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Report No: 19989

IMPLEMENTATION COMPLETION REPORT
(40980; 40981; 28253)

ON A

LOAN

IN THE AMOUNT OF US$317 MILLION

TO THE

REPUBLIC OF UKRAINE

FOR ELECTRICITY MARKET DEVELOPMENT PROJECT

MAY 15, 2000

CURRENCY EQUIVALENTS

(Exchange Rate Effective February 2000)

Currency Unit = Hryvnia
1 Hryvnia = US$ 0.1779
US$ 1 = 5.6199 Hryvnia

FISCAL YEAR
January 1 - December 31

ABBREVIATIONS AND ACRONYMS

CAS	Country Assistance Strategy
EBRD	European Bank for Reconstruction and Development
EMA	Energomarket Members Agreement
EMDP	Electricity Market Development Project
EU	European Union
FRP	Financial Recovery Plan
GDP	Gross Domestic Product
GOU	Government of Ukraine
IDC	Interest During Construction
Minenergo	Ministry of Power and Electrification of Ukraine
NDC	National Dispatch Center
NERC	National Electricity Regulatory Commission
PCU	Project Coordination Unit
PIU	Project Implementation Unit
QAG	Quality Assurance Group
SAR	Staff Appraisal Report
TA	Technical Assistance
USAID	United States Agency for International Development
VAT	Value-Added Tax
WEM	Wholesale Electricity Market

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UKRAINE
ELECTRICITY MARKET DEVELOPMENT PROJECT

CONTENTS

Project ID: P044444	*Project Name:* ELECTRICITY MKT. DEV'T.
Team Leader: Carolyn Gochenour	*TL Unit:* ECSEG
ICR Type: Core ICR	*Report Date: May 3, 2000*

1. Project Data

Name: ELECTRICITY MKT. DEV'T.
Country/Department: UKRAINE
Sector/subsector: PT - Thermal; PY - Other Power & Energy Conversion

L/C/TF Number: 40980; 40981; 28253
Region: Europe and Central Asia Region

KEY DATES

			Original	*Revised/Actual*
PCD:	01/16/96	*Effective:*	01/31/97	01/31/97
Appraisal:	05/15/96	*MTR:*	12/31/97	
Approval:	10/10/96	*Closing:*	12/31/99	09/23/99

Borrower/Implementing Agency: UKRAINE/DNIPROENERGO; DONBASSENERGO; ZAKHIDENERGO; TSENTRENERGO AND NATIONAL DISPATCH CENTER
Other Partners: Governments of USA, United Kingdom, the Netherlands, and EBRD

STAFF	Current	At Appraisal
Vice President:	Johannes F. Linn	Johannes F. Linn
Country Manager:	Luca Barbone	Basil G. Kavalsky
Sector Manager:	David A. Craig	Dominique Lallement
Team Leader at ICR:	Carolyn Gochenour	Laszlo Lovei
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2. Principal Performance Ratings

(HS=Highly Satisfactory, S=Satisfactory, U=Unsatisfactory, HL=Highly Likely, L=Likely, UN=Unlikely, HUN=Highly Unlikely, HU=Highly Unsatisfactory, H=High, SU=Substantial, M=Modest, N=Negligible)

Outcome: HU
Sustainability: UN
Institutional Development Impact: M
Bank Performance: U
Borrower Performance: U

	QAG (if available)	ICR
Quality at Entry:	S	U
Project at Risk at Any Time:	Yes	

3. Assessment of Development Objective and Design, and of Quality at Entry

3.1 Original Objective:

Ukraine's economy has been on a continuous decline since independence in 1991. This has particularly affected the power sector which is suffering from low collection levels, largely in the form of barter and offset transactions (an offset transaction involves several parties which settle claims against each other in a circular fashion, not involving cash); low tariffs; and huge arrears. This has also impacted on the physical condition of the power system which has not been able to spend sufficiently on operation and maintenance, and equipment renewals and modernization, resulting in frequent blackouts. Furthermore, frequency control has been wholly inadequate, with adverse implications on system operations, resulting in Ukraine being effectively disconnected from its neighbor countries including Russia.

In 1994, a Presidential Decree provided for the unbundling of the power system, and the development of a competitive market for electricity. In the process, *inter alia,* one nuclear generation company, two hydroelectric companies, four thermal generation companies, one transmission company and twenty-seven distribution companies were established. Given the overall context, the Bank recognized that to operate properly, a competitive market would require: (i) improved collection levels; (ii) access to working capital enabling generators to procure fuels so that they can submit competing bids; (iii) improved metering facilities to record power flows; and (iv) improved financial management. Project objectives were thus to increase the quality and reduce the cost of electricity supply by supporting the Borrower's (i) development of a competitive electricity market; and (ii) establishing operating conditions in the electricity sector that encourages electricity companies to seek full cost recovery to ensure sustainability of operations.
The Project was consistent with the Country Assistance Strategy (CAS) paper which underscored the importance of structural reforms in the Ukrainian context, and the objectives of the operation were clear and consistent with the Government priorities at the time. However, the Project was particularly demanding on the authorities, which were required, *inter alia*, to take stern measures against customers in default, reduce support to privileged groups, and pursue socially painful tariff adjustments. Against this background, the Government was also pursuing difficult adjustment policies, particularly in the industrial sector, which it was unable to support in a tangible fashion; furthermore it could not meet its payroll and pension obligations on a timely basis.

The Project largely focused on the thermal generation companies (an earlier operation--still under implementation--supported the rehabilitation of hydroelectric plants) which accounted for about 60% of Ukraine's installed capacity and produced the most expensive power in the system. Given the rapid decline in demand (total generation declined from 296 TWh in 1990 to 193 TWh in 1995 and 173 TWh in 1998), thermal power plants were most affected by the downturn and accounted for more than 80% of the overall generation decline. Thus, the restructuring and privatization of the four thermal generation companies had high priority, including plant closings and resulting layoffs, but was not considered politically feasible at the time. (The government undertook to privatize generation and distribution "over the medium- and long-term" under a Statement of Electricity Sector Policy provided in connection with the Project.) Nevertheless, the introduction of a competitive wholesale market (called Energomarket or power pool), all the more so in a predominantly public sector environment, may not have been the optimal approach to address sectoral priorities, and was highly risky.

In all, it is arguable whether the introduction of deep structural reforms in the power sector was appropriate given the rampant payment crisis, the significant decline in demand leading to excess capacity and the reduction in income levels together with significant upward adjustments in energy prices.

3.2 Revised Objective:

Project obejctives were not modified.

