia with Czech Republic and Iran

12/9/93

The manager for technical service of nuclear power plants for the Czech firm Skoda Jaderne Stojirentsvi Plzen, Frantisek Svitak, says that Iran wishes to build a nuclear power plant and that Skoda could provide it with reactor equipment through a Russian general supplier.
CTK (Prague), 12/9/93; in JPRS-TND-94-001, 1/6/94 ***(10940)***.

Russia with Estonia

1/94

An advisor to the Estonian Foreign Ministry states that Russia has agreed to remove all nuclear fuel from Paldiski by 6/30/94, and is already shipping equipment needed to dismantle Russian nuclear installations in Estonia. However, Estonian Environment Minister Andres Tarand later states that the removal of nuclear fuel will begin in 3/94 or 4/94, and will take approximately four months. This schedule is confirmed by Russian naval representatives. Colonel Raul Luks is appointed commandant for the Paldiski and Pakri regions to aid in the dismantlement and in the withdrawal of Russian troops.
ETA News Release (Tallinn), 1/3/94; in FBIS-SOV-94-002, 1/4/94, p. 52 ***(10643)***. *BNS (Tallinn), 1/5/94; in FBIS-SOV-94-004, 1/6/94, p. 69* ***(10642)***. *Radio Tallinn Network, 1/7/94; in FBIS-SOV-94-006, 1/10/94, p. 89* ***(10374)***.

Russia with Estonia, Finland, and Germany

9/93

Finnish authorities arrest two Finns, two Russians and an Estonian for smuggling approximately one gram of californium-252 out of the former Soviet Union. Authorities believe the substance was brought into Finland through Estonia, with Germany as the intended final destination. One week after those arrests, German police arrest two Germans carrying 6.5 milligrams of californium-252 allegedly obtained from the Tomsk-7

nuclear complex in Russia.
Mark Hibbs, Nucleonics Week, 9/2/93, p. 7 ***(9645)***.

Russia with European Community

9/93

Some of the low-enriched uranium fuel pellets found to have been illegally exported to Western Europe are traced to two fuel fabrication facilities in the former Soviet Union: Elektrostal near Moscow, and Ulbinski Chemical Combine in Ust-Kamenogorsk, Kazakhstan. Minatom has not revealed the details of these thefts. Reports claim that several metric tons of UO2 were stolen from the two facilities. There are also concerns that plutonium may have been stolen from a pilot mixed oxide (MOX) fuel fabrication facility.
Mark Hibbs, Nuclear Fuel, 9/13/93, pp. 3-5 ***(9643)***.

9/93

A consortium of European firms, including Belgatom of Belgium, Empresarios Agrupados, Equipos Nucleares, Tecnatom, and Uitesa of Spain, and AEA Technology, National Nuclear Corp., and Nuclear Electric of the U.K., announces that it has obtained nine TACIS-91 contracts, worth $14.3 million, to provide nuclear plant hardware, software and training services to the CIS. Another consortium, including Siemens of Germany and France's Framatome and Electricite de France, will design and build information centers at two locations in Russia for 4 million ECU.
Nucleonics Week, 9/30/93, p. 13 ***(10503)***.

11/93

General Director of the European Nuclear Research Center (CERN) Carlo Rubbia and Russian Minister of Science and Technical Policy Boris Saltykov sign an agreement on cooperation in high-energy physics. CERN is funding the participation of 25 Russian scientists in "an important experiment" in a Geneva laboratory.
Yuriy Konorov, Rossiyskaya Gazeta, 11/16/93, p. 3; in FBIS-SOV-3-222, 11/19/93, p. 11 ***(10678)***.

Russia with Japan, United States and European Community

1/94

It is reported that an internationally funded plan to prevent the "brain drain" of nuclear scientists out of the former Soviet Union will be implemented "soon." Approximately $70 million ($25 million from the U.S., $28 million from the E.C., and $17 million from Japan) will be used to establish a center to employ nuclear scientists and technicians in peace-related jobs.
Los Angeles Times, 1/27/94, p. A7 ***(10459)***.

Russia with Finland

11/94

Finland announces that it hopes to stop shipping its spent nuclear fuel to Russia, because it is currently studying the possibility of storing and reprocessing the fuel itself.
Reuter, 11/24/93 ***(10495)***.

1/94

Anders Palmgren of Finland's Imatran Voima Oy states that Finland will not seek to break its agreement with Russia, which stipulates that nuclear waste from the Loviisa plant be returned to Russia.
Hufvudstadsbladet (Helsinki), 11/25/93, p. 6; in JPRS-TND-94-001, 1/13/94, pp. 56-57 ***(10282)***.

Russia with France

10/93

Russian Foreign Minister Andrey Kozyrev and his French counterpart Alain Juppe sign bilateral agreements under which France will provide Russia with the first 160 million of the 400 million francs allocated to assist Russia in dismantling nuclear weapons, as well as machine tools and storage facilities, and the means to transport the materials.
Andrey Krasnoshekov, et al, ITAR-TASS (Moscow), 10/20/93; in JPRS-TND-93-035, 11/10/93, p. 71 ***(10598)***.

10/93

It is reported that France's Superphenix reactor and Russia's BN-600 will begin a two-year twinning program at the end of 1993. The program will aid the Russian facility in computerizing maintenance and operation, purchasing of a simulator, and making other safety improvements.
Nuclear Engineering International, 10/93, p. 3 ***(10338)***.

11/93

French and Russian scientists are discussing a joint plutonium utilization research program at the Institute of Physics and Power Engineering in Obninsk, Russia. France has allocated 50 million francs toward the program.
German Lomanov, Moskovskiye Novosti, 11/7/93, p. 138 ***(10567)***.

Russia with Germany

10/93

Siemens AG and Minatom sign an agreement on cooperation in nuclear fuel production and spent fuel storage. Siemens is pushing a plan to build a 120-metric ton heavy metal per year mixed oxide (MOX) plant in Russia, but Minatom is refusing to form any such joint venture unless Russia is allowed to export the fuel to Germany and other western nuclear markets.
Mark Hibbs, Nuclear Fuel, 10/11/93, pp. 2-3 ***(10494)***.

1/94

Germany's Siemens AG will send contaminated uranium scrap material to a Russian reprocessing plant, in exchange for approximately 70 metric tons of U-235 enriched to five percent.
Mark Hibbs, Nuclear Fuel, 1/17/94, p. 17 ***(10327)***.

Russia with Hungary and Ukraine

11/93

The management of the Hungarian Paks nuclear power plant reaches agreement with Russia and Ukraine on the transhipment of fuel rods through Ukraine. Russia will supply Hungary with fresh fuel and reprocess the spent fuel.
MTI (Budapest), 10/26/93; in JPRS-TND-93-035, 11/10/93, p. 24 ***(10492)***.

