



U.S. AGENCY FOR  
INTERNATIONAL  
DEVELOPMENT

**ACTION MEMORANDUM FOR THE DIRECTOR, NIS TASK FORCE**

**FROM:** NIS/TF, Barbara Turner *BT*

**SUBJECT:** Project Authorization Amendment No.2 for the Energy Efficiency and Market Reform Project.  
Project Number 110-0002.

**PROBLEM:** Your approval is required to amend the Energy Efficiency and Market Reform Project Authorization to (i) provide an additional \$22 million for Nuclear Power Plant Safety, (ii) re-define such assistance to conform to the full funding for the Multilateral Nuclear Safety Initiative announced by Secretary of State Baker in May 1992 and (iii) increase the LOP funding from \$45.0 million to \$67.0 million.

**BACKGROUND.** This Project was originally authorized by the Bureau for Europe on January 21, 1992 at a level of \$1.8 million. The project was designed to provide highly visible, high impact activities addressing energy sector problems throughout the NIS which also support U.S. private sector opportunities where the U.S. has a comparative advantage. The original project focused on improving efficiency in energy production and consumption and on implementing market reforms in the energy sector. It financed technical advisors, and where appropriate low cost equipment. The original authorization anticipated the need for additional funds to be provided through project amendments. To date, Amendment No.1 extended project life to February 25, 1996 and increased life-of-project funding to \$45.0 million. The first amendment expanded project activities to include nuclear plant safety and operation; coal, gas, oil and electricity production and delivery systems. Nevertheless, more recent analysis indicates that massive improvements and assistance to promote nuclear safety are urgently needed.

**DISCUSSION.** During the May 23-24, 1992 International Conference held in Lisbon to coordinate assistance to the former Soviet Union, Secretary of State Baker proposed a Multilateral Nuclear Safety Initiative to expand international efforts in this area. In support of this initiative the U.S. pledged \$25 million. As was decided by the Secretary of State, the Department of Energy (DOE) and Nuclear Regulatory Commission (NRC) will take the lead to implement the Initiative, via A.I.D.'s transfer of ESF Funds. (See TAB A, Attachment V). With this Project Authorization Amendment, A.I.D. is proceeding to implement the State Department's decision.

Congress has been notified via Congressional Notification of this Amendment, including a summary description of the program which expired without comment July 15, 1992 (See TAB B). While the U.S. continues to support efforts through this project and other activities to get unsafe reactors off-line, many steps can be taken now to enhance operational safety and reduce risks of a nuclear accident. Pursuant to this Amendment No. 2, the Lisbon Nuclear Safety Initiative will be implemented through an existing project component dealing with nuclear safety. This Initiative will enhance previously planned activities in the area of nuclear safety and increase total resources authorized for Nuclear Power Plant Safety from the \$3 million to \$25.0 million. This project component, as described below, will comprise four main activities:

- (a) Establish two regional training centers, one in Russia to provide operational safety training and one in Ukraine with a computer-based simulator for VVER-1000 reactors. The centers will serve as a focal point for training and for establishing comprehensive western safety management systems in existing reactors in the new independent states.
  - Establishment of these centers will be conditioned on agreement that reactor crews from other new independent states and the Baltics can also use the facilities for training purposes.
  - These training centers will cover the full range of civilian nuclear issues from training to nuclear clean-up.
- (b) Provide immediate operational safety enhancement through improvement of emergency operating procedures and improvement of nuclear plant equipment servicing and maintenance practices; translations of U.S. standards, guidelines, and ancillary materials; support to help keep safety procedures and training materials updated; development of alarm response procedures; improvement of diagnostics methods and hardware; and, training for technical support personnel at nuclear power plants.
- (c) Provide risk reduction measures for RBMKs and VVER 440/230s through improvement of confinement performance for severe accidents; development of methods to prevent uncontrolled hydrogen explosions; installation of dedicated emergency diesel and feedwater pumps in protected areas; and improvement of basic fire detection capability.

- (d) Assist regulators in developing consistent and effective safety standards and procedures and provide training in nuclear materials safety, safeguards accountancy, regulatory law, and use of radioactivity monitoring equipment.

These activities are described in more detail along with the Amended Budget, Table I in the Project Memorandum Amendment (Tab A).

**BENEFICIARIES.** The project will directly benefit industrial and energy plant managers who receive technical assistance and training. Indirect beneficiaries include consumers and citizens of the NIS republics who depend on these energy sources. Virtually all of mankind are potential beneficiaries of the nuclear safety activities.

**OTHER DONORS.** This project complements the broad energy strategy that has been developed by the international community, in particular the G-24 countries, for the NIS. The strategy for addressing critical energy problems in the NIS was developed by the Technical Assistance Group and the Energy Working Group (EWG) of the Coordinating Conference on Assistance to the NIS held in January 1992 under the auspices of the U.S. Department of State. This project is fully consistent with the National Security Council Study undertaken to analyze the priority needs for nuclear safety. Finally, the amendment specifically incorporates and implements the Multilateral Nuclear Safety Initiative proposed by the U.S. at the Lisbon Conference. The project implementation will be closely coordinated with energy activities sponsored by the World Bank, the European Community, the International Energy Agency and other bilateral donors.

**WAIVERS.**

Nuclear Technology: Technical assistance, training, technical cooperation in nuclear safety matters and technologies is being extended to the NIS republics. Section 510, FY1991 Appropriations Act, carried forward under the Continuing Resolution for FY1992, prohibits the use of appropriate funds to "...finance the export of nuclear equipment, fuel or technology." However, Section 121 of the Joint Resolution for continuing appropriations for FY1992 authorizes assistance to the NIS "...notwithstanding any other provision of law". In approving this authorization, you will be invoking this authority, notwithstanding any other legislative prohibition on such assistance.

**DESIGN AND REVIEW PROCESS.** The design, approval and authorization of this amendment follows procedures established for NIS projects

and otherwise meets A.I.D. regulations and policies. Staff of the NIS Task Force and the Office of the State Department's Senior Coordinator have participated in the development of this amendment, providing policy guidance and clearing the Project Memorandum Amendment (Tab A).

A preliminary review of the June 30th draft of a draft Initiative Implementation Plan by representatives of the Coordinating Group was held on July 1, 1992. The primary concern of participants focused on the new activities to be financed and the need for clear objectives and conditionality for providing assistance in this area. Moreover, it was noted that reasonable cost estimates and a baseline would be needed to justify funding levels and measure project impact. These are being gathered as noted in the schedule of Nuclear Safety Initiative Activities (Attachment IV TAB A). Given that all the new activities to be financed have been previously identified and agreed to in international fora, the mix of activities was considered appropriate. However, there was concern over the administrative arrangements which rely on a multiple committee structure. Steps remaining to define the Nuclear Safety Initiative are listed in attachment IV TAB A. Based on discussions held during the Interagency Review held on July 28, 1992, it was concluded that all relevant USG agencies support this amendment to the Project.

**CONGRESSIONAL NOTIFICATION (CN).** The Congressional Notification was submitted on June 30, 1992 and expired on July 15, 1992. A copy is attached (TAB B).

**SOURCE, ORIGIN AND NATIONALITY:** Goods and services procured under the Project will have their source and origin in the United States (Code 000) for foreign exchange costs or in the cooperating country for local currency costs. A formal determination under Section 604 (a) of the Foreign Assistance Act of 1961, as amended, was approved March 30, 1992 by the Deputy Secretary of State to remove the NIS from the category of non-Free World countries. (TAB C). Local procurement within the states of the NIS will be conducted in accordance with Chapter 18 of A.I.D. Handbook 1B.

**ENVIRONMENTAL CONSIDERATIONS:** The Project will finance technical assistance, training and commodities procurement. The emphasis on improving aging unsafe nuclear plants by introducing appropriate safety systems and procedures along with other operational reforms is expected to contribute to much higher safety standards and greater protection of the environment, e.g. toxic waste and radioactive fallout etc.. The technical assistance and training provided will encompass regulatory officials training; team inspections; fire hazard analysis; establishment of training centers; creation of an incident response center and regulatory safety analysis. The improvement of safety procedures at nuclear power plants are expected to have positive environmental benefits.

In general, technical assistance and training activities are categorically excluded from examination under A.I.D. Environmental Procedures 22 CFR Sections 216.2 (c)(1)(i) and 216.2 (c)(2)(i). However for this project, a positive determination (setting a requirement for further environmental review in the process of developing specific subproject activities) is recommended. The IAAs for these activities will provide that the environmental procedures of DOE and NRC will apply to project funds transferred to each, including the Environmental Assessment as discussed in the IEE. In addition, A.I.D. will review the procedures which DOE and NRC will apply prior to project implementation. The IEE is contained for your signature (TAB D).

**AVAILABILITY OF FUNDS:** Funding in the amount of \$15.6 million were previously apportioned by OMB and obligated by A.I.D.; an additional \$22 million has been requested from OMB to fund the nuclear safety activities proposed herein.

