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AGENCY FOR INTERNATIONAL DEVELOPMENT
WASHINGTON, D.C. 20523

AMENDMENT NO. 6
TO THE
PROJECT MEMORANDUM

NEW INDEPENDENT STATES:
ENERGY EFFICIENCY AND MARKET REFORM
(110-0002)

APPROVED: APRIL 5, 1995

U.S. AGENCY FOR
INTERNATIONAL
DEVELOPMENT

ACTION MEMORANDUM FOR THE DEPUTY ASSISTANT ADMINISTRATOR, ENI

FROM: ENI/EEUD, Nancy Tumavick

SUBJECT: Energy Efficiency and Market Project (110-0002): Amendment No. 6 - Project Assistance Completion Date Extension to February 25, 1999.

I. ISSUE: We require your approval of an authorization amendment for the Energy Efficiency and Market Reform Project (110-0002) to increase the project's authorized life-of-project (LOP) funding level by $128 million and extend the Project Assistance Completion Date (PACD) by three(3) years to February 25, 1999. This amendment would increase the authorized LOP funding level from the current $322 million to a new LOP amount of $450 million. The PACD would be extended from the current date of February 25, 1996 to February 25, 1999. We also require your approval of the new Initial Environmental Examination.

II. BACKGROUND: The Energy Efficiency and Market Reform (EEMR) Project is the principal vehicle for providing energy assistance to the countries of the New Independent States (NIS), including activities under the Gore-Chernomyrdin Commission and the G-7 Ukraine Energy Action Plan. The project was originally approved on January 21, 1992. The project has been amended five times:

- Project Amendment No. 1: On May 21, 1992, the LOP funding level was increased from $1.8 million to $45 million and the PACD extended from February 25, 1994 to February 25, 1996.

- Project Amendment No. 2: On August 7, 1992, the LOP funding level was increased from $45 million to $67 million to fund Nuclear Power Plant Safety Improvement Initiatives resulting from the Lisbon Conference.

- Project Amendment No. 3: On October 29, 1992, the project was further amended to take into account requirements which arose during negotiations of the Inter-Agency Agreements (IAAs) with the Department of Energy (DOE) and the Nuclear Regulatory Commission (NRC) to implement the Nuclear Power Plant Safety Improvement Initiatives.

- Project Amendment No. 4: On April 22, 1993, the LOP funding

level was increased from $67 million tc $250 million.

- o Project Amendment No. 5: On November 21, 1994, the LOP funding level was increased from $250 million to $322 million to finance a $72 million energy sector reform program for Ukraine.

Attachment A provides the current status of obligations and indicates the need for an amendment to accommodate FY95 planned obligations.

III. DISCUSSION: The EEMR Project has supported activities in four major areas: (a) energy pricing, policy and institutional reform; (b) improvement of energy production and delivery systems; (c) increased energy efficiency and related environmental improvements; and (d) enhancement of nuclear power plant operational safety and regulation.

A. KEY ACCOMPLISHMENTS:

Contracts, grants and interagency agreements are in place to implement these programs and provide key technical support to the field missions in Moscow, Kiev, Yerevan, and Almaty and to the Energy and Infrastructure Division of the Office of Environment, Energy, and Urban Development (USAID/W/ENI/EEUD/EI). (See Attachment B for a listing of the agreements under the project).

Project activities have resulted in many accomplishments over the past three years. Below are several important results:

* Demonstration of the potential for low-cost energy efficiency in district heating plants in six countries;

* Preparation of major energy loan projects for the World Bank and EBRD in Russia, Belarus, Armenia, Georgia, and Ukraine;

* Improved efficiency and operation of power generating plants in the Ukraine, Armenia and Georgia;

* Formulation of a major power sector restructuring program and obtaining Ukrainian commitment to its implementation;

* Substantial collaborative progress under the Gore-Chernomyrdin Commission to determine the investment requirements of the power sector in Russia and the potential alternatives to continued operation of high-risk nuclear power plants;

* Improved fire safety and emergency operating procedures at Russian and Ukrainian nuclear power plants.

* Improved mine safety in Russia, Ukraine, and Kazakhstan.

* Transfer of management systems to NIS utilities by US gas

and electric utilities.

* Development of investment strategy by the Russian electric utility as part of broader restructuring plan to implement a wholesale market.

B. RELATIONSHIP TO NEW STRATEGIC FRAMEWORK:

As currently described, the EEMR Project provides technical assistance and limited commodities and training to support four components: (1) pricing and institutional reform; (2) improved oil, gas, coal, and electricity production and delivery systems; (3) energy efficiency and environmental improvement in power, industry, and buildings; and (4) enhanced nuclear power plant safety and regulation. To improve project management and impact monitoring, the proposed amendment will focus ENI energy activities undertaken under the EEMR Project on three key areas: power sector restructuring (component 1 above), energy efficiency (a concentration of key items from components 2 and 3 above), and nuclear power plant safety (component 4 above). Limited commodity funding will continue in support of selected technical assistance efforts (especially energy efficiency demonstrations) as well as for emergency situations such as in Armenia and Georgia. Note that power sector restructuring activities will be designed/modified to be congruent with each USAID mission's national economic restructuring strategy, especially in the Ukraine.

The following impact indicators have been developed to measure progress in these three focus areas by task. Task lists have been developed and task summaries are being prepared for the activities in each country in cooperation with the field missions (see Attachment C for task lists). Country targets for each task are being developed cooperatively with field missions and country representatives as part of the Bureau's development of a strategic monitoring and reporting system.

1. Power Sector Restructuring

- o Promulgation of energy standards, policies and legislation that support (a) subsector restructuring, (b) commercial market development of energy efficiency and related environmental technologies and services.

- o Establishment of policy, enactment of legislation, and development of regulatory procedures necessary to break-up monopolies, establish markets, expand the private sector and strengthen competitiveness.

- o Development of contractual arrangements and pricing mechanisms for the reliable and efficient trading of energy among NIS, CEE, Western Europe and other markets.

- o Private and public financing mobilized for specific

investment projects in the energy sector.

2. Energy Efficiency

- o Competitive pricing for efficient use of energy resources.
- o Commercially viable private sector capability developed to provide energy services, including production and distribution.
- o Utility demand-side management programs in operation.
- o Improved energy efficiency demonstrated by local firms at facilities directly assisted or influenced by USAID activities and replicated elsewhere.

3. Nuclear Power Plant Safety

- o Consistent and effective safety standards and procedures are adopted by nuclear regulatory authorities.
- o Operational safety at specific sites is improved, as evidenced by a reduction in the number and severity of incidents.

A major evaluation of the NIS energy program, with special attention to Russia, Ukraine, and Armenia, is to begin shortly. This evaluation will help assess the impact of the work to date and develop suggestions for how to better focus individual country programs to increase the impact of USAID's energy assistance program. (See Attachment D for the Scope of Work for the evaluation.)

C. PROJECTED ILLUSTRATIVE BUDGETARY ALLOCATION:

A preliminary estimate of the projected $130 million in obligations over the FY95-FY98 period by country and focus area is given in Table 1. Table 2 presents an illustrative authorized budget for the EEMR Project by focus area over the life of the project. These projections would result in total obligations of about $450 million, the notified LOP.

Cumulative Obligations through FY94 =	$171,908,491
FY95 OYB with Carryovers =	$147,389,465
FY96-98 Projected Obligations=	$130,702,044
Total.....	$450,000,000

D. EXPECTED PROCUREMENTS:

The number of management units will be reduced during the next few years. No new funding is anticipated for USGS, MMS, and the

TABLE 1 - PROJECTED ILLUSTRATIVE OBLIGATIONS ***
By Country and Focus Area (in $ Million)

Country/Area	1995	1996	1997	1998	Total
Russia:	**18**	**14**	**10**	**8**	**50**
Restructuring	12	10	8	6	
Efficiency	6	4	2	2	
Nuclear Safety*	0				
Ukraine:	**17**	**21**	**15**	**10**	**63**
Restructuring	4	6	6	6	
Efficiency	3	5	4	4	
Nuclear Safety**	10	10	5	0	
Armenia:	**7**	**7**	**7**	**7**	**28**
Restructuring	2	3	3	3	
Efficiency	5	4	4	4	
Georgia:	**8**	**8**	**8**	**7**	**31**
Restructuring	2	4	4	3	
Efficiency	6	4	4	4	
Kazakhstan:	**2**	**2**	**2**	**1**	**7**
Restructuring	1	2	2	1	
Efficiency	1				
Kyrgyz Republic:	**1**	**1**	**1**	**0**	**3**
Restructuring	1	1	1	0	
Efficiency					
Moldova:	**1**	**1**	**1**	**0**	**3**
Restructuring	1	1	1		
Efficiency					
Total Energy	**54**	**52**	**44**	**35**	**$185**
	($147 with carryovers)				

*-- Does not include 632(a) transfers to DOE and NRC, which do not count against LOP funding.
**-- Grant to EBRD Nuclear Safety Account.
***--Costs for Environmental Assessments, Evaluations, Audits, and Technical Support are assumed within these allocations.