RUSSIA WITH IRAN

10/93

Iranian officials state that "little progress has been made" on Iran's purchase of Russian VVERs to be constructed at Bushehr.
Mark Hibbs, Nucleonics Week, 10/14/93, p. 9 ***(10597)***.

12/93

Russian Ambassador to Iran Sergei Tretyakov confirms that Russia will help Iran build a nuclear power plant, indicating that a preliminary agreement has been reached but that financing is still being negotiated.
Radio Rossii Network (Moscow), 12/19/93; in FBIS-SOV-93-242, 12/20/93, p. 53 ***(10385)***.

12/93

It is reported that financial problems have stalled Russia's assistance to Iran in the construction of a nuclear power plant in Bushehr and in the completion of a second plant started by Germany but abandoned for political reasons. Iran has requested that Russia fund the projects, but Russia has refused due to its own financial crisis.
AFP (Paris), 12/19/93; in JPRS-TND-94-002, 1/18/94, p. 39 ***(10683)***.

RUSSIA WITH IRAN AND TURKEY

10/5/93

Pinar Bakir, a Turkish businessman and economics professor, is arrested in Turkey for possession of 2.5 kg of uranium, which he was allegedly smuggling from Russia to Iran. Four Iranians and four Turkish citizens are arrested in the raid while trying to purchase the uranium from Bakir. Police suspect the four Iranians of working for Savama, the Iranian secret service. Police identify Turker Gelendost, who is among those arrested, as the central figure in the smuggling of the uranium from Russia to Turkey. According to chief of the police anti-smuggling department Salih Gungor, visitors from Russia brought the uranium into Turkey, where they sold it to Turks. Deputy Head of the Cekmeci Nuclear Research Center Erol Balikcigil announces that the smuggled material "only has about 2.5 to 3.5% uranium-235" and cannot be used in nuclear weapons manufacture. Meanwhile, Iranian Deputy Foreign Minister Alaeddin Boroujerdi denies that Russian uranium is destined for Iran, calling the case a plot to undermine Turkish-Iranian relations and stating that Iran is willing to cooperate with Turkish security forces in the matter. Iran continues to deny that it is attempting to develop nuclear weapons. Another Iranian is being sought in connection with the case. The uranium was to be sold for $40,000 per gram. However, a specialist at the Cekmeci Nuclear Research Center estimates that "the whole amount was worth only a few thousand dollars."
Meral Tamer, Milliyet (Istanbul), 10/9/93, p. 6; in JPRS-TND-93-036, 11/17/93, p. 42 ***(10402).*** *Istiklal Sevinc, Milliyet (Istanbul), 10/9/93, p. 16; in JPRS-TND-93-036, 11/17/93, p. 42* ***(10497)***. *Deutsche Press Agentur, 10/7/93* ***(10504).*** *Reuter, 10/7/93* ***(10507).*** *Reuter, 10/6/93; in Executive News Service, 10/7/93* ***(10938).***

RUSSIA WITH IRAQ

10/93

The director of the Iraqi intelligence services, Faber al-Duri, visits Russia to request "urgent technical assistance" for the completion of the nuclear power plant in Yosfiyi, near Baghdad, which the Russians started building in 1990.
Intelligence Newsletter, 10/28/93, pp. 6-7 ***(10680)***.

RUSSIA WITH IRAQ AND IAEA

10/93

According to IAEA Deputy Director Maurizio Zifferero, the U.N. sent 170 tonnes of equipment to Iraq to aid in the removal from Iraq to Russia of approximately 40 kg (90 lbs.) of nuclear fuel, enough to produce one or two nuclear bombs. The fuel, the "last known amounts" of irradiated uranium stocks in Iraq, is being stored at two locations near Tuweitha under IAEA custody. The U.N. has already removed approximately 12 kg (26 lbs.) of unprocessed fuel and estimates that the remaining fuel will take several months and cost tens of millions of dollars to remove from Iraq.
Leon Barkho, Reuter, 10/7/93; in Executive News Service, 10/7/93, ***(10189)***.

11/93

The IAEA supervises the shipment of 12 kg of unenriched uranium from Iraq to Russia.
AFP (Paris), 1/9/94; in JPRS-TND-94-003, 1/31/94, p. 40 ***(10730)***.

12/93

The first shipment of 33 kg of enriched uranium leaves Iraq for Russia. The IAEA is now preparing for a second shipment of uranium to leave in 1/94, which will complete the transfer. The cost of shipping the material will be paid by Iraq.
AFP (Paris), 1/9/94; in JPRS-TND-94-003, 1/31/94, p. 40 ***(10730)***. *Aleksandr Yelistratov, ITAR-TASS (Moscow), 12/7/93; in FBIS-SOV-93-234, 12/8/93, p. 11* ***(10554)***.

RUSSIA WITH JAPAN

10/93

The Russian Navy dumps 900 tons of liquid radioactive waste into the Sea of Japan on 10/17/93. A second dumping is canceled after complaints from Japan and the wider international community. Russia urges Japan and other countries to assist in the construction of an $8 million plant in the Russian Far East to process the nuclear waste.
Kyodo (Tokyo), 11/5/93; in JPRS-TND-93-036, 11/17/93, p. 43 ***(10343)***. *Veronika Romanenkova, ITAR-TASS (Moscow), 10/21/93; in FBIS-SOV-93-203, 10/22/93, P. 14* ***(10550)***.

10/93

It is reported that officials from the Russian and Japanese foreign ministries will meet on 11/10/93 to discuss Japan's allocation of $100 million for construction of land-based reservoirs for the burial of radioactive waste.
Sergey Agafonov, Izvestiya (Moscow), 10/20/93, p. 3; in FBIS-SOV-93-202, 10/21/93, pp. 12-13 ***(10550)***.

10/93

Experts from the Japanese Nuclear Forum and Japanese Department for Ecology and Natural Calamities state that Russia's dumping of liquid low-level radioactive waste into the Sea of Japan poses no threat to their country.
Vyacheslav Bantin, ITAR-TASS, 10/21/93; in FBIS-SOV-93-203, 10/23/93, p. 13 ***(10443)***.

11/93

Japan and Russia sign an agreement for cooperation in eliminating Russia's nuclear weapons that are subject to dismantlement under international arms reduction agreements.

Vadimir Suprun, ITAR-TASS, 11/12/93; in FBIS-SOV-93-218, 11/15/93, p. 10 ***(10438)****.*

11/93

Russia says it has no choice but to dump an additional 800 cubic meters of liquid radioactive waste into the sea, and that dumping will have to be carried out at least once every 6 months for the next five years. Russia has begun a feasibility study on a $48.5 million waste processing plant, which Russia is hoping to finance with foreign aid. Russian Minister of Atomic Energy Viktor Mikhailov suggests that Japan buy $100 million of Russian uranium to help Russia build a waste disposal facility.