**IMPLEMENTATION ARRANGEMENTS:**

Obligation: As per Secretary of State Baker's decision, Inter-Agency Agreements (IAAs) will be negotiated with the Department of Energy and the Nuclear Regulatory Commission to undertake the nuclear safety and regulatory improvement activities of the project. The IAAs will further describe their responsibilities as lead agencies.

Monitoring: Overall project supervision will be the responsibility of the implementing USG Agencies, i.e. DOE and NRC. NIS/TF/EET with the support of regional AID missions will monitor the safety and regulatory activities to ensure compliance with any applicable AID regulations. Support to the activity will be provided by other bureaus to the extent workloads and resources permit. AID/W will conduct field visits and will review reports provided by grantees, contractors, participating agencies (DOE and NRC) and Embassy staff travelling throughout the region. A.I.D. and contractor/participating agency travel to the field will be cleared in advance with appropriate Regional AID staff.

Quarterly reports will be required of all project implementors (contractors and participating agencies). Project Implementation Reviews will be conducted on a regular basis. Periodic field assessments will be undertaken with the necessary frequency to ensure good project management.

A Project Steering Committee will be convened periodically to review overall project policy, strategy and management. The Committee will be composed of appropriate members of U.S. agencies participating in the project and other relevant U.S. Departments.

Evaluation: Each implementing Agency will be required to prepare an evaluation plan for submittal to USAID. USAID will consult on the

composition of the evaluation teams and the timing of any evaluations. Project funds will be made available to finance external evaluations, as necessary.

Audit: Contracts executed under the project will provide that the audit and inspection requirements set forth in the Inspector General Act of 1978, as amended, shall apply. A.I.D.'s Inspector General shall ensure full compliance with all applicable provisions of the Act. In addition, non-federal audits will be undertaken and necessary funds have been provided in the project budget for this purpose.

Host Country Duties and Taxes and other critical Requirements:

A circular 175 Authorization was obtained from the Deputy Secretary of State on February 4, 1992 permitting negotiation of U.S.-NIS republics agreements covering these matters. Bilateral agreements have been signed with Russia, Ukraine and Kazakhstan. These agreements include appropriate language concerning aid recipients' responsibilities and contributions, duties and taxes, as well as audit rights. Each agreement will ensure, inter alia, that A.I.D. funds are not used to pay host country duties or taxes, that site inspections by the IG may be made, and that A.I.D. financed commodities will be used only for project purposes.

**STATUTORY CHECKLIST(S):** The State Department completed checklists for all republics of the NIS. As a result, all statutory requirements have been met. Copies of those classified documents are on file.

Because certain states of the former Soviet Union are indebted to U.S. citizens, the Secretary of State issued a 620(c) determination on January 20, 1992 that program activities may proceed based on national security considerations.

All "taking into account" matters were reviewed and approved by the Administrator on January 18, 1992

**AUTHORITY:** On September 10, 1991, the Secretary of State signed a Section 620(f) determination to permit assistance for the former Soviet Union. You have authority to authorize this project pursuant to Interim Reorganization Delegation of Authority No. 10 dated March 30, 1992, from the Associate Administrator for Operations.

**RECOMMENDATION:** That by signing below and where indicated you:

(1) authorize this Amendment to the Energy Efficiency and Market Reform Project, AID Project No. 110-0002, to increase planned life-of-project funding from \$45.0 million to \$67.0 million, subject to the availability of funds;

(2) approve a new Initial Environmental Examination (TAB D) covering the additional activities; and,

(3) approve the Nuclear Safety and Regulatory component of the project pursuant to "notwithstanding" authority.

Approved: \_\_\_\_\_

*MB*

Disapproved: \_\_\_\_\_

Date: \_\_\_\_\_

*8/7/92*

**Attachments:**

- TAB A - Project Memorandum Amendment No. 2
- TAB B - Congressional Notification
- TAB C - Section 604 (a) Determination dated 3/30/92
- TAB D - Initial Environmental Examination

*J. Brown*

drafted by: DMasters NE/ENA, EMarkeset NIS/TF

Clearances :

NIS/TF: HJohnson *C. Pascual (DRAFT)* Date *8/7/92*  
NIS/TF: INesterczyk *2001* Date *8/7/92*  
GC/NIS: TGeiger *[Signature]* Date *8/7/92*  
NIS/TF: CMoseley DRAFT Date *8/6/92*  
NIS/TF: DLong DRAFT Date *[Signature]*  
ST/D/CISA: CRufennacht DRAFT Date \_\_\_\_\_  
ST/OES: CKessler DRAFT Date \_\_\_\_\_  
ST/EB/ERF/OGE: DBrown\_EJones for (DRAFT) Date 8/7/92

**DRAFT**

STANDARD FORM (SECTION 632(b) of the FAA, AS AMENDED)  
INTER-AGENCY AGREEMENT BETWEEN  
THE AGENCY FOR INTERNATIONAL DEVELOPMENT (A.I.D.)  
AND  
NUCLEAR REGULATORY COMMISSION (NRC)

SUBJECT: Transfer to NRC for the Implementation of the  
Nuclear Safety Initiative for the NIS under the Energy  
Efficiency and Market Reform Project.

Project Title: Energy Efficiency and Market Reform

Project Number: 110-0002

Activity Name: Nuclear Safety Initiative (NRC)

Obligation Number: 110-0002.x

Amendment Number:

I. PURPOSE

The purpose of this Inter-Agency Agreement (IAA) between the NRC and the Agency for International Development is to define the procedures under which A.I.D. shall transfer funds to NRC to implement the Nuclear Safety component of the Energy Efficiency and Market Reform Project.

II. AUTHORITY AND USES OF FUNDS

Pursuant to Section 531 of the Foreign Assistance Act, as amended, (the "Act") and Section 632(b) of the Act, A.I.D. shall reimburse up to Three Million United States Dollars (\$3,100,000) to NRC to implement activities of the Nuclear Safety Initiative. Additional incremental funding will be provided subject to the availability of funds and to the agreement of the parties to proceed. Annex A describes the draft Implementation Plan and Annex B provides tasks and an estimated budget for the initial activities is understood that the funds made available will be used in a manner consistent with the purposes of the Nuclear Safety Initiative and in accordance with the laws and regulations governing the overall project.

has complied with the terms of the agreement. An audit shall be conducted for each fiscal year of the grant but, in any case, not less frequently than every two years. The audits shall be performed in accordance with generally accepted government auditing standards issued by the Comptroller General of the United States.

(b) DOE shall ensure that contracts with foreign contractors include the appropriate audit and examination of records clauses as specified in the Federal Acquisition Regulations.

(c) DOE shall ensure, by appropriate written arrangement(s) with aid recipients, that such A.I.D.-financed assistance be subject to audit and inspection by authorized U.S.G. officials.

#### OTHER AGREEMENTS:

13. DOE, with the assistance of the A.I.D. representative and if necessary the United States Embassy in the cooperating country (ies), shall seek to obtain for its personnel, contractors, and grantees as well as for any commodities financed hereunder exemptions from taxes, duties and fees which may be imposed by the host country/countries with respect to the assistance program financed by this IAA.

14. DOE shall ensure, with the assistance of the A.I.D. Representative and if necessary the United States Embassy in the cooperating country (ies), in written arrangement(s) which DOE and/or grantees or contractors financed by the funds allocated hereby shall enter into with recipients of A.I.D. assistance that: (1) such assistance shall only be used for the purposes stated therein and, (2) that if such assistance is no longer needed for such purposes, that such assistance may be used for other purposes as may be mutually agreed upon by DOE in consultation with A.I.D.

#### AUTHORIZED REPRESENTATIVES:

15. Authorized representatives for this IAA are the signatories to this agreement, or the person acting in or holding their position, and others, whom each of the parties may designate and notify to the other party in writing. Representatives other than the person acting in or holding the position of the original signatory may execute all actions with respect to this agreement, except for formal amendments hereto.

AMENDMENTS AND MODIFICATIONS:

16. Implementation Letters may be used to record mutually agreed upon adjustments to the Project Description (Annex A) or to the Financial Plan (Annex B) without formal amendment to this IAA. Implementation Letters shall not be used, however, to modify the text of this IAA, which shall only be done through formal amendment hereto.

17. This IAA may be modified or canceled upon the mutual, written consent of both parties.

\_\_\_\_\_

\_\_\_\_\_

Agency for International

Department of Energy

Dated: \_\_\_\_\_

Dated: \_\_\_\_\_

Funding:

Appropriation Symbol:

Budget Plan Code:

Funds Control Number:

The Lisbon Nuclear Safety Initiative consists of the following four components which build on and expand the ongoing work of the Department of Energy and the Nuclear Regulatory Commission over the past five years. Additional details are provided in Annex A:

- (a) Establish two regional training centers
- (b) Provide immediate operational safety enhancement
- (c) Provide risk reduction measures for RBMKs and VVER 440/230s
- (d) Assist regulators in developing consistent and effective safety standards and procedures

The initial tasks to be undertaken under this agreement will consist of those activities outlined in Annex B to this agreement:

### III. TERMS AND CONDITIONS

This Agreement is made under the following terms and conditions.