NOTE: Out-year funding for Moldova is still under discussion with the Mission.

TABLE 2 - ILLUSTRATIVE AUTHORIZED BUDGET *
By Focus Area (in $ Million)

Category	Prior to This Amendment (FY92-FY95)	After This Amendment (FY96-FY98)	L.O.P.
A. Power Sector Restructuring	$126.6	$ 68.0	$194.6
B. Energy Efficiency	$130.9	$ 45.0	$175.9
C. Nuclear Power Plant Safety	$ 64.5	$ 15.0	$ 79.5
TOTAL =	$322.0	$128.0	$450.0

Costs for Environmental Assessments, Evaluations, Audits, and Technical Support are assumed within these allocations.

Atlantic Council beyond FY95. And, beginning in FY96, DOE is expected to have its own budget line item for nuclear power plant safety.

Below is the approach by major focus area:

1. Power Sector Restructuring

   * The main vehicles for implementing this area will continue to be the contracts with RCG/Hagler, Bailly (RCG/HB) and Burns and Roe (B&R). We are exercising the 2.5 year options associated with these two contracts.

   * The Energy Industry Partnership Cooperative Agreement with the U.S. Energy Association (USEA) will be amended. Electric utility partnerships are active in all the project's countries, as are gas partnerships in Russia.

   * A decision will be made with the missions on the future of the Partners in Economic Reform (PIER) cooperative agreement in the coal sector and the Institute for International Education (IIE) cooperative agreement for energy training.

2. Energy Efficiency

   * In addition to the RCG/HB and B&R contracts, some additional funding for DOE is expected in the Ukraine and in support of this focus under the Gore-Chernomyrdin Commission in Russia. The current PASA with DOE for conventional energy activities will be replaced with a more manageable arrangement after FY95.

3. Nuclear Power Plant Safety

   * Interagency agreements will continue with the Nuclear Regulatory Commission for Russia and the Ukraine. Decisions will have to be made on possible regulatory assistance to Armenia and Kazakhstan.

   * FY95 and FY96 funding for the G-7/EBRD Nuclear Safety Account has been pledged as part of the G-7 Ukraine Energy Action Plan. Contributions are estimated at $10 million each year. Future commitments will be determined depending on the progress in Ukraine and Russia.

In addition to the above areas of focus, we will continue to consolidate technical support functions. The 8a technical support contract with IDEA will be amended for a reduced level of effort. The Russia office will be closed and a decision made with other missions on whether they want a continued IDEA presence (funded from their country budgets) or whether they would rather hire PSCs or FSNs to carry out monitoring and technical support/ management activities. Given the limited

field staff and the heavy demands of the new ENI/MRS System, the IDEA/Washington staff will be critical for periodic field monitoring. As part of the dialogue on technical support, the question of the transfer of COTR authority from USAID/Washington to the field missions on selected energy contracts will also be discussed.

III. CONGRESSIONAL NOTIFICATION: On November 22, 1993, a Congressional Notification was sent informing Congress of our intent to increase the LOP funding for the EEMR Project to $450 million (see Attachment F). The CN expired on December 7, 1993. Since this amendment will not call for a change in ENI's Congressional Presentations on the FY95 NIS budget, no Technical Notification is necessary.

IV. ENVIRONMENTAL CONSIDERATIONS: Since the inception of the EEMR Project, all of the Initial Environmental Examinations have resulted in a Positive Determination under USAID Regulation 22 CFR 216, which indicates that the proposed project activities are expected to have a significant effect on the environment (see Attachment G). Given this determination, the Energy & Infrastructure Division (ENI/EEUD/EI) will incorporate suitable environmental analyses into EEMR activities through the following procedure:

1) Task summaries for all activities will be completed.

2) All tasks will be screened to determine those activities subject to a categorical exclusion and those requiring further environmental impact analysis. For the latter, Initial Environmental Examinations (IEEs) will be prepared.

3) Those activities requiring further analysis will then be ranked on the basis of their potential environmental impact and timing for obligation of funds, recognizing that environmental reviews are to be performed prior to the expenditure of project funds.

4) The results of steps 2) and 3) will then be reviewed with the ENI Environmental Coordinator/Officer, and once concurrence is received, ENI/EEUD/EI will arrange for Environmental Assessments to be prepared for the necessary activities in priority order.

5) The Environmental Assessments will then be sent to the ENI Environmental Coordinator/Officer for review and approval.

The cost for completion of the required EAs is incorporated in the project budget.

V. AUTHORITY: The Assistant Administrator for the ENI Bureau was delegated authority to take the action recommended herein pursuant to Delegation of Authority No. 400 and Interim Reorganization Delegation of Authority No. 1, dated October 1,

1993. On April 23, 1994, in Delegation of Authority No. 300, the Administrator delegated to you the authority to act as the alter ego of the Assistant Administrator of the ENI Bureau.

VI. RECOMMENDATION: That you sign: (1) below and on Attachment E to approve Project Amendment No. 6 to the Energy Efficiency and Market Reform Project to increase the LOP funding level to $450 million and extend the PACD to February 25, 1999; and (2) the new Initial Environmental Examination in Attachment G.

Approved

Disapproved

4/7/95
Date

ENERGY EFFICIENCY AND MARKET REFORM PROJECT,
AUTHORIZATION AMENDMENT NO. 6

ATTACHMENTS:

A: Current Obligation Status and Planned FY95 Obligations
B: Existing Agreements
C: Task Listings by Country
D: Scope of Work for NIS Energy Program Evaluation
E: Project Authorization Amendment No. 6
F: Congressional Notification (for $450 Million)
G: Initial Environmental Examination

ENERGY EFFICIENCY AND MARKET REFORM PROJECT,
AUTHORIZATION AMENDMENT NO. 6

CLEARANCES:

ENI/DAA/PO: CPascual _____ Date 4/1/95
ENI/EEUD: JBever _____ Date 2-23-95
ENI/EEUD/EI: RIchord _____ Date 2/23/95
ENI/EEUD/ENR: RGreenberg _____ Date 2/24/95
ENI/PCS: PMatheson _____ Date 3/23/95
ENI/NCE: BKline PB for _____ Date 3/21/95
ENI/PD: PThorn PT _____ Date 2/28/95
ENI/FS: PCallen _____ Date 3/6/95
GC/ENI: BBryant _____ Date 3/3/95
S/NIS: TMacklin _____ Date 3/27/95
M/OP/ENI/NIS: SZavestoski _____ Date _____ (INFO. ONLY)

drafter: ENI/EEUD/EI:RIchord/GWeynand:02/22/95:EEMRAMND.NO6

ATTACHMENT A

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Last update:
22 – Jan – 95

ENI/PCS/B – AUTHORIZATION LOPS, CUM OBS THRU FY94, CURRENT FY95 OYB – BALANCE AVAILABLE WITHIN LOP

PROJ. NO. (A)	PROJECT TITLE (B)	CN LOP NOTIFIED (C)	PROJECT AUTH LOP (D)	PACD (E)	(F)	LATEST AUTH AMEND (G)	CUM OBS THRU FY94 (H)	FY 95 OYB AS OF 1/6/95: NOA (I)	FY 95 OYB AS OF 1/6/95: CARRYOVER/ RECOVERIES (J)	TOTAL FY95 OYB (I + J)	TOTAL H+I+J (L)	BALANCE AVAILABLE WITHIN AUTH LOP LEVEL (M)	REMARKS (N)
NIS PROJECTS:													
110-0001	NIS SPECIAL INITIATIVES	257,000,000	274,600,000	06/31/96		06/24/94	255,234,801	91,590,000	12,892,145	104,282,145	359,516,946	(84,916,946)	NEED AUTHORIZATION AMENDMENT
110-0002	ENERGY EFFICIENCY & MARKET REFORM	450,000,000	250,000,000	02/25/96		04/22/93	171,908,491	114,650,000	32,749,585	147,399,585	319,308,056	(69,308,056)	NEED AUTHORIZATION AMENDMENT
110-0003	ENVIRONMENTAL POLICY & TECHNOLOGY	100,000,000	126,500,000	06/30/99		09/06/94	79,376,677	32,760,000	6,796,412	39,556,412	118,933,089	6,566,911	
110-0004	HEALTH CARE IMPROVEMENT	194,000,000	194,000,000	12/31/98		03/31/94	99,237,247	30,690,000	40,229,584	70,919,584	170,156,831	23,843,169	
110-0005	PRIVATE SECTOR INITIATIVES	875,000,000	875,000,000	04/22/98		02/07/94	538,997,274	178,400,000	34,448,540	212,848,540	751,843,814	123,156,186	
110-0006	FOOD SYSTEMS RESTRUCTURING	118,300,000	109,000,000	09/30/97		08/12/94	73,420,699	8,500,000	2,179,301	10,679,301	84,100,000	24,900,000	
110-0007	DEMOCRATIC PLURALISM INITIATIVES	260,000,000	260,000,000	13/31/97		07/21/93	126,037,592	59,165,000	4,811,340	63,976,340	190,013,932	69,986,068	
110-0008	HOUSING SECTOR REFORM	241,000,000	241,000,000	05/30/96		07/26/94	214,526,562	12,200,000	2,815,241	15,015,241	229,541,803	11,458,197	
110-0009	ECONOMIC RESTRUCTURING	130,000,000	130,000,000	06/01/97		01/11/94	86,945,349	38,500,000	2,519,572	41,019,572	127,964,921	2,035,078	
110-0010	EURASIA FOUNDATION	continuing	75,000,000	04/30/97		04/14/94	26,000,000	10,000,000	0	10,000,000	36,000,000	39,000,000	
110-0011	ENTERPRISE FUNDS	795,000,000	741,000,000	06/01/97		02/2/6/94	214,000,000	65,000,000	108,000,000	173,000,000	387,000,000	354,000,000	
110-0012	NIS EXCHANGES AND TRAINING	250,000,000	300,000,000	12/30/99		09/28/94	124,190,757	30,695,000	800,243	31,504,243	155,695,000	144,305,000	
118-0013	RUSSIA ENERGY & ENVIRONMENT CIP	125,000,000	125,000,000	12/31/95		12/14/93	90,000,000	0	0	0	90,000,000	35,000,000	
TOTAL NIS		3,795,300,000	3,793,100,000				2,099,875,449	672,150,000	248,019,943	920,169,943	3,020,074,392	827,693,899*	0