3.3 Original Components:

The project design components, as stated in the Staff Appraisal Report (SAR), were as follows (excluding financial charges):

(a) Fuels (US$147.1 million). This component was designed to build up fuel stocks at 14 power plants to standard industry levels (about 40 days for coal and mazut).

(b) Spare Parts, Equipment and Urgent Maintenance (US$139.6 million). This component was designed to (i) increase the stock of essential spare parts and equipment; and (ii) carry out deferred maintenance at 14 power plants.

(c) Metering and Communications (US$74.6 million). This component was designed to install metering and communications equipment to improve recording and billing of electricity flows at key wholesale market delivery points.

(d) Technical Services (US$9.3 million). This component was designed to provide consulting services and training for project implementation, financial management and the development of a sector privatization program.

The scope of the Project was consistent with its objectives. However, fuels accounted for nearly 40% of the Project cost. Meeting the working capital requirements of the generation companies through their borrowing long term (to finance fuel purchases) is arguable from a financial standpoint, given that their liquidity shortfall essentially stemmed from the inability of the distributors to pay for power purchases. The Project assumed that the improvement in payment collection (as a condition of Board presentation) would be maintained over time, enabling distributors to pay for the generated electricity and thus making the generators solvent (this was reinforced by the requirement on the generators to maintain minimum fuel stock levels throughout the year). This proved to be an over-ambitious expectation.

3.4 Revised Components:

Project design was not revised during implementation.

3.5 Quality at Entry:

The Project was selected for Quality at Entry assessment by the Bank's Quality Assurance Group (QAG). The QAG report dated December 27, 1997, found the quality at entry to be marginally satisfactory. The following positive features were noted: (i) clear focus on the development of a competitive power pool; (ii) substantial progress in establishing a framework for the electricity wholesale market and in improving tariff levels; (iii) well-coordinated and focused Technical Assistance program; (iv) innovative design; and (v) the possibility of quick exit (through suspension of the Loan) when the Government's commitment faltered. However, the positive aspects were weakened by the overall approach taken to address the fundamental problem of financial sustainability of sector entities in the context of an illiquid system with no incentives to

operate as a market, particularly at the distribution level, where much of the problem originated. Bank experience elsewhere indicates that a strong push towards downstream and upstream privatization should be at the heart of an assistance operation like the EMDP. Strong private participation in generation, distribution and supply companies is essential to make the electricity market work. By not addressing this fundamental issue in a major and direct way under the EMDP, the old payments/collection/barter system was preserved, thereby undermining the operation of the Energomarket.

4. Achievement of Objective and Outputs

4.1 Outcome/achievement of objective:

Underlying the implementation of the Project, there were about 60 covenants (many similar covenants were applicable to all five beneficiaries) and other conditions, largely financial, which were designed to: (i) restructure the financial condition of the generators and the dispatch company in parallel with the introduction of the competitive wholesale market; (ii) ensure the industry's profitability particularly by removing price caps and other Government-imposed constraints and requiring that the full legitimate costs of electricity supply (including subsidies to privileged groups) be recognized by the regulator; (iii) improve the liquidity of the industry by requiring, in particular, the distributors to apply strict disconnection policies; (iv) ensure the industry's sustainability by requiring that certain ratios be observed; and (v) improve the reporting through the introduction of International Accounting Standards.

In practice, however,

- Notwithstanding the requirement that balance sheets be restructured (largely through the rescheduling of arrears) during project preparation and approval, and assurances received to that effect, effectively no action was taken, so the financial soundness of the industry has deteriorated further in recent years;

- Except for short periods, price (bid) caps were in effect on the wholesale market for thermal generators (as well as for hydro and nuclear generators--the latter were prevented from recovering the costs of spent fuel treatment and decommissioning) in order to maintain affordable retail tariffs. Furthermore, as a result of political interference, the authority to set household tariffs was withdrawn from the regulator, at least temporarily. Lastly, the regulator's tariff instructions have not been always followed, and some distributors have been charging below the authorized rates with adverse implications on sector finances;

- Collection levels increased in advance of Board Presentation to exceed 90% (20% in cash) but continuously declined thereafter to reach 60% in 1999 (7% in cash). Collection levels have been, *inter alia*, affected by the reported refusal of the seven privatized distributors to deposit their sales receipts into the central "transit account," as required under the rules of the Energomarket Members Agreement (EMA), the basic document for the power pool;

- The industry has not been able to maintain key ratios affecting, for instance, fuel stocks, and at least one generator (Tsentrenergo) has borrowed long term without prior consultation with the Bank; and

- International Accounting Standards are only being introduced now. While some Ukrainian officials maintain that the electricity industry is "profitable", the valuation of most of the revenue (i.e., barters and "offsets") is open to question.

The authorities continue to allocate coal to power plants ("state reserve coal" may account for 50% of power plant coal consumption) as well as cash to various sector entities. Furthermore, the quality of electricity supply is low, with frequent load shedding (in a country with considerable excess generating capacity). Under the circumstances, in light of the Project objectives, the outcome of the Project can only be rated as Highly Unsatisfactory.

4.2 Outputs by components:

In parallel with loan processing, procurement was initiated for coal and fuel oil, to meet the requirements of the 1996/97 winter. The Loan became effective on January 31, 1997; contracts with suppliers were signed 10 days later, and deliveries took place in March 1997, thus missing the winter demand peak. Although the fuel bidding process was conducted well in advance to allow coal/mazut deliveries to be completed before the onset of the winter season, delays in Loan ratification (hence in effectiveness) led to late contract signing. All fuel contracts were signed between January 31 and February 10, 1997, immediately after Loan effectiveness, and disbursements promptly followed.

As the Loan was suspended in July 1997 (and canceled in September 1999), the above constituted the only procurement action initiated under the Loan. A total of US$76.4 million was disbursed (out of Loan amount of US$317 million).

Once the fuel was procured and burned, the distributors proved unable to pay for the power, and by October 1997, the stocks were depleted resulting again in lack of competition, blackouts and poor service. More importantly, the four generators found themselves saddled with new debt for which the Ministry of Finance demanded payments in cash, as opposed to "offsets", the traditional form of payment until then. On the positive side, this component demonstrated the benefits of cash-based competitive tendering for fuels in the Ukrainian context, as many companies participated in the tender, the quotations received were attractive, and the quality of fuels received was superior (in terms of heat rates and environmental standards). On the whole, still, the outcome of this component is unsatisfactory, given its adverse long-term impact on the generators' financial condition.