#### FISCAL TERMS:

1. Execution of this Agreement will constitute an obligation by A.I.D. of the 1992 funds transferred hereunder for this Activity. This Agreement shall be effective on the date of execution.

2. The financial plan in Annex B provides an illustrative budget for the implementation of the Activity described in this IAA. Under no circumstances may NRC make any adjustments which will cause the reimbursable amount to exceed the amount made available under section II of this agreement.

3. (a) NRC will bill A.I.D. through OPAC procedures or by submitting a Standard Form 1081 (SF-1081) to the Agency for International Development, FA/FM/CARD, Inter-Agency Billing Unit, SA-2, Room 603, Washington, D.C. 20523-0208.

(b) The amount billed will be determined by NRC and will be billed for an expenditure transfer into an account administered by NRC and for which NRC provides fiscal reports to OMB and/or the Department of Treasury. This amount will be treated as an advance by A.I.D. and will be expended based on the quarterly reports, described below, detailing the implementation of the NRC Nuclear Safety Initiative.

4. NRC shall provide a semi-annual report within 30 days of the end of each half year, showing the amount of the original advance as well as current quarter and cumulative expenditures as follows. This information shall be provided in summary for the Nuclear Safety Initiative and separately to show the allocation to each cooperating republic, as appropriate:

	<u>Cumulative Commitment</u>	<u>Current Qtr Expenditure.</u>	<u>Cumulative Expenditure</u>
a. Contractor Personnel			
b. Travel			
c. Training			
d. Equipment costs			
e. Other costs			

Categories of expenditures reported by NRC shall conform to budget categories shown in the financial plan in Annex B.

5. (b) The report above in item 4. will be used to liquidate the advance authorized hereby. An original and three (3) copies of the report shall be submitted to the Agency for International Development, FA/FM/CARD, Inter-Agency Billing Unit, SA-2, Room 603, Washington, D.C. 20523-0208. The report must be signed in the original by an authorized official of NRC's billing office.

6. NRC shall be entitled to reimbursement under this agreement of an amount not to exceed (\$310,000) for costs incurred after June 1, 1992 and before the effective date of this Agreement defined as follows: NRC shall not be entitled to reimbursement for any other costs incurred prior to the effective date of this Agreement.

ARGONNE NATIONAL LABORATORY (ANL)

\$10,000 EFFECTIVE 7/1/92 ADDITIONAL TECHNICAL SUPPORT TO  
DOE/NE -14

BROOKHAVEN NATIONAL LABORATORY

\$70,000 EFFECTIVE 7/1/92 CONTRACT MANAGEMENT, PROJECT  
MANAGEMENT, AND TECHNICAL SUPPORT TO DOE/NE - 14

BURNS AND ROE COMPANY

PROJECT MEMORANDUM AMENDMENT No.2  
(8/7/92)

Country: New Independent States Regional  
Project Title: Energy Efficiency and Market Reform  
Project Number: 110-0002  
Life of Project Funding: \$67.0 million (4 years)  
Current Authorized Funding: \$15.6 million (ESF Grant)  
Proposed Amendment: \$22.0 million (ESF Grant)

I. PROJECT PURPOSE: To improve the efficiency of energy production and consumption in the New Independent States (NIS) of the former Soviet Union, increase energy production, support energy sector privatization and market reform, and reduce safety risks of Soviet designed Nuclear Power Plants.

II. PROJECT ORIGIN AND STATUS: On January 21, 1992, the Energy Efficiency and Market Reform Project No. 110-0002 was authorized with an initial funding level of \$1.8 million dollars "to improve energy efficiency and promote energy price and market reforms". The original project authorization noted, "It is likely that over the course of the Project, a decision will be made to augment the resources allocated, as well as to extend the Project Assistance Completion Date. On May 21, 1992, Amendment No.1 provided an additional \$13.8 million; extended project life to February 25, 1996 and increased life-of-project funding to \$45.0 million. The first amendment expanded project activities to include nuclear power plant safety and operation; coal, gas, oil and electricity production and delivery systems. During the May 23-24, 1992 International Conference held in Lisbon to coordinate assistance to the NIS, Secretary of State Baker proposed a Multilateral Nuclear Safety Initiative to expand international efforts in this area. In support of this Initiative, the U.S. pledged \$25.0 million. As was decided by the Secretary of State, the Department of Energy (DOE) and Nuclear Regulatory Commission, (NRC) will take the lead to implement the Initiative, via A.I.D.'s transfer of ESF Funds. (See TAB A, Attachment V). With this Project Authorization Amendment, A.I.D. is proceeding to implement the State Department's announcement. Congress has been notified via the Congressional Notification for this Amendment, including a summary description of the program which expired without comment July 15, 1992 (See TAB B). While the U.S. continues to support efforts to have the high

risk reactors de-commissioned, there are many steps that can be taken now to enhance operational safety and reduce the risks of a nuclear accident.

III. REVISED PROJECT RATIONALE: Given the internationally recognized safety risks associated with aging and poorly controlled and maintained nuclear power plants, this amendment to the project will support enhanced nuclear safety and improved regulation. The revised project activities will expand and build upon the on-going activities in which the DOE and the NRC implement an operational and regulatory safety program. The risk reduction measures will involve working closely with the nuclear plant designers as well as plant operators and regulators (Attachment I). The rationale for the balance of the project is not changed.

IV. REVISED PROJECT DESCRIPTION: In line with Secretary of State Baker's decision, the implementation responsibility of this initiative will be transferred to the Department of Energy (DOE) and Nuclear Regulatory Commission (NRC). The second project amendment will increase authorized project funding from \$15.6 million to \$37.6 million; and planned L.O.P. funding from \$45 million to \$67 million. All activities will be carefully coordinated with activities financed by other bilateral and international agencies (Attachment II). Only the Nuclear Safety Component is changed by the amendment.

NUCLEAR POWER PLANT SAFETY AND REGULATION COMPONENT: At present, Inter-Agency efforts are already underway to develop an effective and comprehensive program to address the risks of aging nuclear power plant reactors in the NIS. Current efforts include the identification, development of cost estimates, prioritization and implementation of the most urgent operational safety improvements. In addition, regulatory reform measures and the identification of major critical and urgently required plant safety up-grade measures are being studied. The nuclear power safety and regulation activities, financed under this amendment, will provide additional technical assistance, commodity support, i.e. computer-based simulator and training, as follows:

- (a) Establish two regional training centers one in Russia to provide operational safety training and one in Ukraine with a computer-based simulator for VVER-1000 reactors. The centers will serve as a focal point for training and for establishing comprehensive western safety management systems in existing reactors in the new independent states.

-- Establishment of these centers will be conditioned on agreement that reactor crews from other new independent states and the Baltics can also use the facilities for training purposes.

-- These training centers will cover the full range of civilian nuclear issues from training

to nuclear clean-up.

- (b) Provide immediate operational safety enhancement through improvement of emergency operating procedures and improvement of nuclear plant equipment servicing and maintenance practices; translations of U.S. standards, guidelines, and ancillary materials; support to help keep safety procedures and training materials updated; development of alarm response procedures; improvement of diagnostics methods and hardware; and, training for technical support personnel at nuclear power plants.
- (c) Provide risk reduction measures for RBMKs and VVE 440/230s through improvement of confinement performance for severe accidents; development of methods to prevent uncontrolled hydroge explosions; installation of dedicated emergency diesel and feedwater pumps in protected areas; an improvement of basic fire detection capability.
- (d) Assist regulators in developing consistent an effective safety standards and procedures an provide training in nuclear materials safety safeguards accountancy, regulatory law, and use of radioactivity monitoring equipment.

#### V. ILLUSTRATIVE BUDGET:

See TABLE I.

Documents to obligate the \$22 million dollars identified in Table I for the Nuclear Power Plant Safety and Regulation activities will be finalized through Inter-Agency Agreement(s) with DOE and NRC. It is anticipated that these IAA Agreement(s) will be signed on or about September 25, 1992. In order to provide DOE and NRC with funding for initial start-up activities to expeditiously implement the Nuclear Safety Initiative prior to the signing of the \$22 million IAAs, A.I.D. will transfer approximately \$1.9 million to DOE and approximately \$1.1 million to NRC of the \$3 million nuclear component authorized on May 21, 1992 through Inter Agency Agreements. (Attachment III)

VI. ENVIRONMENTAL CONSIDERATIONS: The Project will finance technical assistance, training and limited commodity procurement. The project is likely to have a significant, but positive

environmental impact. The technical assistance provided will encompass assessments and feasibility work on pollution and environmental control issues. Activities aimed at rehabilitation and/or new energy production facilities will include an environmental review process. The amended project will give special attention to the improvement of safety standards at nuclear power plants. Technical assistance and training provided will include regulatory officials training; team inspections; fire hazard analysis; establishment of training centers; creation of an incident response center and regulatory safety analysis. This institutional capability to avert potential accidents represents a very significant environmental benefit from the project. Normally, in energy programs, technical assistance and training activities are excluded from examination under 22 CFR 216.2(c)(1)(i) and 216.2(c)(2)(i). In the present project, however, a positive determination (setting a requirement for further environmental review in the process of developing specific subproject activities) is recommended. The IAAs for these activities will provide that the environmental procedures of DOE and NRC will apply to project funds transferred to each, including the Environmental Assessment as discussed in the IEE. A.I.D. will review project specific procedures of DOE and NRC prior to and during implementation.