TRANSFERS	180,850,000
PERFORM FUND	17,000,000
TOTAL FY 95	850,000,000

ATTACHMENT B

EXISTING EEMR PROJECT AGREEMENTS

Contractor/Grantee/USG Agency	Assistance Area - Country: Activity(ies)
Burns & Roe (B&R)	>> Providing Technology-Based Services - Armenia: Industrial Energy Conservation; Weatherization of Buildings; Hydro Rehabilitation; Fast-Track Coal Mining; Production and Delivery System Repair/Maintenance; Mini Hydro Turbine Replacement; Oil and Gas Program; Inventory Management Improvement; Georgia: Accelerated Energy Program; EBRD Loan Preparation - Power Rehabilitation; Fast-Track Coal Mining; Production and Delivery System Repair/Maintenance; Kazakhstan: Heat and Power Systems Efficiency; Coal Cleaning; Regional Environmental Study; National Energy Savings Plan; Power Costs in South Kazakhstan; Kyrgyzstan: District Heating System Improvement; Transmission System Improvement; Power Market Analysis; Russia: Transmission and Non-Nuclear Alternatives; Energy Efficiency; Thermal Power Plant Rehabilitation; Transmission Improvements; Hydropower Rehabilitation; Project Preparation for Institutional Lending; Commodity Import Program; Ukraine: Kiev No.5 Power/Heat Plant Improvement; Power Plant Efficiency; Industrial Energy Efficiency; Residential District Heating; Coal Bed Methane Drilling Design;
RCG/Hagler, Bailly (RCG/HB)	>> Providing Institutionally-Based Services - Armenia: Independent Private Power; Ministry of Energy & Fuels Management Information System; Regulatory Body Support; Utility Corporatization; Energy Legislation; Kazakhstan: Regulatory/Legislative Reform; Corporatization/Privatization Support; Kyrgyzstan: Regulatory/Legislative Reform; Corporatization/Privatization Support; Russia: Overall Integration of the Results of the Joint Energy Alternatives Study; Regulatory Reform and Privatization; Ukraine: Power Sector Restructuring Implementation; Energy Economic Analysis; Demand Side Management;
US Energy Association (USEA) - CA	>> Introducing US Utility Practices - Armenia: Electric Utility Partnership; Georgia: Electric Utility Partnership; Kazakhstan: Gas and Electric Utility Partnerships; Kyrgyzstan: Electric Utility Partnership; Regional Conferences; Russia: Gas and Electric Utility Partnerships; Ukraine: Electric Utility Partnership;
Atlantic Council - CA	>> Developing National Energy Policies - Russia: Long-Range Strategy;

World Bank (WB) - CA	>> Facilitating Restructuring of Energy Subsectors - Kazakhstan: Strengthening of Management Control Systems in Oil Sector; Russia: Social & Economic Costs of Coal Mine Restructuring & Closure; Subsidies and Employment in the Coal Industry; Financial Performance of the Coal Sector; Oil Enterprise Corporatization Advice for MFE; Oil Enterprise Corporatization Advice for Sidanco; Oil Sector Legislation, Taxation and Tendering Support; Project Preparation and Technical Assistance Management; Oil Transport Access Reform; Ukraine: Power Sector Restructuring Analysis; Oil Exploration/Development Legal Framework;
Partners in Economic Reform (PIER) - CA	>> Improving Coal Mine Operations and Safety - Kazakhstan: Coal Mine Efficiency, Safety and Restructuring; Russia: Coal Mine Efficiency, Safety and Restructuring; Ukraine: Coal Mine Efficiency, Safety and Restructuring;
Dept. of Interior: US Geological Survey (USGS) - PASA	>> Assessing Fossil Fuel Resources - Armenia: Coal Resource Assessment and Exploration; Kyrgyzstan: Coal Resource Assessment; Russia: Oil & Gas Basin Information Systems; Ukraine: Oil & Gas Resource Assessment and Exploration;
Dept. of Interior: Minerals Management Service (MMS) - PASA	>> Improving Management of Oil & Gas Resources - Russia: Improved Resource and Environmental Management in Oil and Gas Leasing Process;
Dept. of Energy (DOE): Non-Nuclear - PASA	>> Introducing Energy Technologies & Practices - Kazakhstan: Energy Technology Transfer Conference; Russia: Moscow Energy Efficiency Center; Plutonium Production Reactor Study; Oil and Gas Technology Center; Energy Technology Transfer Conferences; Ukraine: Energy Technology Transfer Conference; Kiev Energy Efficiency Center; Clean Coal Technology Program;
Dept. of Energy (DOE): Nuclear - IAA	>> Improving Nuclear Power Plant Safety - Russia: Nuclear Operational Safety Program; Ukraine: Nuclear Operational Safety Improvement;
Nuclear Regulatory Commission (NRC) - IAA	>> Improving Regulation of Nuclear Power Plants - Russia: Nuclear Regulatory Reform; Ukraine: Nuclear Regulatory Reform;
European Bank for Reconstruction & Development (EBRD) - G-7 Nuclear Acct. & CA	>> Financing Rehabilitation of Nuclear Power Plants & Natural Gas Systems - Russia: GazProm Pipeline Rehabilitation; G-7/EBRD Nuclear Safety Account (also might include Ukraine);

Institute for International Education (IIE) - CA	>> Training in US Energy Management Practices - Armenia: Energy Management Training; Kazakhstan: Energy Management Training; Kyrgyzstan: Energy Management Training; Russia: Energy Management Training; Ukraine: Energy Management Training;
US Environmental Protection Agency: Energy (EPA) - IAA	>> Introducing US Pollution Control Techniques - Russia: Environmental Control Technologies;
IDEA, Inc.	>> Providing Technical Management Support - Armenia: Program Implementation Support; Georgia: Program Implementation Support; Kazakhstan: Program Implementation Support; Kyrgyzstan: Program Implementation Support; Russia: Program Implementation Support; Ukraine: Program Implementation Support;

Note on Abbreviations:

CA: Cooperative Agreement
IAA: Inter-Agency Agreement
PASA: Participating Agency Services Agreement

ATTACHMENT C

U.S. ASSISTANCE
TO
ENERGY RESTRUCTURING AND ECONOMIC REFORM

TASK LISTINGS

ENERGY EFFICIENCY & MARKET REFORM
IN THE NEW INDEPENDENT STATES

ARMENIA
GEORGIA
KAZAKHSTAN
KYRGYZSTAN
RUSSIA
UKRAINE

NOTE: Contractor/Grantee abbreviations used in the Task Listings are given in Attachment B.

ENERGY EFFICIENCY & MARKET REFORM
IN THE NEW INDEPENDENT STATES

Armenia

Energy Efficiency in Industry, Buildings, & District Heating

Task 1: Industrial Energy Conservation (B&R)
Task 2: Weatherization of Buildings (B&R)

Energy Sector Restructuring and Privatization

Task 3: Power Sector Modernization and Privatization
- Task 3A: Privatization, Regulatory Reform
  - Task 3A.1 Independent Private Power (RCG/HB)
  - Task 3A.2 Ministry of Energy & Fuels Management Information System (RCG/HB)
  - Task 3A.3 Regulatory Body Support (RCG/HB)
  - Task 3A.4 Utility Corporatization (RCG/HB)
  - Task 3A.5 Energy Legislation (RCG/HB)
- Task 3B: Hydro Rehabilitation (B&R)
- Task 3C: Utility Partnerships (USEA)
- Task 3D: Energy Management Training (IIE)

Task 4: Coal Sector Development
- Task 4A: Coal Resource Assessment and Exploration (USGS)
- Task 4B: Fast-Track Coal Mining (B&R)

Critical Commodity and Technical Support

Task 5: Production and Delivery System Repair/Maintenance (B&R)
Task 6: Mini Hydro Turbine Replacement (B&R)
Task 7: Oil and Gas Program (B&R)
Task 8: Inventory Management Improvement (B&R)
Task 9: Emergency Fuel Supplies (USAID/ENI/HR/EHA) (*)
Task 10: Program Implementation Support (IDEA)
Task 11: Alternative Energy (TBD)

(*)- Budget authority for this task transferred out of ENI/EEUD/EI and funds expended for this task are not attributable to the EEMR Project.