Given the suspension of the Loan, the procurement of fuels for the 1997/98 winter, of essential spare parts and of metering and communications equipment did not take place, so these components of the Project had no impact.

Regarding Technical Assistance (TA), this item was largely funded by external donors (USAID, British Know How Fund, CIDA, EU/TACIS; the EBRD approved a loan for the sector in December 1996 with a TA component but the Loan was subsequently canceled). Against an appraisal estimate of US$9.3 million, an amount in excess of US$20 million was eventually mobilized for the electricity industry under a Bank-coordinated TA program, largely on the implementation of the power pool and the associated settlement system (assistance was also provided for the introduction of International Accounting Standards and the preparation of future projects). A 1999 USAID-sponsored detailed review of the TA program concluded that the assistance was of poor technical quality and did not sufficiently address the specific requirements of Ukraine (see "Power Sector Reform Program Evaluation" prepared by The Mitchell Group, July 1999). Furthermore, insufficient efforts had been made to transfer the knowledge deemed essential for the successful operations of power markets. USAID is now trying to redirect its assistance to the privatization of utilities, while the UK Know How Fund has left the sector, in part because of its disappointment with the results including the poor utilization by the Government of Ukraine of the sector privatization strategy developed under British government funding.

4.3 Net Present Value/Economic rate of return:

Not calculated.

4.4 Financial rate of return:

Not calculated.

4.5 Institutional development impact:

The institutional impact of the Project can be assessed as follows:

- The Ministry of Power (Minenergo) is still in control of the sector, given the prevailing shortages and the resulting need to allocate resources;

- The sector Regulatory Agency (NERC) has established itself, has acquired considerable expertise, but had some of its powers removed by the Parliament and the Government (in relation to tariffs for households). It also practices capping of wholesale tariffs, resulting in losses to the power industry and weak competition among the generators; and

- The thermal generation companies are suffering from their declining market share, precarious financial condition, excess capacity and under-maintained facilities. They were the focus of the Project, but visible institutional improvements in the operating environment did not materialize.

In a Policy Letter under the Project, the Government undertook to carry out a privatization program of the generation and distribution companies over the medium- and long-term. Small lots of shares were sold to the workers and on the stock exchange and seven (out of 27) distribution utilities were privatized mostly to speculative financial investors. Contrary to the Bank and other donors' advice, and contrary to a detailed strategic study done by a reputable Investment Bank under the Bank's supervision, the privatization benefited financial investors without any record in the international power distribution business. Some are not complying with the conditions of the Energomarket, so the revocation of their licenses is under consideration. On the whole, institutional progress has been modest, particularly, given the scope of TA that was provided.

5. Major Factors Affecting Implementation and Outcome

5.1 Factors outside the control of government or implementing agency:

Efforts to revive the Project were adversely affected by the severe knock-on effects of the Russian financial crisis of August 1998, which resulted in a large devaluation of the Ukrainian currency, thus creating an immediate requirement for a significant tariff adjustment (at the time, bulk wholesale tariffs, as well as retail tariffs were expressed in US$). Subsequently, the Parliament intervened and effectively withdrew from NERC the powers to adjust household tariffs and the cancellation of the Loan became inevitable in September 1999. (Subsequently, the Constitutional Court overturned Parliament's ban on tariff increases, but NERC's authority to set tariffs continues to be constrained by political considerations.)

5.2 Factors generally subject to government control:

Much of the financial measures which were at the core of the Project were under the control of the Government, in particular:

- Causing budget organizations to pay their electricity bills in cash;
- Authorizing unambiguously the distribution utilities to disconnect delinquent customers;
- Implementing the electricity sector Financial Recovery Plan, thus enabling the power utilities to recover past losses and accumulate working capital;
- Implementing a credible social safety net enabling the lower income groups to meet their electricity bills;
- Not requiring the utilities to carry the burden of supporting privileged groups; and
- Privatizing the distribution utilities in a transparent fashion, in accordance with international practice, to strategic investors with know-how, capital and expertise in modern power utility management.

Had the above been achieved, the Government would not have had to resort to administrative tariff control, fuel allocation and ad hoc interventions in the distribution of Energomarket cash proceeds.

5.3 Factors generally subject to implementing agency control:

These factors were not decisive for the final Project outcome (suspension/cancellation). The key driving factors were under the Government's control.

5.4 Costs and financing:

n.a. (no significant cost changes occurred under the Project).

6. Sustainability

6.1 Rationale for sustainability rating:

Attaining the objectives of the Project on a sustainable basis would have requireed resolution of a large number of significant issues including first and foremost the lack of liquidity in the economy. Resolving this issue is essential to permit the financial rehabilitation of the utilities and the application of appropriate tariffs. As long as their cash collections remain at current levels (5-10%), generation companies will not have sufficient funds to procure quality coal at attractive prices and submit competitive bids. Hence, the main objective would not be attained on a sustainable basis. As a result, taking also into account that less than 25% of the Loan was disbursed, the sustainability of the Project is rated as Unlikely.

6.2 Transition arrangement to regular operations:

n.a.

7. Bank and Borrower Performance

Bank

7.1 Lending:

The Project was innovative and ambitious, supporting the rapid introduction of a competitive power market. Such an approach was consistent with the CAS and Bank sector policies. Virtually all potential issues were addressed during Project preparation including the financial rehabilitation of the sector; the introduction of competitive markets; the articulation of cost reflecting tariff policies; and the immediate capital and operating requirements of the utilities. The Project concept was sound and well-conceived and involved the key players (generation companies and NDC) to prepare themselves for the new competitive market environment. The Bank Loan became a "flagship" sector operation in Ukraine, rallying major international donors into a large and comprehensive program to support broad-based reforms. The appraisal team was well-staffed and competent. It alerted management to the high risks the Project entailed (which were addressed through a large number of covenants, enabling the Bank to suspend the Loan rapidly). The Regional Operations Committee referred the matter to the Bank-wide Operations Committee, which declined to meet on the subject. Both peer reviewers voiced serious reservations about the sustanibility of the financial situation of the generators once the working capital loan has been disbursed. It seems that these sustanability concerns were not addressed properly.

The Project design contained a number of major weaknesses including: (i) excessive focus on a competitive thermal generation market, as opposed to revenue collection (the latter issue would normally be addressed through the privatization of distribution companies); (ii) excessive reliance on legal covenants (although in Ukraine laws and decrees are routinely ignored, usually without serious consequence); (iii) reliance on an untested cash allocation mechanism (which provided for the distributors to deposit all their cash proceeds in a centralized "transit account"); and (iv) insufficient attention to the macroeconomic environment in general and the consumers' ability to pay the full tariff in cash in particular.