#### VII. IMPLEMENTATION:

Obligation: Inter-Agency Agreements (IAAs) under Section 632(b) will be negotiated with DOE/NRC to undertake the nuclear power plant safety and regulation activities.

Contracting and Procurement: Under the IAAs, DOE and NRC will use their own contracting and procurement authorities pertinent to the implementation of the NIS program.

Monitoring: Overall project supervision will be the responsibility of the implementing USG Agencies, i.e. DOE and NRC. NIS/TF will review the implementation reports provided by the participating agencies and will conduct field visits as appropriate to monitor the implementing Agency's compliance with the terms of each IAA.

Each implementing Agency will be required to provide quarterly implementation reports addressing performance against approved work plans. Project implementation reviews will be conducted on a regular basis. USAID will use feedback from periodic field assessments to verify the accuracy of the implementing agency's progress.

A Project Steering Committee will be convened quarterly to review overall project policy, strategy, management and implementation. The Committee will be composed of appropriate members of U.S. agencies participating in the project and other relevant U.S. Departments.

Evaluation: Each implementing Agency will be required to prepare an evaluation plan for submittal to USAID. USAID will consult on the composition of the evaluation teams and the timing of any evaluations. Project funds will be made available to finance external evaluations, as necessary.

Clearance: The Office of the Coordinating Committee has fully participated in the development of this amendment, providing policy guidance and clearing the Project Memorandum. Other appropriate clearances have also been obtained. The Technical Review of the Project Memorandum Amendment (PMA) by intra-Task Force offices within AID was completed on July 28, 1992 and revisions to the draft PMA have been incorporated in this version.

Audit: Contracts executed under the project will provide that the audit and inspection requirements set forth in the Inspector General Act of 1978, as amended, shall apply. A.I.D.'s Inspector General shall ensure full compliance with all applicable provisions of the Act. Project funds will be made available for Non-Federal audits, as required.

Host Country Duties and Taxes and other critical Requirements:  
A circular 175 Authorization was obtained from the Deputy Secretary of State on February 4, 1992 permitting negotiation of U.S.-NIS republics agreements. Each agreement will ensure, inter alia, that A.I.D. funds are not used to pay host country duties or taxes, that site inspections by the IG may be made, and that A.I.D. financed commodities will be used only for project purposes.

Attachments:

- I. Nelson/Butler Memo 6/19/92
- II. Implementation Plan: U.S. Lisbon Multilateral Nuclear Safety
- III. Draft Inter-Agency Transfer Agreement 632(b) With DOE/NRC
- IV. Schedule of Nuclear Safety Actions
- V. U/S Gallucci Testimony on the Hill and Sec. of State Baker Correspondence with Sec. of Energy Watkins. (on file in EET project file.)

Proposed Timeline:

- August 7, 1992: Project Authorization Amendment Signed.
- August 17, 1992: IAAs with DOE and NRC signed for interim funding.
- August 2-8, 1992: State/AID/DOE/NRC Team to Russia/Ukraine to review Draft Initiative Description.
- August 28, 1992: Final Initiative Description approved by Interagency Review.
- September 15, 1992: Complete final Technical Attachment to IAAs.
- September 25, 1993: AID signs IAAs with DOE and NRC.
- June, 1993: In-House Evaluation.
- February 25, 1996: PACD.

TABLE I  
ILLUSTRATIVE BUDGET  
(in \$ million)  
BY Category

	<u>Authorization</u>			<u>Life of Project(1)</u>
	<u>1st</u>	<u>2nd</u>	<u>3rd</u>	
<b>A. <u>NUCLEAR POWER PLANT SAFETY AND REGULATION:</u></b>				
Safety and Regulation	0.0	3.0	22.0	25.0
<b>B. <u>PRODUCTION AND DELIVERY SYSTEMS:</u></b>				
Coal	0.0	2.0	0.0	TBD (1)
Oil & Gas	0.0	1.0	0.0	TBD (1)
Power Sector	0.0	1.0	0.0	TBD (1)
<b>C. <u>PRICING, POLICY AND INSTITUTIONAL REFORM:</u></b>				
Reform	0.0	0.5	0.0	TBD (1)
Training	0.0	1.8	0.0	TBD (1)
<b>D. <u>EFFICIENCY AND PERFORMANCE IMPROVEMENT:</u></b>				
District Heating	1.8	2.0	0.0	TBD (1)
Refineries	0.0	1.5	0.0	TBD (1)
<b>E. <u>UNALLOCATED:</u></b>				
To Be Determined	<u>0.0</u>	<u>1.0</u>	<u>0.0</u>	<u>30.4 (1)</u>
<b>TOTAL:</b>	1.8	13.8	22.0	67.0 (1)

(1) It is too early to budget Life-of-Project amounts for each of the activities to be undertaken during this still initial phase of this project. The number of countries (12) that are candidates for assistance under the project, the diversity of their energy sectors and problems and United States interest combine to require that the project be designed to accommodate a broad range of needs and requests. It is anticipated that with the exception of the larger countries, only 2 or 3 of the 8 activities listed would be included in the energy activity portfolio of a given country. See project description for details. The Congressional Presentation provided the following breakdown of uses of the \$67 million Life-of-Project funding shown therein:

Technical Assistance:	\$30 million
Training:	20 million
Commodities:	<u>17 million</u>
Total	\$67 million

*J. Masters for 8/6/92*

drafted by: DMasters NE/ENA EMarkeset NIS/TF

Clearances:

- NIS/TF: HJohnson C. [unclear] Date 8/7/92
- NIS/TF: JWinn [unclear] Date 8/7/92
- GC/NIS: TGeiger [unclear] Date 8/10/92
- NIS/TF: CMoseley DRAFT Date 8/6/92
- NIS/TF: DLong DRAFT Date 8/6/92
- ST/D/CISA: CRufennacht DRAFT Date \_\_\_\_\_
- ST/OES: CKessler DRAFT Date \_\_\_\_\_
- ST/EB/ERF/OGE: DBrown\_EJones for-(DRAFT) Date 8/6/92

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AGENCY FOR INTERNATIONAL DEVELOPMENT  
 ADVICE OF PROGRAM CHANGE

COUNTRY: New Independent States Regional  
 PROJECT TITLE: Energy Efficiency and Market Reform  
 PROJECT NUMBER: 110-0002  
 FY 1992 CP REFERENCE: None  
 APPROPRIATION CATEGORY: Economic Support Funds (ESF)  
 LIFE-OF-PROJECT FUNDING: \$67,000,000 ESF (Grant)  
 INTENDED FY 1992 OBLIGATION: \$37,600,000 ESF (Grant)

This is to advise that A.I.D. now intends to obligate \$37,600,000 for the Energy Efficiency and Market Reform Project as follows: \$5,800,000 in FY 1991 Economic Support Fund (ESF) carryover grant funds originally planned for Pakistan, and \$31,800,000 in FY 1992 ESF grant funds, of which \$9,800,000 was notified by Congressional Notification #184 submitted March 6, 1992. This is a new project which was not included in the FY 1992 Congressional Presentation. Life-of-project funding is being increased by \$22,000,000 to a new total of \$67,000,000. \$3,000,000 for nuclear safety activities have already been authorized under previous Congressional Notification.

The \$22,000,000 increase in funds to be obligated this fiscal year will provide funding for the Multilateral Nuclear Safety Initiative proposed by Secretary of State Baker during the international conference in Lisbon May 23-24, 1992 to expand international efforts in this area. These funds will support such activities as the establishment of nuclear safety training centers in both Ukraine and Russia, provide operational safety enhancement, provide risk reduction measures, and assist regulators in developing safety standards and procedures.

Annex: Activity Data Sheet

**AGENCY FOR INTERNATIONAL DEVELOPMENT  
ACTIVITY DATA SHEET**

PROGRAM: New Independent States Regional

CP 81-88 (4-88)

TITLE Energy Efficiency & Market Reform		FUNDING SOURCE Economic Support Fund		PROMISED OBLIGATION (in thousands of dollars) FY 15,600		LIFE OF PROJECT (Months) 45,000	
NUMBER 1:0-0002	NEW <input checked="" type="checkbox"/>	PRIOR REFERENCE CN # 056 submitted 12/6/91		INITIAL OBLIGATION FY 92	ESTIMATED FINAL OBLIGATION FY 95	ESTIMATED COMPLETION DATE OF PROJECT FY 96	
GRANT <input checked="" type="checkbox"/>	LOAN <input type="checkbox"/>	CONTINUING <input type="checkbox"/>					

**PURPOSE:** To improve the efficiency of energy production and consumption in the new independent states of the former Soviet Union and to help implement market reforms in this sector.