ENERGY EFFICIENCY & MARKET REFORM
IN THE NEW INDEPENDENT STATES

Georgia

Energy Efficiency and Power Rehabilitation

Task 1: Accelerated Energy Program (B&R)
Task 2: EBRD Loan Preparation - Power Rehabilitation (B&R)

Power Sector Modernization

Task 3: Utility Partnerships (USEA)
Task 4: Fast-Track Coal Mining (B&R)

Critical Commodity and Technical Support

Task 5: Production and Delivery System Repair/Maintenance (B&R)
Task 6: Program Implementation Support (IDEA)

ENERGY EFFICIENCY & MARKET REFORM
IN THE NEW INDEPENDENT STATES

Kazakhstan

Energy Efficiency and Power Rehabilitation

Task 1: Heat and Power Systems Efficiency (B&R)
Task 2: Coal Mine Efficiency, Safety and Restructuring (PIER)
Task 3: Coal Cleaning (B&R)
Task 4: Regional Environmental Study (B&R)

Energy Policy Reform

Task 5: Regulatory/Legislative Reform (RCG/HB)
Task 6: National Energy Savings Plan (B&R)

Commercialization, Privatization & Investment

Task 7: Corporatization/Privatization Support (RCG/HB)
Task 8: Power Costs in South Kazakhstan (B&R)
Task 9: Strengthening of Management Control Systems in Oil Sector (WB-CA)

Energy Training and Technical Support

Task 10: Utility Partnerships (USEA)
Task 11: Energy Management Training (IIE)
Task 12: Program Implementation Support (IDEA)
Task 13: Energy Technology Transfer Conference (DOE)

ENERGY EFFICIENCY & MARKET REFORM
IN THE NEW INDEPENDENT STATES

Kyrgyzstan

Energy Efficiency

Task 1: District Heating System Improvement (B&R)
Task 2: Transmission System Improvement (B&R)
Task 3: Coal Resource Assessment (USGS)

Energy Policy Reform

Task 4: Regulatory/Legislative Reform (RCG/HB)

Commercialization, Privatization & Investment

Task 5: Corporatization/Privatization Support (RCG/HB)
Task 6: Accounts Receivable (NRECA) (*)
Task 7: Power Market Analysis (B&R)

Energy Training and Technical Support

Task 8: Utility Partnerships (USEA)
Task 9: Energy Management Training (IIE)
Task 10: Program Implementation Support (IDEA)

(*)- This task is funded by the Food and Humanitarian Assistance Bureau - not ENI/EEUD/EI - and funds expended for this task are not attributable to the EEMR Project.

Regional Cooperation in Central Asia

Energy Training

Task 1: Regional Conferences (USEA)

ENERGY EFFICIENCY & MARKET REFORM
IN THE NEW INDEPENDENT STATES

Russia

Energy Policy Reform and Investment Strategy

Task 1: Joint Energy Alternative Study (JEAS)
- Task 1A: Overall Integration of the Results of the JEAS (RCG/HB)
- Task 1B: Transmission and Non-Nuclear Alternatives (B&R)
  - Task 1B.1: Energy Efficiency (B&R)
  - Task 1B.2: Thermal Power Plant Rehabilitation (B&R)
  - Task 1B.3: Transmission Improvements (B&R)
  - Task 1B.4: Hydropower Rehabilitation (B&R)

Task 1C: Nuclear Options (DOE)
- Task 1D: Project Preparation for Institutional Lending (B&R)

Task 2: Moscow Energy Efficiency Center (DOE)
Task 3: Plutonium Production Reactor Study (DOE)
Task 4: Long-Range Strategy (Atlantic Council)

Energy Subsector Restructuring and Privatization

Task 5: Electric Power Sector
- Task 5A: Regulatory Reform and Privatization (RCG/HB)
- Task 5B: Utility Partnerships (USEA)
- Task 5C: Environmental Control Technologies (EPA)

Task 6: Coal Subsector and Mine Safety
- Task 6A: Coal Mine Efficiency, Safety and Restructuring (PIER)
- Task 6B: Coal Subsector Program (WB CA)
  - Task 6B.1 Social & Economic Costs of Coal Mine Restructuring & Closure (WB CA)
  - Task 6B.2 Subsidies and Employment in the Coal Industry (WB CA)
  - Task 6B.3 Financial Performance of the Coal Sector (WB CA)

ENERGY EFFICIENCY & MARKET REFORM
IN THE NEW INDEPENDENT STATES

Russia
(continued)

Energy Subsector Restructuring and Privatization (continued)

Task 7: Oil and Gas Subsector
- Task 7A: Policy Reform and Corporatization (WB CA)
  - Task 7A.1 Oil Enterprise Corporatization Advice for MFE (WB CA)
  - Task 7A.2 Oil Enterprise Corporatization Advice for Sidanco (WB CA)
  - Task 7A.3 Oil Sector Legislation, Taxation and Tendering Support (WB CA)
  - Task 7A.4 Project Preparation and Technical Assistance Management (WB CA)
  - Task 7A.5 Oil Transport Access Reform (WB CA)
- Task 7B: Oil and Gas Basin Information Systems (USGS)
- Task 7C: Improved Resource and Environmental Management in Oil and Gas Leasing Process (MMS)
- Task 7D: Oil and Gas Technology Center (DOE)
- Task 7E: Natural Gas Partnerships (USEA)
- Task 7F: GazProm Pipeline Rehabilitation (EBRD CA)

Nuclear Safety

Task 8: Nuclear Operational Safety Program (DOE)
Task 9: Nuclear Regulatory Reform (NRC)
Task 10: G-7/EBRD Nuclear Safety Account (EBRD)

Commodities, Training and Technical Support

Task 11: Commodity Import Program (B&R)
Task 12: Energy Management Training (IIE)
Task 13: Program Implementation Support (IDEA)
Task 14: Energy Technology Transfer Conference (DOE)

ENERGY EFFICIENCY & MARKET REFORM
IN THE NEW INDEPENDENT STATES

Ukraine

Power Sector Restructuring and Management Improvement

Task 1: Regulatory Reform and Restructuring
- Task 1A: Power Sector Restructuring Analysis (WB)
- Task 1B: Power Sector Restructuring Implementation (RCG/HB)

Task 2: Power Management
- Task 2A: Utility Partnerships (USEA)
- Task 2B: Energy Management Training (IIE)
- Task 2C: Energy Economic Analysis (RCG/HB)
- Task 2D: Energy Technology Transfer Conference (DOE)

Energy Efficiency, Reliability and Environmental Sustainability; Production Efficiency Improvement

- Task 3A: Kiev No.5 Power/Heat Plant Improvement (B&R)
- Task 3B: Power Plant Efficiency (B&R)
- Task 3C: Industrial Energy Efficiency (B&R)
- Task 3D: Demand Side Management (RCG/HB)
- Task 3E: Kiev Energy Efficiency Center (DOE)
- Task 3F: Residential District Heating (B&R)

Domestic Energy Resources

- Task 4A: Clean Coal Technology Program (DOE)
- Task 4B: Coal Mine Efficiency, Safety, and Restructuring (PIER)
- Task 4C: Coal Bed Methane Drilling Design (B&R)
- Task 4D Oil and Gas Resource Assessment and Exploration (USGS)
- Task 4E: Oil Exploration/Development Legal Framework (WB CA)
- Task 4F: Refinery Assessment and Petroleum Sector Privatization (John Brown)

Nuclear Safety

- Task 5A: Nuclear Operational Safety Improvement (DOE)
- Task 5B: Nuclear Regulatory Reform (NRC)

Technical Support

Task 6: Program Implementation Support (IDEA)

Program Evaluation of NIS Energy Efficiency and Market Reform (Project No. 110-0002)

I. BACKGROUND

In the immediate wake of the Soviet Union's dissolution at the end of 1991, the United States initiated a multi-billion dollar assistance program for the twelve New Independent States (NIS), with the overarching goal of achieving normal and productive bilateral relations with each NIS country. Within this context, the USAID program focusses on supporting reforms oriented to developing market economies and participatory political systems, and easing the human costs associated with such transitions. Environmentally sound growth is a cross-cutting theme affecting each of these areas.