Reuter, 10/30/93. Craig Whitney, New York Times, 10/22/93, p. A4 ***(10535)****.*

11/93

Russia and Japan discuss possible Japanese participation in the construction of a fast breeder reactor (FBR) in Russia. Private Japanese firms could work with Russia to build three BN-800 FBRs in the South Urals.

Ernst & Young Report, 11/9/93 ***(10285)****.*

12/93

Russian and Japanese officials meet to discuss proposals for cooperation in the area of radioactive waste destruction and disposal. Joint construction of a large storage facility near Tomsk, Russia, is being considered to store uranium and plutonium from dismantled nuclear weapons. Japan's contribution to the projects would not exceed $6 million.

Andrey Varlamov, ITAR-TASS (Moscow), 12/9/93; in FBIS-SOV-93-236, 12/10/93, p. 16 ***(10496)****.*

1/94

Nikolay Shapovalenko, a radiation safety expert with the Russian government, states that Russia accepts Japan's offer of a double-hull tanker ship to hold 10,000 gallons of radioactive waste, but that reprocessing facilities and burial sites will still be needed to resolve the issue permanently.

Interfax (Moscow), 1/11/94; in FBIS-SOV-94-008, 1/12/94, p 43 ***(10547)****.*

Russia with Kazakhstan

1/94

The Russian Defense Ministry denies a 12/27/93 ITAR-TASS report that Lieutenant Yuri Konovalenko, Commander of the Semipalatinsk test site, had been removed from his post after being accused of "embezzlement and resale of especially valuable equipment and nonferrous metals." The Ministry points out that Kazakhstan has no jurisdiction over Russian military personnel, and states that Konovalenko is "currently on leave."

Krasnaya Zvezda (Moscow), 12/31/93, p. 3; in FBIS-SOV-94-001, p. 40 ***(10647)****. Izvestiya (Moscow), 12/28/93, p. 1; in FBIS-SOV-94-001, p. 31* ***(10647)****.*

1/94

Kazakh Ambassador to Iran Myrzadai Zholdasbekov states that Kazakhstan has no plans to return any nuclear weapons to Russia until it receives a guarantee that the weapons would not be used. However, Russian First Deputy Foreign Minister Anatoliy Adamishin states that he has received no such information from Kazakh officials. Kazakh President Nursultan Nazarbayev states the next day that his country still intends to disarm and abide by all its international commitments.

ITAR-TASS (Moscow), 1/28/94; in FBIS-SOV-94-019, 1/28/94, p. 45 ***(10655)****. Interfax (Moscow), 1/28/94; in FBIS-SOV-94-020, 1/31/94, p. 21* ***(10655)****. Reuter, 1/29/94; in Executive News Service, 1/31/94* ***(10655)****.*

Russia with Kyrgyzstan and United Kingdom

12/93

The head of Russia's anti-smuggling division of the State Customs Committee states that customs officials in Kaliningrad, Russia, seized 300 tons of "uranium concerntrate" on its way from Kyrgyzstan to an undisclosed British firm.

Reuter, 12/14/93; in Executive News Service, 12/14/93 ***(10636)****.*

Russia with Lithuania

10/93

Russia cancels a contract to supply nuclear fuel to Lithuania because of nonpayment of the $30 million debt that Lithuania owes on earlier shipments of supplies.

Nucleonics Week, 10/7/93, p. 4 ***(10640)****.*

Russia with Lithuania and Germany

11/93

It is reported that a Lithuanian trucking firm in Vievis had conveyed radioactive metals for the Russian firm Mars from near Moscow to Germany. A previous Mars shipment of 25 tons of "non-ferrous" metal had been transported by Lithuanian trucks via sea ferry to a "small metal factory" in Essenkei, Germany.

BNS (Tallinn), 11/17/93; in JPRS-TND-93-037, 12/8/93, p. 47 ***(10634)****.*

Russia with Mongolia and United States

1/94

The U.S. Company Energy Fuels announces the formation of a joint venture with Russia's geological firm Geologorazvedka and Mongolia's URAN, a subsidiary of the Mongolian Ministry of Geology and Natural Resources. The new joint venture, called Gurvan Saihan BBHK, will mine uranium from eight areas in the Gobi region of Mongolia.

Michael Knapik and Ann Maclachlan, Nuclear Fuel, 1/31/94, pp. 1-2, 14 ***(10439)****.*

Russia with Multi-Country Group

9/93

It is reported that, despite the conversion of COCOM into a more modern structure, exports to Russia will remain restricted indefinitely, as it has not yet joined GATT and could still evolve into a threat to the West.

Sergey Demidov, Rossiyskaya Gazeta (Moscow), 9/9/93, p. 7; in FBIS-SOV-93-175, 9/13/93, pp. 10-11 ***(10579)****.*

RUSSIA WITH NORTH KOREA

1960s-1993

Several hundred DPRK experts have been trained in plutonium separation and other nuclear processes in China and the USSR since the 1960s.

Mark Hibbs, Nucleonics Week, 1/6/94, pp. 8-9 ***(10783)***.

1980s

The USSR is a possible source of the DPRK's dual-use nuclear equipment, since machine tools comprise 30% of the USSR's $500-million in exports to the DPRK.

Mark Hibbs, Nucleonics Week, 1/6/94, pp. 8-9 ***(10783)***.

9/6/93

The Korean Central News Agency, citing a broadcast made by Radio Number One of South Korea, claims that a rumor that North Korean lumberjacks in the Khabarovsk territory of Russia were smuggling uranium out of the mines is "a groundless, sheer fabrication."

KCNA (Pyongyang), 9/6/93; in JPRS-TND-93-029, 9/17/93, p. 18 ***(10745)***.

10/29/93

It is reported that Russia has implied that it will supply a light water reactor (LWR) to North Korea if the North can find financing and if it fully complies with safeguards under the NPT.

Peter Hayes, Asahi Evening News, 10/29/93, pp. 1, 3 ***(10606)***.

11/93

Moscow's security ministry confirms that Russia expelled North Korean Major General Nam Gae-wok for recruiting Russian missile and space technology experts to work on Pyongyang's nuclear weapons program. First Deputy Security Minister Sergei Stepashin says that Moscow agents thwarted a large-scale plan to bring Russian scientists to North Korea. The North Korean embassy confirms that Nam left Moscow "some time ago" but says that he was not a general and that he had not been trying to recruit Russian experts.

Anne McElvoy and Wolfgang Munchau, The Times, 11/17/93 ***(10267)***.