**BACKGROUND:** The dramatic collapse of the Soviet Union presents an historic opportunity for a transition to a more peaceful and stable international order and the gradual integration of the NIS into the community of democratic nations. The United States has a vital interest in the success of this transition. Based on a series of action plans developed in conjunction with the January 1992 Coordinating Conference held in Washington, an Initial A.I.D. program for the region has been developed. The six objectives of this program are: to encourage free-market economic systems; promote democracy; meet urgent humanitarian needs; convert defense-oriented economies; promote bilateral trade and investment; and increase the efficiency of the energy sector in the new states. This project is a principal component of the program.

**Project Description:** Quick-impact, low-cost measures can save significant quantities of energy, thereby reducing environmental pollution and degradation. A.I.D. will apply this principle in the NIS region, with activities tailored to the specific needs of states to which the U.S. has extended diplomatic recognition. The project will demonstrate these savings and promote the energy pricing, regulatory, safety, and investment reforms necessary to commercialize energy-efficient technologies and improve productivity and management in specific industries. This Project is expected to expand the availability of oil, gas and coal supplies in the NIS region and will increase exchange earnings for participating states.

The Project will provide expert U.S. assistance to NIS states to help implement energy efficiency and safety improvements in district heating plants, industrial and electrical facilities, refineries, and petroleum and coal production companies, and safety improvements in nuclear facilities. It will also help to develop energy policy

and pricing reforms and new institutional, safety and regulatory mechanisms which promote market competition, stimulate capital investment and facilitate interstate trade and contractual arrangements. The Project will support the ongoing Energy Roundtable which brings together officials from the U.S. private sector with officials and business people from the NIS; and will support the Partners in Economic Reform program, an initiative of the U.S. coal industry. The Partners program helps relieve logistical bottlenecks and provides training in mine safety.

**Relationship of Project to A.I.D. Strategy:** The Energy Efficiency and Market Reform Project is one of the programs to support and to assist the democratic and economic reforms taking place in the NIS. Its focus will be on those states which have made a commitment to democratic and market reforms and energy efficiency.

**Beneficiaries:** The direct beneficiaries of the Project will be industrial, mining and energy managers, both in the private and public sectors, who will receive the technical assistance and training. Indirect beneficiaries will include citizens of the NIS who will benefit from more reliable energy supplies and such things as improved heating and environmental quality and new job opportunities as market reforms take hold in the NIS.

**Host Country and Other Donors:** The Project will be coordinated with the World Bank, the European Economic Community and other international and bilateral donors to new independent states.

<b>A.I.D.-Financed Inputs:</b>	<b>Life of Project</b>
	(\$000)
Technical Assistance: Industry Technical Experts	25,000
Training	10,000
Commodities: Energy Efficiency Equipment	10,000
<b>Total</b>	<b>45,000</b>

U.S. FINANCING (in thousands of dollars)				PRINCIPAL CONTRACTORS OR AGENCIES
	Obligations	Expenditures	Unliquidated	
Through September 30, 1990	1990	-	-	
Estimated Fiscal Year 1991	1991	-	-	
Estimated Through September 30, 1991	1991	-	-	
Proposed Fiscal Year 1992	1992	15,600	29,600	
		Future Year Obligations	Estimated Total Cost	
		29,600	45,000	

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TAB C

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REC'D S/S - HRM/DND

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U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT S/S *P. 24*



ORIG ACTMEM TO OIS  
COPIES TO ACTION MEMORANDUM

TO: The Deputy Secretary

THROUGH: T - Reginald Bartholomeu  
DA/A.I.D., Mark L. Edelmann *[Signature]*

FROM: PM - Richard A. Clarke *[Signature]*  
DD/POL, Larry Saters *[Signature]*

SUBJECT: Use of Foreign Assistance Act Funds for Procurement  
in Former Soviet Republics

ISSUES FOR DECISION

Whether to conclude that certain former Soviet Republics should no longer be considered as "non-Free World" countries for purposes of permitting foreign assistance procurement from them under a 1961 Presidential determination.

ESSENTIAL FACTORS

On October 31, 1991, you approved a determination that Eastern European countries and Mongolia should no longer be considered as "non-Free World" countries for purposes of permitting foreign assistance procurement from them under a 1961 determination by President Kennedy. The decision memorandum is attached at Tab A.

Your October determination recognized that certain countries, including the Soviet Union, would continue to be excluded from procurement eligibility. (The other countries were Afghanistan, Libya, Vietnam, Cuba, Cambodia, Laos, Iraq, Iran, North Korea, Syria, and the People's Republic of China). Your determination also recognized that, if warranted by changed conditions with respect to any of these countries, A.I.D. would seek a similar foreign policy determination from the Department.

In view of the break-up of the Soviet Union, the U.S. Government has taken a number of steps to support a peaceful transition toward democratic institutions and market economies in the former Soviet Republics. The President on December 25th proposed conducting full diplomatic relations with Russia, Ukraine, Armenia, Byelarus, Kazakhstan, and Kyrgyzstan; and assistance activities (primarily technical and humanitarian

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assistance) have been initiated by A.I.D. and the Congress notified accordingly. These actions are summarized in the Memorandum attached at Tab B. More recently, the President decided similarly to move ahead regarding diplomatic relations with Moldova, Turkmenistan, Uzbekistan, Tajikistan, and Azerbaijan. In this context it no longer makes sense to exclude these eleven Republics from foreign assistance procurement eligibility.

RECOMMENDATIONS

That you conclude that the <sup>12</sup>~~eleven~~ former Soviet Republics noted above should no longer be considered as "non-Free World" countries for the purpose of implementing President Kennedy's determination regarding Section 604(a).

MAR 30 1992

APPROVE MRK DISAPPROVE \_\_\_\_\_

DATE \_\_\_\_\_ DATE \_\_\_\_\_

That this determination will automatically extend to Georgia; Include Georgia; at such time as the United States establishes full diplomatic relations with it.

APPROVE \_\_\_\_\_ DISAPPROVE MRK

DATE \_\_\_\_\_ DATE \_\_\_\_\_

Attachments:

- TAB A - Action Memorandum for the Deputy Secretary  
Approved 10/31/91
- TAB B - Action Memorandum for the A.I.D. Administrator  
Approved 1/18/92

GC/LP:RLester	(Draft)	Date: 2/19/92
A-GC:TGeiger	(Draft)	Date: 2/20/92
EUR/OSA:PO'Farrell	(Draft)	Date: 2/20/92
ENE/EUR:DMerrill	(Draft)	Date: 2/20/92
GC/EUR:HMorris	(Draft)	Date: 2/20/92
AA/R&D:RBissell	(Draft)	Date: 2/23/92
STATE/L/EUR:TBuchwald	(Draft)	Date: 2/28/92
STATE/EUR/ISCA/ECON:KVolker	(Draft)	Date: 3/04/92
STATE/D/EEA:CRufenacht	<u>MRK</u>	Date: 3/15/92
STATE/S/P:JHannah	(draft) <u>MRK</u>	Date: 3/10/92, 3/11/92
STATE/P:C.L.VanVoorst	<u>MRK</u>	Date: 3/11/92
STATE/C:RWilson	<u>MRK</u>	Date: 3/11/92
STATE/EB/IFD/ODF:LMoriarty	<u>MRK</u>	Date: 3/11/92
STATE:H:CRAETHER	<u>MRK</u>	

Drafter:GC/CCM:KFries:DGC:RMeighan:FAAFP:2/7/92:Ext.78332:Revised 2/18/92:Revised 3/2/92 MRK

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EXAMINATION OF THE NATURE, SCOPE AND MAGNITUDE  
OF THE ENVIRONMENTAL IMPACT OF  
THE ENERGY EFFICIENCY AND MARKET REFORM PROJECT, NO. 110-0002

A. DESCRIPTION OF THE PROGRAM:

The purpose of the project, as amended, is to improve the efficiency of energy production and consumption in the New Independent States (NIS, formerly known as the Soviet Union), increase energy production, support energy sector privatization and market reform, and reduce safety risks of Soviet designed Nuclear Power Plants. The amended project will provide technical assistance in: (1) pricing and institutional reform; (2) oil, gas and coal production and delivery systems; (3) energy efficiency and environmental improvement in power, industry, and buildings; and, (4) nuclear power plant safety and regulation. All of these activities will contribute to economic and energy reform efforts that will enhance the environment, reduce pollution, introduce cleaner fuels and more efficient and safe technologies and management systems. The latter shall include operational safety enhancements; near term risk reduction and nuclear safety regulation.

B. RECOMMENDED ENVIRONMENTAL ACTIONS:

The proposed activities are designed to promote and enhance energy efficiency and promote safety procedures associated with nuclear power production. Overall this project should have a positive environmental impacts, that is environmental risks will be reduced. However, there is the potential for adverse environmental impacts associated with accidents and/or poor management of training and clean-up operations, as low-level waste will result from such activities. Therefore, to ensure that:

- 1) Accident contingency plans are in place;
- 2) appropriate worker training and right-to-know exists;
- 3) and appropriate disposal of contaminated items is planned;

It is recommended that an Environmental Assessment be conducted according to DOE's regulations for domestic facilities. This is an opportunity to introduce U.S. environmental procedures and standards. The EA should be considered a proactive tool, conducted collaboratively with NIS technical staff, to ensure environmental quality. The project manager will work closely with the Task Force Environmental Officer to prepare the scope-of-work for the EA. Where potential negative impacts are

identified during the EA, the EA team should develop recommendations to avoid or mitigate such potential impacts. The Environmental Officer is responsible for reviewing and approving the completed EA. This activity should occur prior to any proposed field activities that would involve new generation of nuclear waste; however, other activities can commence while the EA is being planned and conducted.