The energy sector is significant to the changes taking place in the NIS. Inappropriate energy policies, inefficient energy production, transmission and use, and declining oil, gas, coal and electricity production are all constraints to the economic transition the new states are trying to make. Prior to 1991, oil and gas exports were the leading source of foreign exchange for the former Soviet Union, with Russia producing about 91% of the oil and 77% of the natural gas from that region. Thus, the petroleum industry plays a critical role in the economic restructuring process in Russia as does the changing oil price and supply arrangements with importing States like Ukraine and Armenia. Concomitantly, the absence of energy conservation policies, coupled with substandard equipment and processes, have left a legacy of pollution and unabated resource exploitation.

II. INTRODUCTION

A. Project Authorization History

The Energy Efficiency and Market Reform Project (110-0002) was authorized in January 1992 for two years in the amount of $1.8 million with the intention of demonstrating quick-impact, low-cost measures in energy efficiency at the municipal (district) level, and conducting preliminary policy and pricing studies.

In May of 1992, the authorization was amended to increase Life-of-Project (LOP) funding to $45.0 million and extend the Project Assistance Completion Date (PACD) to February 1996. While continuing to support energy efficiency activities, the project description was expanded to include activities in energy pricing and institutional reform; coal, gas, oil and electricity

production and delivery systems; and nuclear power plant safety.

Authorization Amendment No. 2 (dated August 7, 1992) added $22.0 million for nuclear plant safety activities, while Amendment No.3 (dated October 29, 1992) revised some of the requirements governing the Inter-Agency Agreements (IAAs) for the nuclear power plant safety initiative.

Authorization Amendment No. 4, executed on April 22, 1993, increased life-of-project funding from $67 million to $250 million. It was estimated that during the life of the project about 30% of the funds would go to energy efficiency, pricing policy and market reforms; another 30% would be applied to energy production and delivery systems problems; and approximately 40% would be dedicated to nuclear safety improvements. It was also estimated that approximately 50% of project funds would be expended in Russia, 20% in the Ukraine, 10% each to Armenia and Kazakhstan, and the balance divided between Kyrgystan and Byelarus.

B. Evolution of Program Strategy

The design of this project has evolved over time, as USAID has learned more about the energy environment of each country and as it has responded to major external events and opportunities.

The initial program strategy was to help NIS countries respond to the fuel crises they were facing during their first winter of independence. Drawing on its experience in Central and Eastern Europe, USAID selected activities which would be highly visible and provide immediate impact in district heating systems.

As the scope of the project expanded, the nature and type of activities shifted more toward systemic problems needing substantially larger investments of time and money to resolve. USAID resources were used, in part, to leverage external resources for the improvement and expansion of NIS energy production and delivery in a more energy-efficient, environmentally sound manner. As noted in Attachment A, a sizable amount of USAID funds have been allocated to analyses, pre-feasibility assessments, and other preparatory activities intended to mobilize multi-donor loans and private commercial investments.

As an outgrowth of the Vancouver summit between Presidents Clinton and Yeltsin in early 1993, and in anticipation of the July 1993 Tokyo G-7 summit, the LOP funding for this project was increased to $250 million. Subsequently two major Requests for Proposals (RFPs) for project implementation were let, with contracts signed in September 1993, enabling the USAID technical office to streamline implementation procedures, phase-out smaller grants and contracts, and better focus activities on needs

specified in the field.

Also in September 1993, the Vice President Gore - Prime Minister Chernomyrdin Commission on Joint Economic and Technological Cooperation was formed, providing an avenue to apply joint bilateral attention to critical energy and environmental needs in Russia. This initiative has provided a unique opportunity for USAID to influence and focus top level U.S.-Russian attention on key energy and environment policy reform concerns.

See Attachment A, ENI Energy Objectives and Indicators, which describes the conceptual framework for the project.

C. Related Efforts

Following the G-7 Tokyo Summit, the Russia Energy and Environment Commodity Import Program (CIP) was authorized for $125 million, but it is currently expected not to exceed $90 million in LOP obligations. Its purpose is to provide Russian public sector and privatizing entities with U.S. equipment designed to improve the energy efficiency and environmental quality of energy production, transmission and use. Although the bulk of final CIP allocations are still being decided, it will complement other assistance efforts under Project 110-0002.

In June/July of 1993, the district heating portion of of Project 110-0002 was evaluated. USAID had funded activities at nine sites in six countries, totaling $4.0 million. In general, the evaluation found marked improvements in energy efficiency at all sites receiving USAID assistance, with payback on these investments occurring in less than a year at world-level prices. One element of the present comprehensive NIS energy program evaluation will be to follow-up on this first exercise and assess the "multiplier effect" of district heating activities supported by USAID.

III. SCOPE OF WORK

A. Purpose

The purpose of this evaluation is to assess the impact of energy program activities in selected NIS countries and develop options for how to achieve greater impact and focus to the program in the future.

In fulfilling this purpose, the Contractor will provide an objective, formal, interim evaluation of four of the five components of Project 110-0002. Those components, as outlined in Attachment A, include: (1) pricing and national policy; (2) district heating and energy efficiency; (3) subsector

restructuring; and (5) trade and international markets. Component four, nuclear safety, is not to be included in this evaluation.

Field work will be conducted in Armenia, Ukraine and Russia. See Attachment B for relevant impact indicators and country-specific targets.

In conducting this evaluation, the contractor will recommend and test specific ways of measuring ENI's indicators and targets of assistance effectiveness. The contractor will recommend, where needed, additional country-specific targets, with timeframes, and revised or additional quantitative and qualitative impact indicators with measurement methodologies.

B. Strategic Issues

1. Program-Wide Focus

The contractor will address the following strategic issues in carrying out the evaluation:

(a) Economic Restructuring/Market Reform: What has been the relative balance in assistance for economic restructuring vs. emergency energy situations? How has the energy program had an impact on policy reform, economic restructuring, and the movement to a market economy (e.g., structural changes in legislative and regulatory reform, pricing policies, improved climate for investment and trade, environmental protection, etc.)? To what extent are energy prices rising at this time? Describe for each country studied. If there has been no assistance impact, explain why not.

(b) Efficiency: Analyze whether the program has achieved progress in energy efficiency and environmental improvement, and the economic implications of such progress (e.g., foreign exchange savings through reduced need for energy imports).

Building on the district heating evaluation completed in July, 1993, identify the multiplier effect of USAID's work in this area. Cite significant follow-on activities continued after USAID-funded interventions, including their anticipated impact. If evidence exists, document specific examples of: utility demand-side management programs being developed; emerging local markets for energy conservation equipment, such as thermostats, insulation, meters, etc.; NGO sector involvement in energy efficiency/consumption issues.

(c) U.S. Trade and Investment: Develop a methodology and examine to what degree the program has advanced U.S. trade and investment interests through energy partnerships, demonstration programs,

project preparation for multi-donor bank (MDB) financing, institutional reforms to create a more favorable investment climate.

(d) External funding: To what degree has the program served to stimulate funding from external donor sources, e.g. the World Bank and European Bank for Reconstruction and Development (EBRD)? Give specific case examples which describe the anticipated impact of this external funding? The consultant will propose a methodology and assess the cost-effectiveness of USAID's investment in this area.

(e) Focus and Impact: How can the program focus limited resources to achieve greater impact on the restructuring and privatization of the energy sector, and greater impact in energy efficiency? Present specific options and assess their implications, including key management and implementation obstacles. Review impact indicators and targets for selected countries. Confirm their appropriateness for the program options presented and/or recommend new or revised ones with measurement methodologies.

2. Country-Specific Focus

In examining the above issues within a country context, the Contractor will address the country-specific concerns described below.

(a) Armenia

-- Because Armenia continues to face severe energy shortages, the sector operates in a crisis mode. In analyzing the impact of USAID energy assistance to Armenia, evaluators should consider both the effectiveness of USAID's emergency activities, and the degree to which the program has been successful in addressing longer-term energy needs. This assessment should look at USAID-funded activities in the following areas: weatherization and district heating; performance improvements at thermal and hydro-electric power plants; pre-loan assessments for the European Bank for Reconstruction and Development (EBRD) and World Bank financing; development of indigenous fossil fuels, including coal, oil, and gas; stimulation of private sector investments in the power subsector; and partnerships and exchange visits, through the U.S. Energy Association (USEA) and the Institute of International Education (IIE).

-- Following an assessment of program impact to date, the evaluation should describe the prospects for emphasizing economic restructuring in present and future USAID activities (e.g., policy reform - including pricing and

independent power, energy enterprise restructuring, etc.) while de-emphasizing dependency on emergency commodity assistance.

(b) Ukraine

-- In analyzing the impact of the USAID energy program in Ukraine, the evaluation team should particularly look at the following activities:

* power sector restructuring through the Putnam, Hayes and Bartlett (PHB) study (World Bank cooperative agreement), and U.S. Energy Association (USEA) utility partnerships;

* John Brown refinery analysis;

* Petroleum Sector Legal Analysis (Akin, Gump - World Bank Cooperative Agreement;

* improvements in the mining sector through Partners in Economic Reform (PIER) health and safety activities, and the coalbed methane study; and

* ongoing efforts in efficiency (for example, recent power plant and industry energy efficiency initiatives and demand-side management work).