1/94

A confidential report by the Russian General Staff on North Korea, released by a Japanese periodical, states that Pyongyang has succeeded in building one to two nuclear warheads and several hundred delivery systems, and has accumulated 10-12 kg of uranium-235 and 20 kg of plutonium-239. The report also states that 160 Russian nuclear experts have worked for the DPRK, and that nine nuclear scientists and 17 highly-qualified missile technology experts are working there currently, adding that Russian experts helped in creating the Nodong-1 missile and in accumulating enriched uranium. The Russian report recommends establishing a regional anti-missile defense system, in which Russia, Japan and the U.S. would participate, and reviewing all technological agreements with North Korea.

Sergey Agafonov, Izvestiya, 1/27/94, pp. 1, 4 ***(10572)***.

RUSSIA WITH NORWAY

1/94

Russia's Severnyy Zavod Production Association will be cooperating with physicists from Norway's Ioffe Institute in building a spherical Tokamak nuclear research reactor in order to study thermonuclear fusion.

D. Kokko and V. Gonchar, Russian Television Network (Moscow), 12/30/93; in FBIS-SOV-94-005, 1/7/94, p. 36 ***(10444)***.

RUSSIA WITH PRC

11/93

Russia issues a statement condemning China's underground test of a nuclear weapon on 10/5/93, and reiterates its support and observance of a moratorium on nuclear testing.

ITAR-TASS (Moscow), 10/21/93; in JPRS-TND-93-035, 11/10/93, p. 46 ***(10560)***.

RUSSIA WITH SLOVAKIA AND UKRAINE

11/93

Russia declares that it is the successor to cooperation agreements between the USSR and Czechoslovakia, and signs continuation agreements with Slovakia on cooperation in nuclear energy. Russia, Slovakia, and Ukraine sign the "Agreement of Cooperation in the Sphere of Transporting Nuclear Fuel Across the Territory of Ukraine."

Republika (Bratislava), 10/23/93, p. 1; in JPRS-TND-93-035, 11/10/93, p. 24 ***(10677)***.

RUSSIA WITH SOUTH KOREA

10/93

Russia is discussing a joint venture with South Korea to build a mixed oxide (MOX) fuel fabrication plant in Russia, which would produce MOX for the Korea Electric Power Company (Kepco).

Mark Hibbs, Nuclear Fuel, 10/11/93, pp. 2-3 ***(10494)***.

RUSSIA WITH TAIWAN

11/93

Liu Kuang-chi, Vice-Chair of the Atomic Energy Council of Taiwan, states that Taiwan is considering an arrangement whereby Russia would store Taiwanese nuclear waste.

Reuter, 11/9/93; in Executive News Service, 11/9/93 ***(10427)***.

RUSSIA WITH UKRAINE

9/93

At the Russian-Ukrainian summit at Massandra, an agreement is signed whereby Ukraine will send 1,800 warheads to Russia for dismantlement in exchange for uranium fuel for Ukraine's nuclear power plants, and relief from Ukraine's $2.5 billion debt to Russia.

Fred Hiatt, Washington Post, 9/4/93, pp. A17, A22 ***(10144)***.

9/93

Russia annuls the agreement signed at the Massandra summit regarding the dismantling of Ukraine's nuclear weapons. A hand-

written amendment to the agreement excludes the SS-24 ICBMs from dismantlement. Ukraine maintains that the amendment was in the agreement when it was signed, but Russia claims that it was added after the signing.
John Lepingwell, RFE/RL Daily Report, 9/22/93 ***(9714)***.

10/93

Russian Ambassador to the U.S. Vladimir Lukin states that Ukraine has not allowed Russian experts to enter the country to monitor and maintain the nuclear weapons stationed there. He adds that this represents a dangerous violation of the Lisbon Protocol, because Ukraine does not have the resources to properly maintain the weapons on its own. Lukin cites a 9/93 incident in which experts reported finding dangerously high temperatures and levels of radiation at the Pervomaisk nuclear weapons storage facility.
Sergio Sergi, L'Unita, 10/24/93, p. 14; in FBIS-SOV-93-205, 10/26/93, pp. 13-14 ***(10313)***.

10/93

Minatom officials say that an agreement between Russia's Krasnoyarsk-26 spent fuel reprocessing center and Ukraine's nuclear industry on reprocessing spent fuel from Ukraine's VVER-1000 nuclear reactors is contingent on Ukraine's agreement to purchase fresh UO_2 fuel from Minatom under IAEA safeguards. A grace period which allows Minatom to supply the fuel to Ukraine, even though Ukraine has not yet signed the NPT, will expire at the end of 1993, after which time Minatom officials expect IAEA safeguard requirements will necessitate the end of fuel supply to Ukraine.
Mark Hibbs, Nuclear Fuel, 10/11/93, pp. 2-3 ***(10494)***.

10/93

Two nuclear warheads are transferred from Ukraine to Russia on 10/26/93. The warheads had been sitting in a railroad car on the Russian-Ukrainian border since 10/5/93 while Ukraine sought assurance of compensation from Russia for the value of the nuclear materials and while Russia accused Ukraine of violating the transfer agreement signed at the Massandra summit.
John Lepingwell, RFE/RL Daily Report, 10/27/93. Ustina Markus, RFE/RL Daily Report, 10/21/93 ***(10317)***.

11/93

Russia announces its intention to begin withdrawing nuclear warheads from Ukraine on 1/1/94 under an agreement between the two countries.
ITAR-TASS, 11/5/93; in JPRS-TND-93-036, 11/17/93, p. 22 ***(10215)***.

1/94

Russia halts fuel supplies to Ukraine's nuclear power stations because of Ukraine's inability to pay the required 48 billion rubles for new fuel. Ukraine's State Committee for the Use of Nuclear Power states that unless new fuel is obtained, one-third of the country's nuclear power plants will have to be shut down in 1994, and the remaining two-thirds in 1995.
UT-1 Television Network (Kiev), 1/28/93; in FBIS-SOV-94-020, 1/31/94, p. 34 ***(10627)***.

Russia with Ukraine and United States

12/93

Ukrainian President Leonid Kravchuk announces that Ukraine, Russia, and the U.S. will conclude a tripartite agreement on financial compensation, security guarantees, and technical and scientific aid to Ukraine in return for its dismantlement of nuclear weapons.
Reuter, 12/18/93; in Executive News Service, 12/18/93 ***(10535)***.

Russia with United Kingdom

11/93

On 11/2/93, the presidents of the British Nuclear Industry Forum and the Moscow-based Nuclear Society sign an agreement to strengthen collaboration between the nuclear industries in those countries.
Nuclear Europe Worldscan, 11-12/93, p. 27 ***(10679)***.

Russia with United States

9/93

On 9/1/93, Russian Prime Minister Viktor Chernomyrdin and U.S. Vice-President Al Gore sign a transparency agreement concerning the uranium removed from nuclear warheads. On 9/3/93, Chernomyrdin meets with U.S. President Bill Clinton to sign agreements on U.S. aid for improving Russian nuclear safety.
Pavel Vanichkin and Ivan Ivanov, ITAR-TASS (Moscow), 9/2/93; in FBIS-SOV-93-169, 9/2/93, p. 5 ***(9524)***.
Tomas W. Lippman, Washington Post, 9/3/93, p. A28 ***(9899)***.