Action Recommended: Positive Determination.

INITIAL ENVIRONMENTAL EXAMINATION

(A) PROGRAM COUNTRY: Newly Independent States  
(B) ACTIVITY: Energy Efficiency and Market Reform (No. 110-0002), Amended  
(C) FUNDING: \$67.0 million  
(D) PERIOD OF FUNDING: FY 1992 - FY 1997  
(E) STATEMENT PREPARED BY: Donald C. Masters, NE/FNA  
(F) RECOMMENDED ENVIRONMENTAL ACTION: POSITIVE DETERMINATION  
(G) DECISION OF DIRECTOR NIS/TF:

Markus Butler  
Approved

Disapproved  
8/7/92  
Date

(H) DECISION OF NIS/TF ENVIRONMENTAL OFFICER:

James A. Bever  
Approved

Disapproved  
Aug 6, 1992  
Date

**Attachment I**

UNCLASSIFIED  
MEMORANDUM

TO: AID/NIS/TF - Malcolm Butler  
FROM: STATE/D/CISA - Rick Nelson *RAN*  
SUBJECT: Implementation of Lisbon Nuclear Safety Initiative

The Lisbon nuclear safety initiative announced by Secretary Baker consists of the following four components which builds on and expands the ongoing work of the Department of Energy and the Nuclear Regulatory Commission over the past five years:

- Establish two regional training centers --- one in Russia to provide operational safety training and one in Ukraine with a computer-based simulator for VVER-1000 reactors. The centers will serve as a focal point for training and for establishing comprehensive western safety management systems in existing reactors in the new independent states.
  - Establishment of these centers will be conditioned on agreement that reactor crews from other new independent states and the Baltics can also use the facilities for training purposes.
  - These training centers will cover the full range of civilian nuclear issues from training to nuclear clean-up.
- Provide immediate operational safety enhancement through improvement of emergency operating procedures and improvement of nuclear plant equipment servicing and maintenance practices; translations of U.S. standards, guidelines, and ancillary materials; support to help keep safety procedures and training materials updated; development of alarm response procedures; improvement of diagnostics methods and hardware; and, training for technical support personnel at nuclear power plants.
- Provide risk reduction measures for RBMKs and VVER 440/230s through improvement of confinement performance for severe accidents; development of methods to prevent uncontrolled hydrogen explosions; installation of dedicated emergency diesel and feedwater pumps in protected areas; and improvement of basic fire detection capability.

- 2 -

- Assist regulators in developing consistent and effective safety standards and procedures and provides training in nuclear materials safety, safeguards accountancy, regulatory law, and use of radioactivity monitoring equipment.

These components, especially the operational safety improvements, are fully consistent with the preliminary outline of activities proposed under the original \$3 million of funding (out of \$85 million program) set aside for nuclear safety assistance in the AID Energy Efficiency and Market Reform Project. Thus, in the design of the initiative, we incorporated this component into a comprehensive package. Dr. Gallucci is now working on the appropriate breakdown of funding between the four components. He has distributed the DOE and NRC action plans for implementation of the Lisbon initiative and will chair a meeting on Monday, June 22, to discuss these plans.

In summary, the original \$3 million component out of the \$85 million program, combined with the \$22 million of the upcoming \$150 million ESF reallocation, provides for the initiative's funding. I hope this resolves the question of the origin of the \$25 million for the Secretary's nuclear safety initiative.

cc: Richard Armitage  
Fred Hof

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**Attachment II**

**IMPLEMENTATION PLAN  
U.S. LISBON MULTILATERAL  
NUCLEAR SAFETY INITIATIVE**

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*We will be working  
bi-laterally with the EU*

**U.S. Program of Assistance Announced at the Lisbon Coordinating Conference**

- **Operational Safety Enhancements**
- **Near Term Risk Reduction**
- **Nuclear Safety Regulation**

**IMPLEMENTATION PLAN  
U.S. LISBON MULTILATERAL  
NUCLEAR SAFETY INITIATIVE**

---

**Program Being Developed Jointly By:**

- **U.S. Department of State**
- **U.S. Department of Energy**
- **U.S. Nuclear Regulatory Commission**
- **U.S. Agency For International Development**

**IMPLEMENTATION PLAN  
U.S. LISBON MULTILATERAL  
NUCLEAR SAFETY INITIATIVE**

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**OPERATIONAL SAFETY ENHANCEMENTS**

**Establish Two Regional Training Centers: One in Russia, One in Ukraine To Facilitate the Introduction of the Following Safety Enhancements:**

- **Expedite Development of Emergency Operating Procedures, Performance Based Training, and Administrative and Operational Controls**
- **Support the following actions for all applicable plant types:**
  - **Enhance the capability to keep procedures and training materials current;**
  - **Provide normal operation and alarm response development;**
  - **Provide translations of U.S. standards, guidelines, and ancillary materials.**
- **Improve nuclear plant equipment servicing and maintenance practices;**
- **Improve diagnostics methods and hardware; and**
- **Provide training for technical support personnel at nuclear power plants.**

# IMPLEMENTATION PLAN U.S. LISBON MULTILATERAL NUCLEAR SAFETY INITIATIVE

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## NEAR TERM RISK REDUCTION

### For the RBMKs:

- **Verify/complete post-Chernobyl fixes;**
- **Improve confinement performance for severe accidents through filtered venting, hydrogen control and reduced leakage;**
- **Install a dedicated emergency diesel and feedwater pump in a new, dedicated structure;**
- **Assure that basic fire detection <sup>(and suppression)</sup> capabilities are provided at each plant; and**
- **Install automatic reactor trips for remaining high-risk failure modes.**

### For the VVER 440/230s:

- **Improve confinement performance for severe accidents through filtered venting, hydrogen control, and reduced leakage;**
- **Assure that basic fire detection capabilities are provided at each plant.**

# IMPLEMENTATION PLAN U.S. LISBON MULTILATERAL NUCLEAR SAFETY INITIATIVE

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## NUCLEAR SAFETY REGULATION

- **Training former Soviet Union regulators to set up a governing structure adopting the appropriate U.S. standards, requirements and procedures.**
- **Participation in simulator training and technical assistance areas developed under Operational Safety Enhancements.**
- **Participate in training in the United States, including but not limited to:**
  - **selected inspection techniques and evaluation methods** *& NRC activities in the former Soviet Union and Russia*
  - **design and construction considerations**
  - **familiarization with Standard Review Plan**
- **NRC personnel to observe Russian and Ukrainian planned team inspections**

**IMPLEMENTATION PLAN  
U.S. LISBON MULTILATERAL  
NUCLEAR SAFETY INITIATIVE**

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**NUCLEAR SAFETY REGULATION (cont.)**

- **Establishment of regulatory personnel training center** *(Tenn. Chicago)*
- **Establishment of Incident Response Centers**
- **Performance of fire hazard analysis** *(To address the need for fire hazard analysis for fire detection & fire suppression systems)*
- **Implement analytical methodologies in performing safety analysis of operating plants.**

**Attachment III**

**DRAFT**

Attachment III

**STANDARD FORM (SECTION 632(b) of the FAA, AS AMENDED)  
INTER-AGENCY AGREEMENT BETWEEN  
THE AGENCY FOR INTERNATIONAL DEVELOPMENT  
AND  
THE DEPARTMENT OF ENERGY**

**SUBJECT: Reimbursement to the Department of Energy (DOE) for the Implementation of the Nuclear Safety Assistance to Russia and Ukraine under the Energy Efficiency and Market Reform Project (Project No. 110-0002), as amended.**

**Project Title: Energy Efficiency and Market Reform**

**Project Number: 110-0002**

**Amendment Number: 2**

**I. PURPOSE**

The purpose of this Inter-Agency Agreement (IAA) between the Department of Energy (DOE) and the Agency for International Development (A.I.D.) is to define the procedures under which A.I.D. shall reimburse funds to DOE pursuant to this Agreement for the purpose of implementing activities specified herein which have been authorized for U.S. Government financing under the Energy Efficiency and Market Reform Project, AID Project No. 110-0002, as amended, for Russia, Armenia and the Ukraine.

**II. AUTHORITY AND USES OF FUNDS**

Pursuant to Section 531 of the Foreign Assistance Act, as amended, (the "Act") and Section 632(b) of the Act, A.I.D. shall reimburse Three Million United States Dollars (\$3,000,000) to DOE for the implementation of activities under the Project which represents total funding for this specific Activity, as described in Annex A. Execution of this IAA by A.I.D. also constitutes its delegation to DOE of A.I.D.'s authority under Section 635(b) of the Act to make grants or enter into any other agreement in furtherance of this program of assistance. It is understood that the funds made available will be used in a manner consistent with the purposes of the Activity and in accordance with the laws and regulations governing the Activity.