Overall, the performance of the Bank during appraisal was Unsatisfactory. The prospect of a competitive generation market in Ukraine proved too attractive to turn down, notwithstanding the fact that the Project did not address directly the main issues (most notably, the privatization) of the sector, and did not take sufficiently into account the unfavorable underlying macroeconomic environment.

7.2 Supervision:

The Loan became effective on January 31, 1997. A supervision mission visited Ukraine in April 1997 and reported that a whole series of agreed steps were not being implemented consistently with earlier undertakings, particularly, with respect to tariffs and revenue collection. In addition, the Government was intervening in the functioning of the Energomarket. Under the circumstances, the Bank had no choice but to threaten suspension (May 1997). A follow-up mission visited Ukraine in June/July 1997 and reported excellent progress in the preparation of remedial measures, including a much overdue residential tariff adjustment. Eventually, the Government backed off on the agreed tariff adjustments, thus forcing the Bank to suspend at end-July 1997.

Four supervision missions visited Ukraine subsequently, which were largely dedicated to the preparation and monitoring of a Financial Recovery Plan (FRP), designed with susbstainal assistance from the Bank and the donors to enable resuming Project implementation. Hopes were running high much of 1998 that the Loan could be reinstated following Cabinet of Ministers approval of a comprehensive FRP in April 1998. The FRP received the support of the G-7 at the highest level. Under the FRP, a high level inter-agency

Financial Recovery Commission was appointed, tariffs were significantly adjusted in line with the relevant Loan covenants, bid caps were removed and considerable progress was made toward market-based retail tariffs (except residential tariffs), arrears were partially rescheduled, and payment collections improved. However, the Russian financial crisis (para. 5.1) then intervened, resulting in drastic depreciation of the Hryvnia and a politically unsustainable tariff increase. Residential tariffs became highly politicized under a Parliament-initiated law (dated September 23, 1998) that imposed a ban on raising tariffs for public utilities and disconnecting non-paying households until budget arrears in salaries and pensions were paid in full. Payment collections (both total and cash) deteriorated markedly and the Energomarket's formula-based payment allocation mechanism was suspended by NERC from time to time due to "emergency" circumstances. With the possibility of Loan reinstatement fading away progressively, the Loan was eventually cancelled on September 23, 1999 at the request of the Government.

The Bank had no choice but to suspend the Loan in July 1997, given that the fundamental conditions for the introduction of a competitive market were not being met. Under such conditions, for the Bank to finance additional fuel supplies (to meet the requirements of the 1997/98 winter) would have made little sense. The efforts of the Bank in the subsequent two years to restore the Project, under the original framework, were remarkable, as they mobilized the authorities and the affected parties, together with all the donors, in elaborating a sector-wide FRP. Overall, the supervision effort was Satisfactory under the difficult circumstances created by a particularly challenging Project in a difficult country environment.

7.3 Overall Bank performance:

The Bank tried to seize a window of (political) opportunity to introduce a modern power market in a transition economy. While the Project was fully consistent with the CAS and sectoral priorities, it did not take sufficiently into account the overall macroeconomic environment, the status of the legal framework, as well as the level of real political commitment behind the program. With hindsight, the political and social ramifications of the power sector reform program could have been better anticipated. The overall performance of the Bank, under the circumstances, is rated Unsatisfactory.

Borrower

7.4 Preparation:

The authorities--most notably, Minenergo and NERC--participated actively in Project preparation, as they were committed at the time to the Project objectives, with all that this entails in terms of putting together a competitive power market, as well as a performing financial settlement system. These actions were taken well in advance of Loan negotiations. Subsequently, the authorities adjusted power tariffs and made efforts (mostly administrative in nature) to improve collections. In all, the Borrower's performance during Project preparation was Satisfactory.

7.5 Government implementation performance:

Attainment of the Project's goals was adversely affected by the Government and the sector regulator taking flagrant measures in contradiction with the agreed Loan covenants including: (i) disallowing tariff adjustments; (ii) capping wholesale tariffs; (iii) through the use of emergency powers, influencing the allocation of cash between different members of the Energomarket; and (iv) rationing coal. The Bank alerted the authorities to the need to take remedial measures, but unquestionably, the political will was missing. The Government's performance in the privatization of the distribution companies was also questionable as, against the donors' advice, it decided to opt for financial as opposed to strategic investors for the first seven distribution companies that were privatized during 1998. Finally, there was poor

coordination between various GOU agencies in the implementation of the FRP. The Government's overall implementation performance is thus rated as Unsatisfactory.

7.6 Implementing Agency:

The four generation companies were keen to see the Project succeed as it was perceived as essential to achieve their institutional, technical and financial rehabilitation. As explained above, these objectives were not attained. Still, an area where the generation companies should have been expected to play a key role would have been the procurement of fuels, as it was expected specifically that they would be in charge of this activity (SAR, para. 4.9), and would be assisted by external consultants (para. 2.15). In the event, Minenergo played a "coordinating role", which caused, *inter alia*, bidding documents being floated on a joint basis and the same price for fuel oil being charged to all four companies (the same four trading firms, which obtained US$76 million worth of contracts, supplied the four generation companies with fuel oil and coal). This was inconsistent with the objective of the Project, which was to create a competitive framework between the generators, and did not contribute to their developing fuel procurement expertise either. Further, during the two-year suspension period, generation companies and the National Dispatch Center did not push strongly enough with the Government for an early cancellation of the Loan to avoid paying commitment charges on the outsanding Loan balance. Overall, the implementation performance of the generation companies was Unsatisfactory.

7.7 Overall Borrower performance:

While the Government was supportive of the Project during preparation, its performance during implementation was particularly weak, given that it frustrated, through its continuous ad hoc interference, the operation of a competitive power market. Government and Parliamentary actions made residential tariff setting highly politicized. The Government's reluctance to give up its day-to-day management of the electricity industry, including fuel procurement, results in an overall Unsatisfactory performance rating.

8. Lessons Learned

Power Sector Reform and Macroeconomic Environment

A key lesson from the Project is that there is little merit in pursuing comprehensive power sector reform policies (legislation, unbundling, competition, privatization, regulation, etc.) in a country in the throes of a major economic crisis. The Project amply demonstrates that when the economy is fundamentally barter-based, salaries/pensions are in arrears and the Governement condones the culture of non-payment, there is no way to cause consumers to pay for electricity in cash. In such an environment, the introduction of an advanced model of a competitive power market is bound to be a losing proposition. Project objectives should have been more modest and targeted to improving well-delineated technical, institutional and financial problems.