9/93

Minatom's Viktor Mikhailov states that the sale of Russian HEU to the U.S. will depend upon modifying the anti-dumping suspension agreement so that Russia could sell 2,000 metric tons of uranium per year with a "trigger price" of no more than $11/lb for U3O8. Mikhailov states that the current trigger price of $13/lb prevents Russia from entering the U.S. market for "at least three to five years."
Ann MacLachlan, Pearl Marshall and Michael Knapik, Nuclear Fuel, 9/13/93, pp. 1, 10-11 ***(9494)***.

9/93

U.S. Undersecretary of Defense for Policy Frank Wisner and Russian Minister of Atomic Energy Viktor Mikhailov sign an agreement granting Russia $85 million in aid for nuclear disarmament and establishing a system of verification and control over civilian nuclear materials. The money will come from the $800 million Nunn-Lugar fund.
Arkadiy Sidoruk, ITAR-TASS (Moscow), 9/3/93; in JPRS-TND-93-029, 9/17/93, p. 33 ***(10463)***.

9/93

The U.S. approves the purchase of four additional Topaz-2 space propulsion nuclear reactors from Russia for $20 million, for use in a design project for a new space propulsion system.
Ben Iannotta, Space News, 9/13/93-9/19/93, p. 10 ***(10462)***.

9/93

The U.S. Defense Nuclear Agency grants Westinghouse subsidiary Scientific Ecology, Inc., a $39.9 million contract to supply Russia with 32,968 containers for HEU and plutonium from dismantled nuclear weapons. The deal was financed by the Nunn-Lugar fund.
Wilson Dizzard III, Nuclear Fuel, 9/27/93, p. 9 ***(10350)***.

9/93

U.S. and Russian diplomats sign agreements on a $75 million project for design, construction, and maintenance of a fissile materials storage facility and a $10 million project for fissile materials control.
Wilson Dizzard III, Nuclear Fuel, 9/27/93, p. 9 ***(10350)***.

11/93

The U.S. Congress passes the 1994 Defense Authorization bill, which contains a provision prohibiting funding to Russia for the construction of a plutonium storage facility until Russia stops production of all weapon-grade plutonium and recovery of plutonium from civilian nuclear reactors.
Michael Knapik, Nuclear Fuel, 11/22/93, pp. 10-11 ***(10467)***.

11/93

Petitioners in the anti-dumping case against former Soviet uranium exporters ask the U.S. Department of Commerce (DOC) to review its suspension agreements with Russia, Kazakhstan, Kyrgyzstan, and Uzbekistan and resume anti-dumping investigations, in the hope that this will result in anti-dumping duties being levied against the former Soviet republics. Uranium from these republics is now entering the U.S. under a grandfather clause in the suspension agreements. On 11/17/93, DOC announces that it is beginning a review of the agreements with these countries, and will complete the review by 10/31/94. DOC says that, at this time, it has no evidence that these countries have violated any of the agreements.
Michael Knapik and Wilson Dizzard III, Nuclear Fuel, 11/8/93, pp. 1-4 ***(10472)***.

11/93

The U.S. Ballistic Missile Defense Organization is refusing to purchase four additional Topaz-2 space propulsion nuclear reactors from Russia, due to budget constraints. The reactors are worth $21 million.
Ben Iannotta, Space News, 11/15/93, pp. 4, 29 ***(10599)***.

12/93

U.S. Energy Secretary Hazel O'Leary states that the provision of nuclear safety equipment to Russia is being delayed by demands from U.S. nuclear suppliers that they not be held liable should an accident occur.
Nuclear Engineering International, 12/93, p. 3 ***(10620)***.

1/94

Russian scientists will be working with the Advanced Physics Corp. of the U.S. on a joint project to build a 60-mw high-temperature gas-cooled reactor for potential sale to developing countries. The mini-reactor, described as "accident proof," is expected to be built by 6/96 at Chelyabinsk-70 under U.S. supervision. Financing for the $200 million project will come from "investors in Europe, Asia and the Middle East." Minatom has approved the project, but it is not yet backed by the U.S. government.
Kathleen Hart, Nucleonics Week, 1/6/94, p. 17 ***(10328)***.

1/94

On 1/14/94, Russian Minister of Atomic Energy Viktor Mikhailov and U.S. Enrichment Corp. (USEC) Transition Manager William Timbers sign a contract for USEC's purchase of LEU blended down from HEU from dismantled Russian nuclear weapons. The first delivery is scheduled to take place within 60 days. Over the 20 year period of the HEU deal, the U.S. will pay approxiamtely $11.9 billion (1993 dollars) to Russia for 500 metric tons of HEU, which will be blended to 15.3 million kg of 4.4 percent U-235. USEC will buy 10 metric tons of HEU per year for the first five years and 30 metric tons for the next 15 years. The price of the uranium will be adjusted annually.
Wilson Dizzard and Mark Hibbs, Nuclear Fuel, 1/17/94, pp. 1-2 ***(10470)***.

1/94

At the 1/14/94 signing of the U.S.-Russian contract for blending weapons HEU into LEU, Viktor Mikhailov of Minatom proposes a joint venture to U.S. Enrichment Corp. (USEC) Transition Manager William Timbers which would specialize in blending down and marketing HEU from both Russia and the U.S. The blended uranium would then be used for reactor fuel in both countries. The joint venture would facilitate the implementation of the contract and would involve Minatom, Techsnabexport, USEC, Allied Signal Inc., and Nuclear Fuel Services, Inc. as partners. Mikhailov's proposal also includes a suggestion that a SWU plant be built in the U.S. using Russian technology. USEC responds by stating that it does not have a license to deal with HEU and is not interested in applying for one.
Nuclear Fuel, 1/31/94, pp. 15-16 ***(10473)***.

1/94

At the Eleventh Symposium on Space Nuclear Power and Propulsion, held 1/10/94-1/13/94, Russian officials offer the Rorsat space nuclear reactor to the U.S. Potential commercial uses of other space nuclear reactors, such as Topaz-1, are also discussed. Since hardware no longer exists for Topaz-1, the Russian concern Krasnaya Zvezda is seeking foreign partners for a joint venture to build a successor to the Topaz-1, called Topazstar.
Theresa Foley, Space News, 1/31/94, p. 10 ***(10386)***.

1/94

It is reported that a shipment of Russian plutonium may be released to the U.S. in 2/94 in order to supply fuel for the U.S. Department of Energy's space power units. According to DOE's Alan Newhouse, the U.S. purchased the non-weapons-grade material for $6 million.
Trish Gilmartin Williams, Space News, 1/17/94, p. 2 ***(10387)***.