The Activity consists of technical assistance in nuclear safety and management. DOE and US industry associations would

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undertake an overall technical and management systems audit and identify low-cost equipment and training needs. Training would be provided in US industry and ODE and NRC laboratory facilities. DOE would purchase low-cost instrumentation and software from US industry and work with US suppliers to install and train counterparts in its use. The program will be coordinated with the Utility Partnership program involving US utilities with nuclear capabilities and EPRI nuclear experts.

### III. TERMS AND CONDITIONS

This Agreement is made under the following terms and conditions.

#### FISCAL TERMS:

1. Execution of this Agreement will constitute an obligation by A.I.D. of the 1992 funds transferred hereunder for this Activity.

2.(a) DOE will bill A.I.D. through OPAC procedures or by submitting a Standard Form 1081 (SF-1081) to the Agency for International Development, FM/CARD, Inter-Agency Billing Unit, SA-2, Room 603, Washington, D.C. 20523-0208.

(b) The amount billed will be determined by DOE and will be treated as an advance by A.I.D. This advance will be expended based on the quarterly reports, described below, detailing the implementation of the Energy Efficiency and Market Reform Project, nuclear safety component.

3.(a) DOE shall provide a quarterly report showing the amount of the original advance as well as current quarter and cumulative expenditures as follows (this information shall be provided in summary for the Activity, and separately to show the allocation to each cooperating republic, as appropriate):

<u>Cumulative Commitment</u>	<u>Current Qtr Expenditure.</u>	<u>Cumulative Expenditure</u>
----------------------------------	-------------------------------------	-----------------------------------

(Categories of expenditures to be reported by DOE shall follow those provided in Annex B, Financial Plan, attached hereto.)

- a. Contractor Personnel
- b. Travel
- c. Training
- d. Other costs

(b) The report will be used to liquidate the advance authorized hereby. An original and three (3) copies of the report shall be submitted to the Agency for International Development, FM/CARD, Inter-Agency Billing Unit, SA-2, Room 603, Washington, D.C. 20523-0208. The report must be signed in the original by an authorized official of DOE's billing office.

(c) The quarterly report shall also include a narrative description of the progress of program activities. An additional copy of the quarterly report shall be submitted to the A.I.D. Project Manager (to be designated by separate communication), , Agency for International Development, Washington, D.C. 20523.

(d) Additionally, DOE shall submit such other information as A.I.D. may, from time to time, request regarding implementation of the activities and expenditure of allocated funds.

5. Funds not disbursed by DOE upon completion of the Activity, or disbursed for purposes or activities not authorized by this IAA, shall be promptly refunded to A.I.D.

6. It is understood that the completion date for this Activity shall be fifty-eight (58) months from the date of this Agreement, unless the Activity is completed at an earlier date. "Completion Date" for this purpose refers to the last day for performance of services in the eligible Newly Independent States. If the completion date for any activities under this Activity shall exceed fifty-eight (58) months, DOE shall obtain prior, written concurrence from A.I.D. before an agreement for any such activity is entered into.

7. DOE shall ensure that all statutory or other restrictions on expenditures of the funds transferred hereby are fully complied with.

#### PROCUREMENT:

8. (a) DOE agrees to use the funds transferred hereby to cover the administration and related costs of the Activity, and the award of grants and contracts. The funds will be administered by DOE, including procurement actions, monitoring, and follow-up, in accordance with DOE procedures unless otherwise agreed to by A.I.D.

(b) Further, DOE shall procure or obtain goods of U.S. source and origin, and in the case of services, U.S. nationality. DOE may procure goods and services from non-U.S. sources upon

prior consultation with and approval by A.I.D. Local procurement in the cooperating country where assistance is being rendered by DOE shall be permissible for residential, logistical and other technical support needs. DOE shall consult with A.I.D. for guidance as necessary.

#### RECORDS AND REPORTS

9. DOE shall keep full and complete records and accounts with respect to the funds transferred hereby in accordance with generally accepted U.S. Government accounting principles. Further, DOE shall require that all contractors or grantees financed with funds provided hereunder maintain books and records related to the Activity in accordance with accounting principles generally accepted in the United States, the cooperating country, or as promulgated by the International Accounting Standards Committee (an affiliate of the International Federation of Accountants). Further, DOE shall ensure that all such books and records of all contractors and grantees financed with funds allocated hereby may be audited by DOE, A.I.D., or other authorized U.S. Government officials for a period of three (3) years from the expiration of the contract or grant.

10. DOE hereby agrees to provide A.I.D. with copies of all evaluation (or other) reports generated by federal or outside sources, and such other information as A.I.D. may, from time to time, request concerning the progress, impact or success of the Activity.

#### AUDIT AND INSPECTION RIGHTS:

11. Audit and inspection requirements as set forth in the Inspector General Report of 1978, as amended, (the "Act") shall apply with respect to the funds transferred hereby, and to the books and records of any contractor or grantee financed with such funds. The Office of the Inspector General of A.I.D. shall ensure full compliance with all applicable provisions of the Act in coordination with the Office of the Inspector General for DOE, or other appropriate office, who shall provide all assistance or other support.

12.(a) DOE shall ensure that all contracts and grants with non-U.S., nongovernmental organizations include an audit clause which requires that if a grantee receives \$25,000 per year or more under such grant, the grantee agrees that it shall have an independent financial audit made of the funds provided under such a grant. The financial audit of the funds disbursed to the grantee shall determine whether the receipt and expenditure of the funds provided under the grant are in accordance with generally accepted accounting principles and whether the grantee

\$100,000 EFFECTIVE 6/8/92 FEASIBILITY/CONCEPTUAL STUDIES FOR RISK REDUCTION MEASURES AND REVIEW OF VVER/RBMK REPLACEMENT COST ANALYSIS

\$80,000 EFFECTIVE 8/21/92 FIRE HAZARDS ANALYSIS OF RUSSIAN AND UKRAINIAN NUCLEAR POWER PLANTS (INCLUDES PLANT WALKDOWNS)

MANAGEMENT STRATEGIES INCORPORATED

\$50,000 EFFECTIVE 7/1/92 FOR TECHNICAL, PROGRAMMATIC, AND ADMINISTRATIVE SUPPORT TO ANL.

7. Funds not disbursed by NRC upon completion of the Activity, or disbursed for purposes or activities not authorized by this IAA, shall be promptly refunded to A.I.D.

8. It is understood that the completion date for these initial tasks shall be Eighteen (18) months from the date of this Agreement, unless the Activity is completed at an earlier date. "Completion Date" for this purpose refers to the last day for performance of services in the eligible New Independent States. If the completion date for any tasks under this Initiative shall exceed Eighteen (18) months, NRC shall obtain prior, written concurrence from A.I.D. before extending such tasks.

9. NRC shall ensure that all statutory or other restrictions on expenditures of the funds transferred hereby are fully complied with.

#### IV. IMPLEMENTATION AND MONITORING REQUIREMENTS:

10. Overall project supervision will be the responsibility of NRC. NRC will designate a representative, pursuant to Section 17 of this Agreement, who is the contact point for information concerning implementation of the activities approved under this agreement. A Committee will convene quarterly to review overall project policy, strategy, management and implementation.

DOE will establish a monitoring function to assure the objectives of the Lisbon initiative are achieved. Semi-annually, within 30 days after the end of each half year of the fiscal year over the life of this activity, NRC will submit to the Director of the Office Energy, Environment and Technology, NIS/TF/EET, Agency for International Development, Washington, DC 20523 a narrative report on the progress of implementation for activities approved under this agreement.

NRC will also conduct environmental assessments (EA's) according to its own regulations and procedures.

PROCUREMENT:

11. (a) NRC agrees to use the funds transferred hereby to cover the administration and related costs of the Nuclear Safety Initiative, and the award of grants and contracts. The funds will be administered by NRC, including procurement actions, monitoring, and follow-up, in accordance with NRC procedures unless otherwise agreed to by A.I.D.

(b) NRC may procure goods and services from U.S. or recipient country sources for activities described in Annex A, it shall procure them under authorities of NRC or those applicable to funds hereby obligated as it deems appropriate. NRC shall consult with A.I.D., as necessary, regarding non-U.S. procurement.

RECORDS AND REPORTS:

12. NRC shall keep full and complete records and accounts with respect to the funds transferred hereby in accordance with generally accepted U.S. Government accounting principles. Further, NRC shall require that all contractors or grantees financed with funds provided hereunder maintain books and records related to the activity in accordance with accounting principles generally accepted in the United States, the cooperating country, or as promulgated by the International Accounting Standards Committee (an affiliate of the International Federation of Accountants). Further, NRC shall ensure that all such books and records of all contractors and grantees financed with funds allocated hereby may be audited by NRC, A.I.D., or other authorized U.S. Government officials for a period of three (3) years from the expiration of the contract or grant.