Financing of Working Capital

Under normal circumstances, capital assets are financed through long-term loans (together with some equity) and working capital is financed through short-term borrowings, supplier's advances and equity. Hence, the financing of fuels through longer term borrowings was highly unusual; it enabled the generators to meet their requirements for a few weeks or months, but saddled them with long-term financial obligations they are presently unable to meet, let alone in cash. The Bank should apply strict policies on the financing of working capital, essentially confining such financing to genuine *force majeure* circumstances.

Ability to Pay

It does not seem that serious attempts were ever made to assess the ability of major categories of consumers (residential, industrial and budget organizations) to pay the full cost of electricity in cash in a consistent fashion. Granted that some categories of consumers were expected to be supported by local and central government, the sustainability of such arrangements should have been assessed realistically.

Targeting of Project

The Project intended to benefit largely the generation companies through the provision of working capital (fuel and spare parts). Yet, to be successful, the Project ultimately depended on the ability of 27 distribution companies in collecting revenue and compensating the generators correspondingly. The distributors were encouraged to improve collections primarily through legal means, but had no real incentive to perform in this respect. Had the Project been addressing distribution as well, the Bank could have had more influence over this critical segment of the sector.

Period of Suspension

The Loan was suspended for an unusually long period (26 months). The Bank's compliance deadlines for the reinstatement conditions were moved several times. This was in large part due to the broader international significance of the Project. Nevertheless, the Bank should have taken a tougher stance on this matter, including unilateral cancellation, when the Financial Recovery Plan started to unravel at the end of 1998 and hopes for restoring the Loan were fading rapidly.

Role of Peer Reviewers

Both peer reviewers expressed strong reservations about the Project, particularly with respect to the generation companies borrowing long term to finance fuel purchases, the advisability of creating a competitive market at this juncture, the role of a regulator in an environment in which enterprises are in the public sector, and the insufficient emphasis on privatization. Peer reviewers' opinions, particularly when critical of an operation, should be given more weight in the Project approval process.

9. Partner Comments

(a) Borrower/implementing agency:

Comments of Minenergo

Evaluation of Project Objectives and Implementation Results

The necessity of preparation of the Project was dictated in an extremely difficult situation in the branch of electric energy of Ukraine. Implementation of market relations in this branch of economy began on the background of the acute financial and payment crisis in the economy of Ukraine which resulted in rapid lowering of the level of payments (especially in terms of bank-effected payments) for consumed electric and heat energy. This entailed recession in production, further washing-out of working funds, lack of funds for modernization and updating of energy capacities as well as for wages and salaries of the branch employees.

In order to stabilize the financial status of energy companies and organize the operation of the wholesale electricity market of Ukraine, a decision was made to obtain financial resources of the World Bank.

The Loan Agreement was signed between Ukraine and the International Bank for Reconstruction and Development on November 1, 1996 and ratified by the Supreme Council of Ukraine on December 18, 1996.

The total loan amount for the Project was US$375 million, including US$50.5 million as a share of Ukraine, US$7.5 million as technical (grant) assistance and US$317 million as the World Bank loan consisting of the following three parts:

> *part 1* - US$123.1 million for purchasing fuel (590,000 tons of fuel oil and 2.6 million tons of coal) by energy generating companies;
>
> *part 2* - US$122.3 million for acquisition of spare parts for equipment of 14 thermal power stations; and
>
> *part 3* - US$71.6 million for installation of measuring instruments and communication devices for improvement of operation of the wholesale electricity market.

Implementation of part 1 and part 2 of the Project had to be carried out by joint-stock power generation companies, Dniproenergo, Donbassenergo, Zakhidenergo and Tsentrenergo for the period of three years. The NDC of Ukraine (National Dispatch Center), currently called the NEC Ukrenergo (National Electricity Company), was in charge of implementation of the part 3 of the Project.

As specified in the Agreement, the closing date for withdrawal of funds from the loan account was December 31, 1999. In accordance with the Sub-Credit Agreements signed between the Ministry of Finance of Ukraine, the thermal power generation companies and the NDC, repayment of credit funds according to part 1 and part 2 is to be commenced by the thermal power generation companies in May 2000, and repayment of credit funds under part 3 of the Project by the NEC Ukrenergo must be commenced in May 2002.

Implementation teams were formed within organizations-performers of the energy generation companies under the Project for the purpose of its realization. In addition, a working group was organized within the structure of the Ministry of Energy of Ukraine for coordination of activities in preparation and implementation of the Project. Also, the Project Steering Committee was approved in accordance with a special edict of the Cabinet of Ministers of Ukraine.

Purchase of fuel was conducted by means of international tender. All necessary documents for its holding were prepared in a very short time. This became possible due to fruitful collaboration of experts of the generating companies and the Ministry of Energy of Ukraine with USAID and the consultants of the Hagler-Bailly company.

In connection with the facts that the World Bank made the loan effective only on January 31, 1997 and the prolonged review of the tender documents by World Bank experts, the power stations started to receive the fuel purchased through the loan funds at the end of winter/beginning of spring of 1997. The table below shows the breakdown of the fuel purchases:

	Coal		Fuel Oil	
	thousand tons	US$ (million)	thousand tons	US$ (million)
Dniproenergo	495.0	17,668.3	45.0	4,725.0
Donbassenergo	439.0	17,913.5	28.5	2,992.5
Zakhidenergo	441.0	11,311.6	-	0.0
Tsentrenergo	489.0	18,609.7	26.1	2,743.5
Total	1,800.0	65,503.1	99.6	10,461.0

Another tender intended to purchase fuel had to be held at the end of 1997. However, starting from July 28, 1997, funding of the Project was suspended due to both unsatisfactory financial standing of the entire power sector and prohibited increase of electricity tariffs for household consumers.

In order to stabilize the financial situation of the energy companies and regulate financial settlements in the power sector, the Cabinet of Ministers adopted a series of regulations (of which the World Bank was constantly kept informed by Minenergo).

It was expected that implementation of measures, which had been planned by the regulations, would allow to overcome the existing difficulties at the earliest possible time. Unfortunately, the expectations did not materialize. In particular, indicators of payment collection of the four generating companies remained at rather low levels, as shown below:

	Generation Companies	
	General level of payments	Including cash
1997	76.20%	7.70%
1998	68.60%	5.29%
1999 (10 months)	59.20%	7.70%

On July 23, 1998, the Supreme Council of Ukraine passed the law of Ukraine "On Temporary Prohibition of Increasing Prices and Tariffs for Housing and Communal Services and Services of Municipal Transport Rendered to the Citizens of Ukraine." This law provides temporary prohibition of increasing prices and tariffs for housing and communal services at any time prior to full repayment of arrears of wages and salaries, stipends, pensions as well as social allowance debts.