-- USAID's program focus has been largely on power and efficiency. Yet, coal is Ukraine's only domestic energy resource, and it has inherent problems. What should be USAID's role, if any, in restructuring the mining industry and improving its productivity? Take into consideration what other donors are doing in the Ukraine in this subsector

-- Based on work completed, current conditions, and the role of the petroleum sector in the Ukraine economy, what should be USAID's approach, if any, to petroleum sector legal/regulatory reform and restructuring?

(c) Russia

-- USAID has supported a variety of activities in the Russian gas subsector (e.g., GAZPROM[1] pipeline rehabilitation through EBRD, preparation of a loan from the International Bank for Reconstruction and Development (IBRD) to improve efficiency of gas distribution, gas partnerships through

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[1] GAZPROM is the Russian Natural Gas Production and Transmission Company.

USEA, resource exploration and definition through the U.S. Geological Survey (USGS) and the Minerals Management Services (MMS), and some training through IIE). Taken together, to what extent do these activities constitute an effective strategy for the gas subsector? What should USAID be doing, if anything, in gas policy reform and restructuring, given the dominance of GAZPROM in this subsector?

-- USAID is providing assistance to the World Bank for oil policy reform and corporatization of oil enterprises. Other activities related to the oil subsector include: training, under IIE and USEA; and resource exploration and definition, through USGS and MMS. Is this an appropriate mix of activities given ENI's overall program focus on economic restructuring? What else, if anything should USAID be doing in oil policy reform in Russia?

-- Among donors, USAID has taken the lead in the Russian power subsector, with the dual objective of helping it run more efficiently and improving the climate for attracting more investment. Major activities include: legislative and regulatory reform and privatization, through RCG/Hagler Bailly; utility partnerships, through USEA; IIE training; and development of technical options for rehabilitating the power subsector, through the Joint Energy Alternative Study (JEAS). Phase I of both the Hagler Bailly and JEAS activities will end in December 1994. What would be the appropriate focus area(s) for Phase II of both these activities. What other interventions would enhance the USAID assistance program in the Russian power subsector? To what extent, and how, should USAID help catalyze future public and private investments in power?

-- Energy efficiency and environmental controls have been cross-cutting concerns in the USAID energy program. Activities in Russia have included: district heating, which was evaluated in July 1993; pre-loan preparation on gas distribution and gas flaring, through the World Bank; resources and environmental management, through MMS; development of environmental control technologies, through the Environmental Protection Agency (EPA); and authorization of the Russian Commodity Import Program (0013). What is the appropriate role for USAID and possible strategic approaches in energy efficiency in the future?

C. Team Composition

All team members should possess superior written and verbal communication skills. Preference will be given to a team with strong interdisciplinary skills and relevant Eastern European

and/or NIS experience.

USAID reserves the right to appoint a USAID employee to act in the capacity of an additional team member, observer, and/or resource person throughout this process.

The following expertise is required:

(1) an expert with relevant USAID program design and evaluation experience, and a working knowledge of energy sector issues, who will serve as the team leader;

(2) an energy economist with extensive exposure to policy development and reform;

(3) a technical expert with substantial background in energy efficiency and energy-induced pollution; and

(4) a privatization specialist with experience in the power subsector.

USAID will consider other configurations to this team as long as the total team background covers all the energy subsectors to be studied, with a special emphasis on electric power. For instance, an energy economist with relevant USAID design and evaluation experience could serve as team leader and a fourth position could be devoted to a power subsector specialist.

The Contractor will certify that there is no conflict of interest with respect to the performance of this assessment on the part of the contractor and each individual team member for this assessment. The Contractor will also guarantee that approved team members will be available as required by the schedule outlined in section E, below.

D. Methodology

The contractor will complete the tasks outlined below. Tasks 1-3 will be performed consecutively and tasks 4-5 will be performed consecutively. A break in work of up to two weeks between tasks 3 and 4, will be allowed by USAID.

Task 1: Start-up -- Meet with ENI technical and evaluation offices to discuss scope of work and clarify evaluation requirements. Review available project documentation in AID/W and at Washington-based contractor offices. Interview designated USAID, Contractor, and World Bank personnel (see attachment D), and design information gathering and measurement instruments for rapid appraisal work in the field. Finalize travel plans and host country logistical support. Interview EBRD representatives in London.

It is imperative that the team develop an evaluation methodology acceptable to USAID prior to departing from the Washington area. If additional time is needed to complete this task, only 1-2 team members will proceed to London for the EBRD interviews and the other team members will remain in Washington to finalize plans for the field work.

ENI/EEUD/EI (Gordon Weynand) will schedule Washington meetings and obtain country clearances for the team.

Task 2: Field Work (Russia) -- Travel to Moscow to interview USAID representatives, USAID contractor personnel, U.S. Embassy personnel as suggested by USAID, host country counterparts, and other donor representatives. Visit project sites, as designated by USAID, and interview representative samples of participants involved in or affected by USAID-funded activities. See attachment D for a tentative list of in-country contacts.

The team will spend approximately two weeks in Russia, visiting Moscow and St. Petersburg. Prior to departure the team will provide the USAID Mission an oral debriefing which outlines their findings.

Task 3: Interim Return to Washington -- Return to US, debrief ENI/PCS/PAC and ENI/EEUD/EI, and prepare interim draft report regarding team's findings in Russia. Prepare for trip to Ukraine and Armenia.

Task 4: Field Work (Ukraine, Armenia) -- Travel to Kiev and Yerevan to interview USAID representatives, USAID contractor personnel, U.S. Embassy personnel as suggested by USAID, host country counterparts, and other donor representatives. Visit project sites, as designated by USAID, and interview representative samples of participants involved in or affected by USAID-funded activities. See attachment D for a tentative list of in-country contacts.

The team will spend one week in Armenia, staying in Yerevan and taking 1-day excursions to various project sites; up to 9 days in the Ukraine, visiting Kiev and Donbass. Prior to departure from each country, the team will provide the USAID Mission an oral debriefing which outlines their findings.

Task 5: Debriefing and Writing -- Return to US, debrief ENI/PCS/PAC and ENI/EEUD/EI on latest portion of fieldwork, and prepare full draft evaluation report for USAID review.

Task 6: Finalize Report -- Prepare final evaluation report based on USAID comments. USAID will provide written feedback six weeks following receipt of the full draft evaluation document, allowing for field review of the document.

Further definition of these tasks and their related end-products are contained in section H, Deliverables.

E. Schedule/Level of Effort

The evaluation will start in January/February 1995 and will take approximately 10 weeks of work. The proposed level of effort for each task is outlined below. Although USAID agrees to dividing the fieldwork into two trips, it wishes to minimize any break in work that may occur between tasks 3 and 4. Unless otherwise agreed to by USAID, no more than a 2-week break (preferably less) can transpire between the end of task 3 and the beginning of task 4.

Task 1	-	8 days (all team members)
Task 2	-	13 days (all team members)
Task 3	-	7 days (all team members)
Break	-	-- Up to 14 days --
Task 4	-	17 days (all team members)
Task 5	-	7 days (all team members)
Task 6	-	8 days (1 team member, or 2 members at 4 days each, following USAID review of draft report)

F. Logistical Support

All logistical support will be provided by the Contractor, including travel, transportation, secretarial and office support, interpretation, report printing and communication.

G. Work Week

A six-day work week is authorized in the field.

H. Deliverables

1. Draft work plan: Following the completion of Task 1, and prior to departure for the field, the Contractor will submit a draft work plan to ENI/EEUD/EI and ENI/PCS/PAC for concurrence. This plan will include for each country, the indicators the evaluators propose to use to assess impact, the means they will

use for measuring the impact, and a list of in-country interviews planned to date.

2. In-country briefings: On arrival in each country, the team will provide the Mission with an initial briefing and a draft written description of its plans for carrying out its work in country. Prior to departure from each country, the team will provide the USAID Mission with an oral debriefing, outlining their findings.

3. USAID Washington debriefing: The team will provide an oral debriefing for ENI/EEUD/EI, ENI/PCS/PAC, and related ENI/NCA desk officers immediately following its return from the field.

4. Interim draft report: Following the field trip to Russia, the team will provide an oral debriefing to ENI/PCS/PAC, ENI/EEUD/EI and the Russia desk officer. Within a week following their return, the team will submit an interim draft report covering their findings regarding the energy program in Russia. This interim report, based on USAID feedback, will be incorporated into the full draft evaluation report submitted per item #5, below.

5. Full draft evaluation report: No later than two weeks following return from the field, the contractor will submit 60 copies of a draft evaluation report which:

- addresses all the points identified in this SOW (see especially section III. B and attachment C);
- through specific case studies, identifies and analyzes successes, failures, problem areas, and lessons learned;
- recommends and justifies which activities should be continued or expanded, discontinued or postponed, and any new initiatives recommended as priorities for future consideration.

Within one week of receipt of the draft report, ENI/EEUD/EI and ENI/PCS/PAC will determine whether to accept the draft for internal review. Subsequent to USAID concurrence in accepting the draft report, ENI/PCS/PAC will coordinate bureau and field comments and provide them to the Contractor six weeks after receipt of the draft report.