Russia with United States, European Community, and Japan

1/94

It is reported that an internationally funded plan to prevent the "brain drain" of nuclear scientists out of the former Soviet Union will be implemented "soon." Approximately $70 million ($25 million from the U.S., $28 million from the E.C., and $17 million from Japan) will be used to establish a center to employ nuclear scientists and technicians in peace-related jobs.
Los Angeles Times, 1/27/94, p. A7 ***(10459)***.

RUSSIA WITH UNITED STATES AND PRC

10/93

The U.S. State Department voices concern over reports of China's success in importing strategic weapons technology and experts from Russia, which could "eventually enable Chinese nuclear forces to reach the United States."
Reuter, 10/14/93 ***(10562)***.

TAJIKISTAN

INTERNAL DEVELOPMENTS

1/94

The Vostokredmet industrial association, which had been a uranium mine and mill for the Soviet atomic weapons program, is converting its operations to gold refining.
Ostankino Television (Moscow), 12/9/93; in JPRS-TND-94-001, 1/6/94, p. 26 ***(10650)***.

TAJIKISTAN WITH UNITED STATES

9/93

It is reported that the International Trade Commission has determined that uranium supplied by Tajikistan is not harmful to the U.S. market because Tajikistan typically mills uranium supplied by other countries.
Nuclear News, 9/93, p. 76 ***(10112)***.

UKRAINE

INTERNAL DEVELOPMENTS

9/93

Ukrainian Prime Minister Leonid Kuchma resigns due to increasing political pressure from factions angered by his support of transferring Ukrainian nuclear weapons to Russia.
Alexander Tkachenko, Washington Post, 9/10/93, p. A32 ***(10143)***.

10/93

Ukrainian Defense Minister Konstantin Morozov resigns after he angered nationalists by advocating that Ukraine relinquish all its nuclear weapons.
Ustina Markus, RFE/RL News Briefs, 10/4/93-10/8/93, pp. 12-13 ***(10308)***.

10/93

A man identifying himself as a liaison officer of the "Crimean Republican Army" appeared on Ukrainian television demanding Crimean sovereignty and intimating that if his demands were not met, his group would attack Ukrainian nuclear power plants in an effort to make "western Ukraine disappear as a territory suitable for life."
Khreshchatyk (Kiev), 10/1/93, p. 2; in FBIS-SOV-93-192, 10/6/93, p. 18 ***(10136)***.

10/93

Vitaly Hryhorovych Radetsky is confirmed as Ukraine's new defense minister. He supports approval of START and the NPT, but agrees that Ukraine should receive security guarantees and financial compensation in return for dismantling its nuclear weapons.
Reuter, 10/8/93 ***(10218)***. *RFE/RL News Briefs, 10/11/93-10/15/93, p. 10* ***(10218)***.

10/93

Ukraine's parliament adopts a new military doctrine which pledges non-nuclear status for Ukraine.
Marta Kolomayets, The Ukrainian Weekly, 10/24/93, p. 2 ***(10115)***.

10/93

Ukrainian nuclear physicist and Chairman of the Ukrainian State Committee for Nuclear and Radiation Safety (GANU) Nicolai Steinberg reports that over the last year and a half, no liquid nuclear waste from Ukraine has been brought to the appropriate disposal facilities because it is cheaper to dump the waste into the rivers.
Annes Gamillschegg, Frankfurter Rundschau, 10/14/93, p. 1; in JPRS-TND-93-034, 10/27/93, p. 54 ***(10452)***.

10/93

Ukraine announces that it will deactivate 17 of its SS-24 strategic missiles by taking them off alert and removing the nuclear warheads, an announcement that contradicts previous reports that all ICBMs had already been taken off alert. The deactivation of the missiles implies that Ukraine has achieved partial operational control over the missiles.
John Lepingwell, RFE/RL Daily Report, 10/21/93 ***(10314)***.

10/93

The Ukrainian parliament passes a resolution by 221 to 38 allowing the continued operation of the Chernobyl nuclear power plant and lifting the moratorium on construction of new plants. Construction can now be completed on the Zaporozhe-6, Khmelnitski-2 and Rovno-4 VVER-1000 reactors, which should be operational by 1995.
Ustina Markus, RFE/RL Daily Report, 10/22/93 ***(10624)***.

10/93

Chernobyl plant officials discover that two uranium-filled reactor control rods are missing. The three-yard-long rods contain 454 uranium pellets and are valued at $1 million. An investigation is begun, which produces two hypotheses: first, that the fuel is not actually lost, but rather it is the documents recording its official transfer at an earlier date which are misplaced; and second, that the fuel was stolen. On 10/26/93, the leader of the State Committee for Use of Atomic Energy and Chernobyl Station Director N. Sorokin declares that only 260 grams of uranium-235 had been taken. Later, Chairman of the Ukrainian State Committee for Nuclear and Radiation Safety (GANU) Nicolai Steinberg states that the missing nuclear fuel assemblies were not stolen, but rejected as defective in 1987 and stored at a locked site.
Robert Seely, Washington Post, 11/12/93, p. A44 ***(10432)***. *Yuriy Khlystun, Kievskiye Novosti (Kiev), 10/30/93, p. 6; in JPRS-TND-93-036, 11/17/93, pp. 29-30* ***(10213)***. *Yuriy Khlystun, Kievskiye Vedemosti, 10/30/93, pp. 6-7* ***(10581)***.

11/93

First Deputy Nuclear Regulatory Chief Georgi Kopchinsky resigns from the Ukraine State Committee on Nuclear Radiation and Safety (UkrSCNRS) in protest of the parliament's decision to keep the Chernobyl plant open. He states that it is the decision to reopen the Chernobyl-2 reactor, now closed due to fire damage, which specifically influenced his decision to resign.
Nucleonics Week, 12/9/93, p. 11 ***(10394)***.

11/93

The Ukrainian parliament ratifies START-I but with ten conditions limiting its implementation. The vote commits Ukraine only to "stage-by-stage" disarmament of 36 percent of its missiles and 42 percent of its warheads. The document calls upon all nuclear states to pledge no first use against Ukraine of nuclear or conventional weapons or economic coercion; this pledge calls on nuclear states to refrain from threatening such actions. The document also makes ownership claims on all tactical and strategic weapons on Ukrainian territory. The parliament also ratifies the Lisbon Protocol, but omits Article Five, which stipulates that Ukraine join the NPT as a non-nuclear state in the "shortest possible time."
Margaret Shapiro, Washington Post, 11/19/93 ***(10434)***. *John Lepingwell, RFE/RL Daily Report, 11/17/93* ***(10434)***. *Marta Kolomayets, The Ukrainian Weekly, 11/21/93, p. 1* ***(10206)***.