On request from the President of Ukraine, the Constitutional Court of Ukraine adopted the decision on March 2, 1999 as to non-constitutional nature of adopting the above law. The National Electricity Regulatory Commission (NERC) adopted a regulation on increase of tariffs for electric energy for household consumers starting in April 1999.

In order to provide social protection of the citizens, the Supreme Council of Ukraine passed on March 17, 1999 the Law of Ukraine "On Introduction of Changes to the Law of Ukraine on Tariffs and Pricing." In accordance with this law;

- prices and tariffs for housing and communal services (including electric energy and natural gas for housing and communal needs), services of municipal transport and communication services shall be established by the Cabinet of Ministers in agreement with the Supreme Council of Ukraine; and

- payments for housing and communal services as well as services of municipal transport shall be carried out the basis of prices and tariffs set by the NERC as of June 1, 1998.

Passing these laws was a serious impediment to renewal of the loan due to infringement of a condition of the World Bank as to the exclusive right of the NERC to perform regulation of the electricity tariffs.

In response to repeated requests of Minenergo and the generating companies for renewal of funding and then for cancellation of unused funds of the loan or redirection of the loan funds in full for the purposes of purchase and installation of measuring instruments and communication devices (in order to improve the operation of the power market), the World Bank did not give its consent and canceled the balance of unused funds as late as on September 23, 1999.

Work Efficiency of Project Agencies

Unfortunately, implementation of the Project led to negative effects. Losses incurred by the NEC Ukrenergo because of commitment fees due to the Ministry of Finance of Ukraine during 1997-1999 amounted to US$0.446 million.

Especially tangible were the negative effects for the generating companies. First, fuel was purchased at the expense of the World Bank funds (i.e., settlements with suppliers were fully performed in cash). However, for the electricity generated, the companies received cash only in the amount of seven to eight percent of its total value. Second, the suspension of the loan negatively affected conditions under which the companies and the branch were to meet maximum load requirements during the fall and winter periods of 1997/98 and 1998/99, the volume of fuel provided under the Project being introduced into the balance settlements of 1997 and then of 1998. In this connection, the generating companies faced significant difficulties while having carried out maximum load during the fall and winter periods on their own. Third, according to the conditions formulated by the World Bank, commitment fees were charged even during the suspension of the loan. Finally, the loan was suspended because of reasons beyond the control of the generating companies. However, within two and a half years the companies were facing serious problems associated with the interest balance due to the Ministry of Finance in accordance with the appropriate covenants provided by the Agreement.

Debt of the generating companies to the Ministry of Finance (US$4.5 million equivalent as of end-1999), was repaid by means of offsets with state budget organizations.

Currently, the overdue repayment of debts relating to interest balance due to the Ministry of Finance by the generating companies amounts to about US$6.5 million. Meanwhile, the local tax administration offices continuously charge penalties for debts to the state budget and total indebtedness of the generating companies has been increasing.

The above factors created a situation in which the generating companies, after having failed to renew funding under the Project, appealed to the World Bank, the Ministry of Finance and Minenergo with requests for cancellation of the unused portion of the loan.

Efficiency of the World Bank

The drawbacks of generally fruitful cooperation with experts of the World Banks are as follows:

- long period of time needed by the World Bank experts to clear the tender documents;

- lack of provision for effective assistance in concluding agreements with donor countries under the Loan Agreement on providing technical (grant) assistance;

- disregarding by the World Bank appeals of the generating companies as to refusal from further implementation of the Project and cancellation of unused portion of the loan (independently of the Project Implementation Agreement concluded with them); and

- refusal to reallocate the loan funds for the purpose of increasing the volume for purchase of measuring instruments and communication devices (and corresponding reduction of funds for replenishment of the working capital), which, in our opinion, would have facilitated improvements in the operation of the wholesale electricity market of Ukraine.

Lessons and Experience

It was expected that implementation of the Project will improve the financial situation of the generating companies and allow them in the future to secure their working capital from their own incomes.

The fuel acquired from the loan funds was used for production of electricity but the generating companies failed to return funds from the wholesale market and the electricity consumers. Receipt of credit for purchasing fuel under conditions of the non-payment crisis led to even greater deficit of working capital in the generation companies.

We positively evaluate the experience gained by the generating companies during preparation and conduct of the international tender for the purchase of fuel and the related conduct of procurement workshops.

We consider inappropriate to obtain long-term credits for the replenishment of working capital. These funds should have been spent in the first place on development, reconstruction and upgrade of existing faiclities, the construction of new highly efficient capacities and the introduction of modern technologies.

Comments of the National Electricity Regulatory Commission

Evaluation of Project Objectives, Design and Implementation

The Commission believes that the objectives which were set to be achieved during the implementation of the Electricity Market Development Project relating to reduction of cost of electric energy for consumers and provision of standard indicators of its quality were totally consistent with the economic interests of the state. Achievement of these goals may support the product competitiveness of Ukrainian enterprises and create a pre-condition for the economic revival of Ukraine.

The Commission's understanding is that one of the basic components of the Project, i.e., establishing a Wholesale Electricity Market (WEM), was implemented within a short period of time consodering the significant transformations that have taken place in this branch of the economy. This process was carried out in a rather reasonable, civilized and elaborated manner with simultaneous passing of appropriate normative legislative documents. Implementation of the WEM was done in the environment of the economic recession and financial crisis.

In the opinion of the Commission, the experience obtained in the course of functioning of the WEM

(1997-1999) shows that implementation of this Project in full amount, given availability of payments by suppliers for acquired electric energy on the WEM, could undoubtedly ensure improvements of the branch, including an assurance for the further conduct of market reforms in the economy and the lack of funding risk for investors.

It should be noted that the financial crisis within the state and the non-payment by consumers rather than economic disadvantages of the WEM model implemented in Ukraine, have given rise to some negative judgements about the operation of the electricity market.

Competitiveness of the Market

The WEM has features of the competitive market, however, with some peculiarities typical for a transition economy. On one hand, the Agreement among the WEM members created all conditions for competition but the practice demonstrated that realities of the Ukrainian economy inevitably impact on the development of competition through administrative interference in the electricity sector. An equal and fair competition among the generating companies was not implemented in full due to unsatisfactory collection of payments for electric energy and, consequently, the lack of fuel stocks for the power stations. The considerable number (about 120) of independent suppliers offering their products at unregulated tariffs on the WEM enhanced the competitive environment in the market.