6. Final report: Within two weeks of receipt of USAID's comments, the Contractor will submit 80 copies (79 bound and one loose leaf) of the final report. The final report will respond to all comments submitted by USAID. It will not exceed 30 pages, plus an Executive Summary not to exceed five pages. Additional material may be submitted as annexes, which shall include a list of acronyms, a list of individuals consulted, and a bibliography of documents reviewed.

7. Computer diskette: The Contractor will also submit both the draft and final reports on a diskette in WordPerfect 5.1 format.

8. Project Evaluation Summary (PES): Based on the results of the completed evaluation and other pertinent data, the Contractor will prepare a Project Evaluation Summary (PES) in AID's standard format. This PES will also be submitted in hard copy and diskette at the time of the final report submission.

DRAFT, 9/23/94
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ATTACHMENT E

PROJECT AUTHORIZATION

AMENDMENT NUMBER 6

Name of Region: New Independent States

Project Name: Energy Efficiency and Market Reform

Project Number: 110-0002

1. The authorization for the Energy Efficiency and Market Reform Project, dated January 21, 1992, and amended on May 21, 1992, August 7, 1992, October 29, 1992, April 22, 1993, and November 21, 1994, is hereby further amended by revising paragraph 1 of the project authorization to read as follows:

> 1. Pursuant to Sections 498B and 531 of the Foreign Assistance Act of 1961, as amended (FAA), I hereby authorize the Energy Efficiency and Market Reform Project for the New Independent States of the Former Soviet Union (NIS), involving planned obligations of not to exceed $450,000,000 in grant funds over a seven-year period from the date of original authorization, subject to the availability of funds in accordance with the USAID OYB/allotment process, to help in financing foreign exchange and local currency costs of the project. Except as USAID may otherwise agree in writing, the planned project assistance completion date is February 25, 1999.

2. Except as modified herein, the project authorization remains in force.

Barbara Turner
Deputy Assistant Administrator
Bureau for Europe and the
New Independent States

4/7/95
Date

Clearances: As shown on the action memorandum.

drafted: ENI/EEUD/EI:GWeynand:01/31/95

ATTACHMENT F

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 1994 CP REFERENCE:	None
APPROPRIATION CATEGORY:	Economic Support Funds (ESF) New Independent States (NIS)
LIFE-OF-PROJECT FUNDING:	$ 33,110,000 ESF (Grant) $416,890,000 NIS (Grant) $450,000,000
INTENDED FY 1994 OBLIGATION:	$ 80,015,000 NIS (Grant)

This Congressional Notification supersedes CN #048 submitted October 29, 1993.

This is to advise that A.I.D. intends to obligate an initial tranche of $80,015,000 in FY 1994 for the Energy Efficiency and Market Reform Project. These funds include $15,000 in FY 1993 NIS carryover funds. Additional notification(s) will be submitted for obligations that exceed this level. This project was not included in the FY 1994 Congressional Presentation, but was previously notified by Congressional Notification #178, dated 2/22/93. The purpose of this notification is to increase life-of-project funding by $200,000,000 to a new total of $450,000,000.

This increase in life-of-project funding is necessary to expand the improvement of efficiency and performance of energy production and consumption, expand energy sector privatization and market reform and further reduce safety risks of Soviet designed nuclear power plants. Illustrative activities include: $35 million to the Department of Energy to finance nuclear safety assistance in Russia; $1 million for an EBRD-managed multilateral nuclear safety fund; $4 million for the Nuclear Regulatory Commission to provide nuclear safety assistance in Russia; $10 million to the Department of Energy and Nuclear Regulatory Commission to finance nuclear safety assistance in the Ukraine; $10 million to finance emergency energy activities in Armenia; $10 million for support of on-going activities initiated in FY 93 by the Department of Energy (non-nuclear), Department of Interior, United States Energy Association and Partners in Economic Reform; and $10 million to support the Gore-Chernomyrdin energy initiatives in Russia.

This CN falls under the category Energy and Environment, as specified in Section 560 of the FY 1994 Foreign Operations Appropriations Act.

Attachment: Activity Data Sheet

16

AGENCY FOR INTERNATIONAL DEVELOPMENT
ACTIVITY DATA SHEET

PROGRAM: New Independent States Regional

CP 81-05 (4-85)

TITLE	FUNDING SOURCE	PROPOSED OBLIGATION (in thousands of dollars)		
Energy Efficiency and Market Reform	New Independent States Economic Support Funds	FY 94 $ 80,015	LIFE OF PROJECT (Planned) $450,000	
NUMBER 110-0002 GRANT X LOAN ☐ / NEW ☐ CONTINUING X	PRIOR REFERENCE CN #178 submitted February 22, 1993	INITIAL OBLIGATION FY 92	ESTIMATED FINAL OBLIGATION FY 95	ESTIMATED COMPLETION DATE OF PROJECT FY 96

Purpose: To improve the efficiency and performance 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.

Background: This project is designed to provide highly visible, high impact activities addressing energy sector problems throughout the NIS. These activities also support U.S. private sector opportunities where the U.S. has a comparative advantage. The energy sector is of critical importance in each of these newly independent states. Inappropriate energy policies, inefficient energy production, distribution and end-use and declining oil, gas, coal and electricity production pose serious threats to the transitions of all the states to democratic societies and market economies. Massive improvement and assistance to promote nuclear safety are urgent, critical needs. Activities to improve the energy efficiency of selected district heating systems in Russia, Ukraine, Byelarus, Armenia, Kazakhstan and Kyrgyzstan, and to procure equipment and instrumentation for installation in the selected heating plants have been completed. Other initiated activities include coal mine safety/health improvements, energy commodity exchange training, thermal power plant expansion technical assistance, and U.S.- NIS energy partnership/exchange programs.

Project Description: U.S. efforts will concentrate on short-term catalytic impacts, critical policy reforms and other measures which also provide opportunities for the NIS to tap the benefits of U.S. trade and investment. Improving energy efficiency is an important element in achieving viable economies and in reducing environmental pollution. The project contains four basic components:

1.) Energy Efficiency and Performance Improvement- to improve energy efficiency in electric power, refineries, industries and buildings.

2.) Energy Pricing Policy and Institutional Reform- to introduce a market-driven approach for energy supply-demand balance in the NIS republics.

3.) Energy Production and Delivery Systems- to improve production from existing facilities, develop additional capacity and efficiency-driven reduction in demand in key elements of the energy production, conversion and delivery systems.

4.) Nuclear power plant Safety- to reduce the risk of accidents in unsafe civilian nuclear power reactor stations.

These activities are expected to: expand the availability of oil, gas and coal production and exports; increase hard currency earnings in the NIS republics; contribute to the reversal of environmental degradation trends; and reduce the risks of accidents in aging and new nuclear power plants.

Relationship 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. Greater efficiency in energy production and consumption in the NIS will not only assist in addressing the serious energy shortages but is also critical to successful economic reform and environmental improvement.

Beneficiaries: The project will directly benefit industrial, mining and energy managers through specific training programs and will indirectly benefit the ultimate consumers and citizens of the NIS republics who depend on these energy sources. It will also directly address social and economic unrest throughout the republics caused by disruptions in the production and distribution of coal, oil, gas and electricity.

Host Country and Other Donors: The project will be coordinated with the World Bank, the Commission of the European Community, the European Bank for Reconstruction and Development, the Organization for Economic Cooperation and Development, the International Atomic Energy Agency and other international and bilateral donors to the New Independent States.

A.I.D.- Financed Inputs:	Life of Project
Technical Assistance:	$320,000
Training	30,000
Commodities and Equipment	100,000
Total	$450,000

U.S. FINANCING (in thousands of dollars)	Obligations	Expenditures	Unliquidated
Through September 30, 1992	$33,107	$1,642	31,465
Estimated Fiscal Year 1993	$56,464	$17,796	
Estimated Through September 30, 1993	$89,571	$19,438	$ 70,133
		Future Year Obligations	Estimated Total Cost
Proposed Fiscal Year 1994	$ 80,015	$280,414	$450,000

PRINCIPAL CONTRACTORS OR AGENCIES

Private contractors, NGOs, DOE, NRC, EPA, EBRD and possibly other agencies, as appropriate.

AUG 1 0 1994

UNITED STATES AGENCY FOR INTERNATIONAL DEVELOPMENT
ADVICE OF PROGRAM CHANGE

PROGRAM:	New Independent States Regional
TITLE:	Energy Efficiency and Market Reform
PROJECT NUMBER:	110-0002
FY 1994 CP REFERENCE:	Statistical Annex, p. 298
APPROPRIATION CATEGORIES:	Economic Support Funds (ESF); New Independent States (NIS)
LIFE-OF-PROJECT FUNDING:	$ 33,110,000 ESF (Grant) 416,890,000 NIS (Grant) $ 450,000,000 Total
INTENDED FY 1994 OBLIGATION:	$ 156,615,000 NIS (Grant)

This is to advise that USAID intends to obligate a third tranche of $21,100,000 for the Energy Efficiency and Market Reform Project, for a total of $156,615,000 in FY 1994. Of this amount $135,515,000 was notified by Congressional Notification #419, submitted May 27, 1994, which included transfers of $40,000,000 to the Department of Energy and $9,000,000 to the Nuclear Regulatory Commission for nuclear safety activities, and $15,000 in FY 1993 carryover funds. Life-of-project funding remains at $450,000,000.