Ukraine with European Community

10/93

Ukraine is seeking funds to help pay for the construction of a new sarcophagus for the Chernobyl-4 reactor. Western banks are reluctant to finance the project because Ukraine represents a "major lending risk," and because the result of the work would have no financial payback. A representative from the Ukraine Academy of Sciences and an advisor to Ukraine president Leonid Kravchuk had informal discussions on the funding problem in Germany with officials from the European Bank for Reconstruction and Development (EBRD). The EBRD suggests that the project be funded with government grants and bank credits instead of loans from financial institutions. Although a French consortium won an international competition for "Shelter-2" proposals last summer, no official tenders have been made and no feasibility studies have been done. Some sources say that if France, Germany, and the European Communities all contribute, the estimated $7 million for the feasibility study could be raised. The Commission of the European Communities (CEC) has authorized $7 million for Chernobyl-related funding, of which approximately $3.5 million could be allocated for the study. According to a French official, German funding of the project could be seriously jeopardized if Ukraine continues to operate Chernobyl-1 and -3. Ukraine subsequently decided to continue their operation. The structures that currently contain Chernobyl-4 were built in 1986; estimates state that the structures are safe for a period of seven to 10 years from the time that they were built.
Ustina Markus, RFE/RL Daily Report, 10/22/93 ***(10624)***. *Ann MacLachlan, Nucleonics Week, 10/21/93, pp. 17-18* ***(10195)***.

Ukraine with Germany

12/93

It is reported that in 1994 Ukraine will receive a German computer-based system called RODOS (real-time, on-line decision support), which will assist in predicting and mitigating the consequences of a nuclear emergency.
ENS NucNet, 12/17/93 ***(10623)***.

12/93

German Ambassador to Ukraine Alexander Arno presents Ukraine's Foreign Ministry Department of Military Disarmament and Arms Control with 50,000DM worth of computer equipment to aid in the implementation of START-I and to encourage Ukraine to accede to the NPT. The two countries are discussing cooperation on destroying the liquid fuel for Ukraine's SS-19 missiles.
The Ukrainian Weekly, 12/19/93, p. 8 ***(10436)***.

1/94

Ukraine's Rovno nuclear power plant, the Kiev Institute Enerhoprojekt, and Germany's KAB form UNA, a joint venture to improve safety at Rovno and other Ukrainian nuclear power plants.
Zhozef Shapoval, Kievskiye Vedomosti (Kiev), 1/5/94, p. 6 ***(10621)***.

Ukraine with IAEA

11/93

Director of IAEA Safeguards Bruno Pellaud is to meet with Ukrainian officials to discuss a proposal to implement a "close-to-full-scope safeguards" agreement prior to signing the NPT. Many western experts object to this, as it could pave the way for nations outside the NPT to take advantage of NPT-member benefits, such as importing fuel from the Nuclear Suppliers Group, and will take away some of the international community's leverage to pressure Ukraine into signing the NPT. The U.S. is in favor of the proposal as it would serve as a confidence-building measure. The IAEA states that talks are proceeding as if Ukraine will become a non-nuclear weapon state.
Mark Hibbs, Nucleonics Week, 10/28/93, pp. 6-7 ***(10214)***.

Ukraine with Libya and Pakistan

10/93

Ukraine denies accusations that it has sold nuclear technology to Libya and Pakistan.
Uniar (Kiev), 10/6/93; in JPRS-TND-93-034, 10/27/93, p. 38 ***(10198)***.

Ukraine with Moldova

1/94

Authorities confiscate 3.3 pounds of radioactive materials found in Kishinev, Moldova. The material allegedly belonged to a group of six people attempting to smuggle it out of Ukraine.
Philadelphia Inquirer, 12/24/93; in International Security Digest, 1/94, p. 5 ***(10377)***.

Ukraine with Multi-Country Group

10/93

Representatives from the U.S., Canada,

Sweden and Ukraine sign a multilateral agreement establishing a Scientific and Technological Center to employ Ukraine's nuclear engineers and scientists in civilian research and thus prevent the proliferation of nuclear technology.
Ukrayinske Radio First Program Network (Kiev), 10/26/93; in FBIS-SOV-93-206, 10/27/93, pp. 51-52 ***(10613)****. Serhiy Danylenko, Holos Ukrayiny (Kiev), 11/3/93, p. 5; in JPRS-TND-93-037, 12/8/93, p. 49* ***(10613)****.*

1/94

Ukrainian Deputy Foreign Minister Borys Tarasyuk states that the U.S., Russia, and U.K. have agreed to sign a multilateral document extending security guarantees to Ukraine once START-I has been implemented and Ukraine has adhered to the NPT.
Washington Times, 1/27/93, p. A13 ***(10630)****.*

Ukraine with Poland

1/94

Poland has given Ukraine $10,000 in equipment to monitor radioactive atmospheric pollution, but Ukraine lacks the money to install it.
Olga Iwaniak, Radio Warszawa Network (Warsaw), 12/29/93; in JPRS-TND-94-001, 1/13/94, p. 52 ***(10622)****.*

Ukraine with PRC

9/93

Chinese Foreign Minister Qian Qichen says that China has sent a diplomatic note to Kiev offering Ukraine security guarantees in exchange for its promise to relinquish its nuclear weapons. He said that China could not offer financial assistance for Ukrainian disarmament.
Reuter, 9/7/93; in Executive News Service, 9/7/93 ***(10277)****.*

Ukraine with Russia

9/93

At the Russian-Ukrainian summit at Massandra, an agreement is signed whereby Ukraine will send its warheads to Russia for dismantlement in exchange for uranium fuel for Ukraine's nuclear power plants.
Fred Hiatt, Washington Post, 9/4/93, pp. A17, A22 ***(10144)****.*

9/93

Russia annuls the agreement signed at the Massandra summit regarding the dismantling of Ukraine's nuclear weapons. A handwritten amendment to the agreement excludes the SS-24 ICBMs from dismantlement. Ukraine maintains that the amendment was in the agreement when it was signed, but Russia claims that it was added after the signing.
John Lepingwell, RFE/RL Daily Report, 9/22/93 ***(9714)****.*

10/93

Russian Ambassador to the U.S. Vladimir Lukin states that Ukraine has not allowed Russian experts to enter the country to monitor and maintain the nuclear weapons stationed there. He adds that this represents a dangerous violation of the Lisbon Protocol, because Ukraine does not have the resources to properly maintain the weapons on its own. Lukin cites a 9/93 incident in which experts reported finding dangerously high temperatures and levels of radiation at the Pervomaisk nuclear weapons storage facility.
Sergio Sergi, L'Unita, 10/24/93, p. 14; in FBIS-SOV-93-205, 10/26/93, pp. 13-14 ***(10313)****.*