World Bank's Condition to Set Average Residential tariffs at least 20% above Average Industrial Tariffs

This requirement was absolutely fair as the actual costs of transportation of electric energy and its supply to population are siginicantly higher than the costs for industrial consumers. At the same time, it is deemed inappropriate to determine some specific indicators of average tariff overcharge (in this case, 20 %) as the credibility of such assessment is very doubtful.

In order to meet the terms and conditions of the Loan Agreement relating to increase of prices for electric energy supplied to the rural population and consumers, NERC consequently adjusted tariffs for the electric energy supplied to the population. This was done for fuller compensation by consumers of actual cost of electric energy (three changes in tariffs took place during two years) and currently the average tariff applied to population exceeds the average tariff effective for industrial consumers by 10.5 %.

However, in order to meet the Law of Ukraine "On Temporary Prohibition of Increasing Prices and Tariffs for Housing and Communal Services and Services of Municipal Transport Rendered to the Citizens of Ukraine" adopted by the Supreme Council of Ukraine, NERC had to suspended the implementation of its own resolutions aimed at coplying with the above Loan covenant. In other words, the Borrower failed to meet the conditions of the Loan Agreement due to interference with NERC's exclusive jurisdiction in regulation of retail and wholesale tariffs for electric energy.

Furthermore, the cost of subsidy certificates, which cover losses of the energy supplying companies, shall be accounted for in the wholesale market price if the companies supply the electric energy to privileged consumers, provided that those privileges do not have any sources of coverage according to the laws as well as coverage of losses of the energy supplying companies while supplying electric energy to agricultural consumers.

NERC within its own competence, has actually fulfilled all conditions of the Loan Agreement.

World Bank's Condition to Apply a Bid Cap no less than US$40.00 per MWh

In conditions of lack of competition among the generating companies due to deficit of operating fuel reserves, for the purpose of prevention of increase in retail tariffs, in certain situations, NERC enforces limitation on the maximum system marginal price.

NERC believes that on condition of conclusion of a new loan agreement, there is little sense to consider issues of establishing a specific value for the system marginal price as a condition of the loan. While securing competition among the generating companies, NERC will not fix any upper system marginal price whatsoever.

Additional Information by JSC Tsentrenergo at World Bank's Request

Explanation on Insurance Policy

A reserve fund of the company was formed on September 1, 1998 in accordance with the charter of the company. However, due to deficit of banking funds in payment for electric energy supplied by the company, all funds received on the current account of the company are directed to wage payments and other urgent needs of the enterprise. Therefore, no funds are currently allocated to the reserve fund.

Explanation on New Long-Term Borrowings

In accordance with the resolution of the Cabinet of Ministers of Ukraine adopted on November 4. 1997, No. 1212, the Government of Ukraine provided guarantees for the conclusion of an Agreement between Tsentrenergo and the consortium Zamischennia CHAES for the reconstruction of the Zmiivsk power station in the amount of DM138 million.

Within the framework of this Agreement, credit in the amount of DM126.61 million was extended. The Credit Agreement of April 3, 1998, No. 02/64-163, was concluded in the amount of DM63.3 million (creditor: banking consortium AKA, FRG) and the Credit Agreement No. 11/15-162 in the amount of DM63.3 million (creditor: Kreditanstalt fur Wiederautbau). For implementation of the above Agreements, an Agreement between the Tsentrenergo and the State Export and Import Bank of Ukraine was concluded as of June 19, 1998, No. 221. A Guarantee Agreement was concuded between the Ministry of Energy of Ukraine and the State Export and Import Bank of Ukraine as of May 22, 1998, No. 206. Finally, an Agreement "On Determination of Sources and Establishment of Mechanism of Repayment of Credit Extended by FRG Received under the Guarantee of the CMU for Funding the Project of Reconstruction of the Energy Unit 8 of Zmiivska TES" was concluded on March 17, 1998, No. 98, between Tsentrenergo, the National Dispatch Center and the Energomarket State Enterprise. As of January 1, 2000, DM19.1 million was disbursed under this credit.

Borisov
January 25, 2000

(b) Cofinanciers:

No comments were received.

(c) Other partners (NGOs/private sector):

No comments were received.

10. Additional Information

No additional information is provided.

Annex 1. Key Performance Indicators/Log Frame Matrix

This is not applicable as the project was suspended.

Annex 2. Project Costs and Financing

Project Cost by Component (in US$ million equivalent)

Project Cost By Component	Appraisal Estimate US$ million	Actual/Latest Estimate US$ million	Percentage of Appraisal
A. Fuels	135.74	83.36	64
B. Spare Parts, Equipment and Urgent Maintenance	128.74	0.00	0
C. Metering and Communications	68.82	0.00	0
D. Technical Service	8.50	4.82	56
Total Baseline Cost	341.80	88.18	
Physical Contingencies	6.40	0.00	0
Price Contingencies	22.40	0.00	0
Total Project Costs	370.60	88.18	
Interest during construction	7.00	0.45	6.00
Total Financing Required	377.60	88.63	

Project Costs by Procurement Arrangements (Appraisal Estimate) (US$ million equivalent)

Expenditure Category	Procurement Method[1] ICB	NCB	Other[2]	N.B.F.	Total Cost
1. Works	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	24.90 (0.00)	24.90 (0.00)
2. Goods	281.60 (281.60)	0.00 (0.00)	27.60 (27.60)	28.00 (0.00)	337.20 (309.20)
3. Services	0.00 (0.00)	0.00 (0.00)	2.00 (2.00)	6.50 (0.00)	8.50 (2.00)
4. Interest During Construction	0.00 (0.00)	0.00 (0.00)	5.80 (5.80)	1.20 (0.00)	7.00 (5.80)
5. Miscellaneous	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
6. Miscellaneous	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Total	281.60 (281.60)	0.00 (0.00)	35.40 (35.40)	60.60 (0.00)	377.60 (317.00)

Project Costs by Procurement Arrangements (Actual/Latest Estimate) (US$ million equivalent)

Expenditure Category	Procurement Method[1] ICB	NCB	Other[2]	N.B.F.	Total Cost
1. Works	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
2. Goods	19.66 (19.66)	0.00 (0.00)	56.30 (56.30)	0.00 (0.00)	75.96 (75.96)
3. Services	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
4. Interest During Construction	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
5. Miscellaneous	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
6. Miscellaneous	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)	0.00 (0.00)
Total	19.66 (19.66)	0.00 (0.00)	56.30 (56.30)	0.00 (0.00)	75.96 (75.96)

1/ Figures in parenthesis are the amounts to be financed by the Bank Loan. All costs include contingencies.