This third tranche is necessary to continue improvement in efficiency in energy production and consumption, and to expand energy sector privatization and market reform in Armenia, Georgia, the Kyrgyz Republic, Kazakhstan, and Russia. $15,100,000 will be obligated to support the three non-nuclear components of the project (Energy Efficiency and Performance Improvement, Energy Pricing Policy and Institutional Reform, and Energy Production & Delivery Systems), and $6,000,000 will be obligated for a second grant to the European Bank for Reconstruction and Development (Nuclear Safety Account) to improve the safety of nuclear reactors in the NIS. Planned activities include: assessment of energy sources and emergency winterization (including kerosene supply) in Armenia; alleviation of the present energy emergency in Georgia by providing critical spare parts and commodities; continuation of implementation of the Joint Energy Alternatives Study and the privatization of the electric power sector in Russia; and to assist the Kyrgyz Republic and Kazakhstan in their efforts to privatize, restructure, and improve efficiency of the electric power sector.

This CN falls under the Energy and Environment category, as specified in Section 560 of the FY 1994 Foreign Operations Appropriations Act.

Attachment: Activity Data Sheet

UNITED STATES AGENCY FO' 'ERNATIONAL DEVELOPMENT
ACTIVITY A SHEET

PROGRAM: New Independent States Regional

TITLE	FUNDING SOURCE	PROPOSED OBLIGATION (In thousands of dollars)		
Energy Efficiency and Market Reform	New Independent States Economic Support Funds	FY 94 156,615	LIFE OF PROJECT (Planned) 450,000	
NUMBER 110-0002 GRANT X LOAN / NEW CONTINUING X	PRIOR REFERENCE CN #419 submitted May 27, 1994	INITIAL OBLIGATION FY 92	111ESTIMATED FINAL OBLIGATION FY 95	ESTIMATED COMPLETION DATE OF PROJECT FY 96

Purpose: To improve the efficiency and performance 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.

Background: This project is designed to provide highly visible, high impact activities addressing energy sector problems throughout the NIS. These activities also support U.S. private sector opportunities where the U.S. has a comparative advantage. The energy sector is of critical importance in each of these newly independent states. Inappropriate energy policies, inefficient energy production, distribution, and end-use, and declining oil, gas, coal and electricity production pose serious threats to the transitions of all the states to democratic societies and market economies. Massive improvements and assistance to promote nuclear safety are urgent, critical needs. Activities to improve energy efficiency and to procure equipment and instrumentation for selected district heating systems in Russia, Ukraine, Belarus, Armenia, Kazakhstan, and the Kyrgyz Republic have been completed. Other initiated activities include assistance for restructuring and privatization of the power sectors in Russia and Ukraine; a joint energy alternatives study for Russia; power sector loan document preparation for international funding in Georgia and Belarus; oil and gas seismic data analysis; assistance in oil and gas leasing arrangements; assistance in oil and gas exploration legislation; refinery sector restructuring in Ukraine; coal mine safety and health improvements in Russia, Ukraine and Kazakhstan; training and U.S.- NIS utility partnership and exchange programs.

Project Description: U.S. efforts will concentrate on short-term catalytic impacts, critical policy reforms and other measures which also provide opportunities for the NIS to tap the benefits of U.S. trade and investment. Improving energy efficiency is an important element in achieving viable economies and in reducing environmental pollution. The project contains four basic components:

1) Energy Efficiency and Performance Improvement -- to improve energy efficiency in electric power, refineries, industries and buildings.

2) Energy Pricing Policy and Institutional Reform -- to introduce a market-driven approach for energy supply-demand balance in the NIS republics.

3) Energy production and Delivery Systems -- to improve production from existing facilities, develop additional capacity and efficiency-driven reduction in demand in key elements of the energy production conversion and delivery systems.

4) Nuclear power plant safety -- to reduce the risk of accidents in unsafe civilian nuclear power reactor stations.

These activities are expected to: expand the availability of oil, gas and coal production and exports; increase hard currency earnings in the NIS republics; contribute to the reversal of environmental degradation trends; and reduce the risks of accidents in ageing and new nuclear power plants.

Relationship to USAID 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. Greater efficiency in energy production and consumption in the NIS will not only assist in addressing the serious energy shortages but is also critical to successful economic reform and environmental improvement.

Beneficiaries: The project will directly benefit industrial, mining, and energy managers through specific training programs and will indirectly benefit the ultimate consumers and citizens of the NIS republics who depend on these energy sources. It will also directly address social and economic unrest throughout the republics caused by disruptions in the production and distribution of coal, oil, gas and electricity.

Host Country and Other Donors: The project will be coordinated with the World Bank, the Commission of the European Community, the European Bank for Reconstruction and Development, the Organization for Economic Cooperation and Development, the International Atomic Energy Agency and other international and bilateral donors to the New Independent States.

USAID- Financed Inputs:	Life of Project ($000)
Technical Assistance	320,000
Training	30,000
Commodities and Equipment	100,000
Total	450,000

U.S. FINANCING (In thousands of dollars)				
		Obligations	Expenditures	Unliquidated
Through September 30,	1992	33,107	1,642	31,465
Estimated Fiscal Year	1993	56,464	17,796	[illegible]
Estimated Through September 30,	1993	89,571	19,438	70,133
			Future Year Obligations	Estimated Total Cost
Proposed Fiscal Year	1994	156,615	203,814	450,000

PRINCIPAL CONTRACTORS OR AGENCIES

Burns & Roe, RCG/Hagler-Bailly, United States Energy Association, Partners in Economic Reform, Institute for International Education, NGOs, Department of Energy, Nuclear Regulatory Commission, Department of the Interior (U.S. Geologic Survey and Mineral Management Service), Environmental Protection Agency, International Bank for Reconstruction & Development European Bank for Reconstruction & Development and to be determined as appropriate.

ATTACHMENT G

INITIAL ENVIRONMENTAL EXAMINATION

(A)	PROGRAM COUNTRY:	New Independent States (Regional)
(B)	PROJECT:	Energy Efficiency and Market Reform - No. 110-0002
(C)	FUNDING:	$450 million
(D)	PERIOD OF FUNDING:	FY 1992 - FY 1998
(E)	STATEMENT PREPARED BY:	Gordon Weynand, ENI/EEUD/EI
(F)	RECOMMENDED ENVIRONMENTAL ACTION:	Positive Determination under USAID Environmental Procedures (22 CFR 216), with a categorical exclusion per 216.2(c)(2)(i) for training activities.
(G)	DECISION OF DAA/ENI:	Barbara Turner Approved Disapproved 4/7/95 Date
(H)	DECISION OF ENI ENVIRONMENTAL OFFICER:	J. J. Harmon Approved Disapproved Date

EXAMINATION OF THE NATURE, SCOPE, AND MAGNITUDE OF THE ENVIRONMENTAL IMPACT OF ACTIVITIES PROPOSED UNDER AMENDMENT NO. 6 OF THE ENERGY EFFICIENCY AND MARKET REFORM PROJECT (110-0002)

A. DESCRIPTION OF THE PROGRAM:

The purpose of the project, as amended, is to expand the improvement of efficiency of energy production and consumption in the New Independent states (NIS, formerly known as the Soviet Union) and to help implement market reforms in this sector. The amended project will provide technical assistance and limited commodities and training to support three focus areas: (1) power sector restructuring, (2) energy efficiency, and (3) nuclear power plant safety. All of these activities contribute to economic and energy reform efforts that will enhance the environment, reduce pollution, introduce cleaner fuels and more efficient and safe energy technologies and management systems.

B. RECOMMENDED ENVIRONMENTAL ACTIONS:

The positive implications of this project on promoting energy efficiency and clean energy sources lead to an overall conclusion that the project will have a positive environmental impact. However, interventions (even if limited to technical assistance and feasibility studies) in nuclear safety, fossil fuels production, and energy pricing reform could introduce incentives for expanding unregulated and risk-producing activities unless appropriate assessment and mitigation of these risks are undertaken. Environmental considerations will be incorporated into technical assistance, project studies, and activities aimed at rehabilitating existing or constructing new energy production facilities. Where negative effects may occur, project developers (consultants and/or participating agency officials) will prepare recommendations to avoid or mitigate these effects.

Environmental assessments (EAs) will be required for all activities not covered by categorical exclusions (e.g., training). These EAs will be performed by independent teams and reviewed and approved by the ENI Environmental Coordinator/Officer prior to expenditure of project funds on these activities. The cost for completion of the required EAs is incorporated in the project budget.

Action Recommended: Positive Determination under USAID Environmental Procedures (22 CFR 216)