10/93

Minatom officials say that an agreement between Russia's Krasnoyarsk-26 spent fuel reprocessing center and Ukraine's nuclear industry on reprocessing spent fuel from Ukraine's VVER-1000 nuclear reactors is contingent on Ukraine's agreement to purchase fresh UO_2 fuel from Minatom under IAEA safeguards. A grace period which allows Minatom to supply the fuel to Ukraine, even though Ukraine has not yet signed the NPT, will expire at the end of 1993, after which time Minatom officials expect IAEA safeguard requirements will necessitate the end of fuel supply to Ukraine.
Mark Hibbs, Nuclear Fuel, 10/11/93, pp. 2-3 ***(10494)****.*

10/93

Two nuclear warheads are transferred from Ukraine to Russia on 10/26/93. The warheads had been sitting in a railroad car on the Russian-Ukrainian border since 10/5/93 while Ukraine sought assurance of compensation from Russia for the value of the nuclear materials and while Russia accused Ukraine of violating the transfer agreement signed at the Massandra summit.
John Lepingwell, RFE/RL Daily Report, 10/27/93. Ustina Markus, RFE/RL Daily Report, 10/21/93 ***(10317)****.*

11/93

Russia announces its intention to begin withdrawing nuclear warheads from Ukraine on 1/1/94 under an agreement between the two countries.
ITAR-TASS, 11/5/93; in JPRS-TND-93-036, 11/17/93, p. 22 ***(10215)****.*

1/94

Russia halts fuel supplies to Ukraine's nuclear power stations because of Ukraine's inability to pay the required 48 billion rubles for new fuel. Ukraine's State Committee for the Use of Nuclear Power states that unless new fuel is obtained, one-third of the country's nuclear power plants will have to be shut down in 1994, and the remaining two-thirds in 1995.
UT-1 Television Network (Kiev), 1/28/93; in FBIS-SOV-94-020, 1/31/94, p. 34 ***(10627)****.*

Ukraine with Russia and United States

12/93

Ukrainian President Leonid Kravchuk announces that Ukraine, Russia and the U.S. will conclude a tripartite agreement on financial compensation, security guarantees, and technical and scientific aid to Ukraine in return for its dismantlement of nuclear weapons.
Reuter, 12/18/93; in Executive News Service, 12/18/93 ***(10535)****.*

Ukraine with Turkey

11/93

Turkish police recover 4.5 kilograms of uranium from a 10 kilogram batch believed to have been stolen from the Chernobyl nuclear power plant.
Robert Seely, Washington Post, 11/12/93, p. A44 ***(10432)****.*

UKRAINE WITH UNITED STATES

9/6/93

The U.S. International Trade Commission (ITC) determines that uranium supplied by Ukraine is "injurious to U.S. industry," and that importers will be required to post a cash bond equal to 129.29 percent of the value of each shipment. This announcement is the ITC's final determination, closing the Department of Commerce's anti-dumping case against Ukraine that started in 11/92.
Nuclear News, 9/93, p. 76 ***(10112)***.

10/93

U.S. Secretary of State Warren Christopher and Ukrainian Foreign Minister Anatolii Zlenko sign an agreement stipulating that the U.S. will provide $175 million in aid for the dismantling of Ukrainian nuclear weapons. Another source reports that Christopher said that if Ukraine agrees to give up its nuclear arsenal, the U.S. will provide $330 million in aid and technical assistance.
John Lepingwell, RFE/RL News Briefs, 10/25/93-10/29/93, p. 11 ***(10114)***. *Carla Ann Robbins, Wall Street Journal, 10/26/93, p. A13* ***(10116)***.

10/93

Ukrainian President Leonid Kravchuk promises to submit START-I, the Lisbon Protocol, and the NPT to parliament for ratification.
John Lepingwell, RFE/RL News Briefs, 10/25/93-10/29/93, p. 11 ***(10114)***.

11/93

At a meeting with U.S. Secretary of State Warren Christopher, Ivan Plyushch, Chair of the Ukrainian Supreme Council, states that Ukraine should receive $5 billion in exchange for 170 strategic missiles on its territory.
Uniar (Kiev), 11/3/93; in JPRS-TND-93-036, 11/17/93, p. 28 ***(10208)***.

11/93

U.S. intelligence reports that Ukraine has the capability to break the control codes of former Soviet missiles in Ukraine, and is motivated to do so by the threat of Russian aggression.
Martin Sieff, Washington Times, 11/30/93, pp. A1, A8 ***(10318)***.

12/93

ABB Combustion Engineering Nuclear Power of the U.S. announces its agreement with the Ukrainian government to provide nuclear instrumentation monitoring systems (NIMS) for the Khmelnitsky and Zaporozhia nuclear power plants. ABB will work with Ukraine's Hartron, which will install the monitoring systems and eventually manufacture the needed safety upgrade equipment.
Nucleonics Week, 12/23/93, p. 7 ***(10619)***.

12/93

Duke Engineering & Services signs a contract to develop a spent fuel dry cask storage system for the Zaporozhia nuclear power plant. The plant is due to run out of storage space in 1995 due to Russia's refusal to accept the spent fuel for reprocessing.
Ann MacLachlan, Ray Silver and Elaine Hiruo, Nuclear Fuel, 1/17/94, pp. 16-17 ***(10673)***.

UZBEKISTAN

UZBEKISTAN WITH EUROPEAN COMMUNITY AND UNITED STATES

12/93

Uzbekistan reports its uranium sales to the U.S. Department of Commerce, including a sale of 415,812 pounds of U308 to Nukem Inc. of the U.S. for an approximate unit price of $8.36/lb, and seven sales totalling 6.9 million pounds to a "European concern," which is said to be Nukem GmbH. Before reaching the buyer, 381,000 pounds of the 6.9 million were sent to the U.S. for reprocessing; the remaining amount is being stored at European converters such as British Nuclear Fuels.
Michael Knapik, Nuclear Fuel, 12/6/93, p. 2 ***(10632)***.

UZBEKISTAN WITH UNITED STATES

11/93

Petitioners in the anti-dumping case against former Soviet uranium exporters ask the U.S. Department of Commerce (DOC) to review its suspension agreements with Russia, Kazakhstan, Kyrgyzstan and Uzbekistan and resume anti-dumping investigations, in the hope that this will result in anti-dumping duties being levied against the former Soviet republics. Uranium from these republics is now entering the U.S. under a grandfather clause in the suspension agreements. On 11/17/93, DOC announces that it is beginning a review of the agreements with these countries, and will complete the review by 10/31/94. DOC says that, at this time, it has no evidence that these countries have violated any of the agreements.
Michael Knapik and Wilson Dizzard III, Nuclear Fuel, 11/8/93, pp. 1-4 ***(10472)***.