13. NRC hereby agrees to provide A.I.D. with copies of all evaluation, environmental assessments, audits (or other) reports generated by federal or outside sources, and such other information as A.I.D. may, from time to time, request concerning the progress, impact or success of the Nuclear Safety Initiative.

AUDIT AND INSPECTION RIGHTS:

14. Audit and inspection requirements as set forth in the Inspector General Report of 1978, as amended, (the "Act") shall apply with respect to the funds transferred hereby, and to the books and records of any contractor or grantee financed with such funds. The Office of the Inspector General of A.I.D. shall ensure full compliance with all applicable provisions of the Act in coordination with the Office of the Inspector General for NRC, or other appropriate office, who shall provide all assistance or other support.

15. (a) NRC shall ensure that grants with non-U.S., nongovernmental organizations include an audit clause which requires that if a grantee receives \$25,000 per year or more under such grant, the grantee agrees that it shall have an independent financial audit made of the funds provided under such a grant. The financial audit of the funds disbursed to the grantee shall determine whether the receipt and expenditure of the funds provided under the grant are in accordance with generally accepted accounting principles and whether the grantee has complied with the terms of the agreement. An audit shall be conducted for each fiscal year of the grant but, in any case, not less frequently than every two years. The audits shall be performed in accordance with generally accepted government auditing standards issued by the Comptroller General of the United States.

(b) NRC shall ensure that contracts with foreign contractors include the appropriate audit and examination of records clauses as specified in the Federal Acquisition Regulations.

(c) NRC shall ensure, by appropriate written arrangements with aid recipients, that such A.I.D.-financed assistance be subject to audit and inspection by authorized U.S.G. officials.

OTHER AGREEMENTS:

16. NRC, with the assistance of the A.I.D. representative and if necessary the United States Embassy in the cooperating countries, shall seek to obtain for its personnel, contractors, and grantees as well as for any commodities financed hereunder exemptions from taxes, duties and fees which may be imposed by the host countries/countries with respect to the assistance program financed by this IAA.

17. NRC shall ensure, with the assistance of the A.I.D. representative and if necessary the United States Embassy in the cooperating countries, in written arrangements which NRC and/or grantees or contractors financed by the funds allocated hereby shall enter into with recipients of A.I.D. assistance: (a) that such assistance shall only be used for the purposes stated therein, and (b) that if such assistance is no longer needed for such purposes, that such assistance may be used for other purposes as may be mutually agreed upon by NRC and A.I.D.

AUTHORIZED REPRESENTATIVES:

18. Authorized representatives for this IAA are the signatories to this agreement, or the person acting in or holding their positions, and others, whom each of the parties may designate and notify to the other party in writing. Representatives other than the person acting in or holding the position of the original signatory may execute all actions with respect to this agreement, except for formal amendments hereto.

AMENDMENTS AND MODIFICATIONS:

19. Implementation Letters may be used to record mutually agreed upon adjustments to Annexes without formal amendment to this IAA. Implementation Letters shall not be used, however, to modify the text of this IAA, which shall only be done through formal amendment hereto.

20. This IAA may be modified or canceled upon the mutual, written consent of both parties.

\_\_\_\_\_  
Agency for International  
Development

\_\_\_\_\_  
Nuclear Regulatory Commission

Dated: \_\_\_\_\_

Dated: \_\_\_\_\_

Funding:

Appropriation Symbol:

Budget Plan Code:

Funds Control Number:

## ANNEX A

### DRAFT IMPLEMENTATION PLAN SUMMARY U.S. INITIATIVE AT LISBON ON NUCLEAR SAFETY

There are four elements of the initiative. These are: (1) Establishing two regional training centers (2) Implementing other measures to provide immediate operational safety enhancements; (3) Providing risk reduction measures for RBMK and VVER reactors; and (4) Assisting regulators in training and in developing safety standards and procedures.

#### I. TRAINING CENTERS Training Centers would be established in Russia and Ukraine to:

- o Expedite development of emergency operating procedures, performance based training, and administrative and operational controls for VVER and RBMK reactors in Russia and Ukraine.
- o Provide a VVER 1000 simulator for Ukraine
- o This element supports the following actions for all applicable plant types:
  - Enhance the capability to keep procedures and training materials current;
  - Provide normal operation and alarm response development;
  - Provide translations of U.S. standards, and ancillary materials.

It will also:

- o Improve nuclear plant equipment servicing and maintenance practices;
- o Improve diagnostics methods and hardware; and
- o Provide training for technical support personnel at nuclear power plants.

#### II. OPERATIONAL SAFETY

These will include rapid development of emergency operating procedures, performance based on training and administrative and operational controls for VVER and RBMK reactor in Russia and Ukraine.

Actual development of work products on Emergency Operating Instructions (EOI), training materials, and maintenance/diagnostic practices to be implemented at powerplants would be done by the Russian or Ukrainian nuclear officials.

### III. RISK REDUCTION MEASURES

U.S. industry participation will be needed to carry out these actions. The U.S. has initiated feasibility and conceptual design studies of the actions described below and preliminary results can be completed in 1993. On a normal basis, all identified actions are expected to be completed within a 2 year period. However, coordination and administrative requirements of the bilateral program could extend the schedule.

#### For the RBMKs:

- o Verify/complete post-Chernobyl fixes
- o Improve confinement performance for severe accidents through filtered venting
- o Install a dedicated emergency diesel and feedwater pump in a new, dedicated structure
- o Assure that basic fire detection capabilities are provided at each plant
- o Install automatic reactor trips for remaining high-risk failure modes
- o Improve confinement performance for severe accidents through filtered venting, hydrogen control, and reduced leakage
- o Assure that basic fire detection capabilities are provided at each plant

### IV. NUCLEAR SAFETY REGULATION

(The above three element are included for information purposes only. A separate Inter-Agency Agreement is being executed with NRC)

It is planned that the NRC will work with the recently established regulatory bodies in Russia and Ukraine to develop and implement projects that would assist these bodies in meeting their responsibilities by:

- o Training former Soviet Union regulatory representatives to set up a governing structure adopting appropriate U.S. standards, requirements and procedures.
- o Participating in simulator training and technical assistance areas developed under Operational Safety Enhancements;
- o Selection of key regulatory officials to participate in training in the United States, including but not limited to:
  - selected inspection techniques and evaluation methods
  - design and construction considerations
  - familiarization with Standard Review Plan
- o Observing Russian and Ukrainian planned team inspections
- o Establishing a regulatory personnel training center
- o Establishing a Incident Response Centers
- o Performing a fire hazard analysis; and
- o Implementing analytical methodologies in performing safety analysis of operating plants.

**Attachment IV**

## NUCLEAR SAFETY INITIATIVE

Key Activities through October 1992  
(Revised July 27, 1992)

NLT Dates	Activity
July 13	USAID Document Writer On-board under Purchase Order (done)
July 15	Congressional Notification Expires (done)
July 19 thru July 25	- Visit of Russian and Ukrainian Regularors (done)
July 20	- USAID begins drafting of non-technical and general provisions of Inter-Agency Agreements to be signed by no later than 9/15/92 with DOE and NRC (in process)
July 21	- DOE and NRC submit requests to USAID for interim (Start-up) funding (DOE rec'd. NRC pending)
July 24	- First draft USAID-DOE-NRC Initiative Description document completed and distributed (done)
July 27	- Inter-Agency review of first draft USAID-DOE-NRC document (scheduled 2 p.m.)
July 29	- USAID authorizes the balance of funds \$22 million required to finance the \$25 million Initiative
July 29	- Inter-Agency review of second draft USAID-DOE-NRC document
July 31	-USAID Document Writer comes on-board under a personal services contract
July 31	- First full draft Initiative description document finalized and reproduced. (This draft will serve as an initial Initiative proposal to the Russians and Ukrainians and discussions paper during the visit identified below.)
July 31	- USAID provides limited funds to DOE and NRC for start-up activities

- August 1 - USG (State/USAID/DOE/NRC Team to Russia (8/2 - 8/5) and Ukraine (8/5 - 8/8) to Review draft Initiative description, receive Russian and Ukrainian comments and inputs and reach agreements concerning and other aspects of the Initiative including inputs, outputs and the implementation schedules.
- August 16 - Technical Teams (DOE-NRC-USAID) visit Russia and Ukraine as required for up to 2 weeks to collect and understand technical details needed to finalize the Initiative design and description document.)
- August 27 - First USAID-DOE-NRC review of non-technical and general provisions of Inter-Agency Agreements to be signed on 9/25/92 with DOE and NRC.
- August 29 - First Inter-Agency Review of non-technical and general provisions of Inter-Agency Agreements to be signed by USAID and DOE/NRC on 9/25/92.
- Sept 14 - Completion of final draft of Initiative Description Document (Technical Attachment to Inter-Agency Agreements between USAID and DOE/NRC.
- Sept. 21 - Inter-Agency review and approval of comprehensive Initiative Description Document that will serve as a basis for Inter-Agency Funding Agreements between USAID and DOE and NRC.
- Sept. 25 - USAID signs Inter-Agency Funding Agreements with DOE and NRC
- Oct. 1 - Full scale Initiative implementation begins

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