2/ Includes civil works and goods to be procured through national shopping, consulting services, services of contracted staff of the project management office, training, technical assistance services, and incremental operating costs related to (i) managing the project, and (ii) re-lending project funds to local government units.

Project Financing by Component (in US$ million equivalent)

	Appraisal Estimate			Actual/Latest Estimate			Percentage of Appraisal		
	Bank	Govt.	CoF.	Bank	Govt.	CoF.	Bank	Govt.	CoF.
A. Fuels	123.10	18.49	0.00	75.96	10.40	0.00	61.7	56.2	0.0
B. Spare Parts, Equipment and Urgent Maintenance	122.30	21.94	0.00	0.00	0.00	0.00	0.0	0.0	0.0
C. Metering and communications	69.60	6.64	0.00	0.45	0.00	0.00	0.6	0.0	0.0
D. Technical Service	2.00	1.00	5.50	0.00	0.00	4.82	0.0	0.0	87.6

Annex 3: Economic Costs and Benefits

Not calculated.

Annex 4. Bank Inputs

(a) Missions:

Stage of Project Cycle	No. of Persons and Specialty (e.g. 2 Economists, 1 FMS, etc.)		Performance Rating	
Month/Year	Count	Specialty	Implementation Progress	Development Objective
Identification/Preparation 01/96 - 02/96	*10*	1 Mission Leader, 4 Financial Analysts, 1 Energy Economist, 1 Mining Engineer, 2 Power Engineers, 1 Operations Officer		
Appraisal/Negotiation No appraisal mission as the pre-appraisal mission was upgraded.				
Negotiations: 08/96	*7*	1 Mission Leader, 1 Energy Economist, 1 Financial Analyst, 1 Lawyer, 1 Disbursement Officer, 1 Procurement Specialist, 1 Power Engineer		
Supervision 01/97	*2*	1 Mission Leader, 1 Operations Officer	S	S
04/97	*4*	1 Mission Leader, 1 Sr. Financial Analyst, 1 Oper. Officer, 1 Financial Analyst	HU	U
06/97 - 07/97	*3*	1 Mission Leader, 1 Energy Economist, 1 Operations Officer, 1 Financial Analyst	U	HU
10/97	*2*	1 Mission Leader, 1 Operations Officer	U	HU
02/98	*2*	1 Mission Leader, 1 Operations Officer	HU	HU
05/98	*2*	1 Mission Leader, 1 Operations Officer	U	U
09/98 - 10/98	*3*	1 Team Leader, 1 Energy Specialist, 1 Operations Officer	U	U
11/98	*2*	1 Team Leader, 1 Operations Officer	U	U
03/99	*2*	1 Team Leader, 1 Operations Officer	U	U
ICR 12/99 - 04/00	*2*	1 Team Leader, 1 Energy . Specialist		

(b) Staff:

Stage of Project Cycle	Actual/Latest Estimate	
	No. Staff weeks	US$ (,000)
Identification/Preparation	49.5	150.5
Appraisal/Negotiation	22.0	66.3
Supervision	83.0	244.9
ICR	10.0	60.0
Total	164.5	521.7

Annex 5. Ratings for Achievement of Objectives/Outputs of Components

(H=High, SU=Substantial, M=Modest, N=Negligible, NA=Not Applicable)

	Rating				
☒ *Macro policies*	○ *H*	○ *SU*	○ *M*	○ *N*	● *NA*
☒ *Sector Policies*	○ *H*	○ *SU*	○ *M*	● *N*	○ *NA*
☒ *Physical*	○ *H*	○ *SU*	○ *M*	● *N*	○ *NA*
☒ *Financial*	○ *H*	○ *SU*	○ *M*	● *N*	○ *NA*
☒ *Institutional Development*	○ *H*	○ *SU*	● *M*	○ *N*	○ *NA*
☒ *Environmental*	○ *H*	○ *SU*	○ *M*	○ *N*	● *NA*
Social					
☒ *Poverty Reduction*	○ *H*	○ *SU*	○ *M*	○ *N*	● *NA*
☒ *Gender*	○ *H*	○ *SU*	○ *M*	○ *N*	● *NA*
☒ *Other (Please specify)*	○ *H*	○ *SU*	○ *M*	○ *N*	● *NA*
☒ *Private sector development*	○ *H*	○ *SU*	○ *M*	● *N*	○ *NA*
☒ *Public sector management*	○ *H*	○ *SU*	○ *M*	● *N*	○ *NA*
☒ *Other (Please specify)*	○ *H*	○ *SU*	○ *M*	○ *N*	● *NA*

Annex 6. Ratings of Bank and Borrower Performance

(HS=Highly Satisfactory, S=Satisfactory, U=Unsatisfactory, HU=Highly Unsatisfactory)

6.1 Bank performance	*Rating*
☒ *Lending*	○ *HS* ○ *S* ● *U* ○ *HU*
☒ *Supervision*	○ *HS* ● *S* ○ *U* ○ *HU*
☒ *Overall*	○ *HS* ○ *S* ● *U* ○ *HU*

6.2 Borrower performance	*Rating*
☒ *Preparation*	○ *HS* ● *S* ○ *U* ○ *HU*
☒ *Government implementation performance*	○ *HS* ○ *S* ● *U* ○ *HU*
☒ *Implementation agency performance*	○ *HS* ○ *S* ● *U* ○ *HU*
☒ *Overall*	○ *HS* ○ *S* ● *U* ○ *HU*

Annex 7. List of Supporting Documents

Energomarket Members Agreement, prepared by Coopers & Lybrand, 1996.

Standard License For The Right to Carry Out Entrepreneurial Activity in Transmission of Electricity by Local Electricity Networks, prepared by Coopers & Lybrand, 1996.

Standard License for the Right to Carry Out Entrepreneurial Activity in Electricity Supply at Non-Regulated Tariff, prepared by Coopers & Lybrand, 1996.

Standard License for the Right to Carry Out Entrepreneurial Activities in Electricity Transmission by Main Inter-State Networks, prepared by Coopers & Lybrand, 1996.

Standard License for the Right to Carry Out Entrepreneurial Activity in Generation of Electricity, prepared by Coopers & Lybrand, 1996.

Restoration of NDC Solvency, prepared by Putnam, Hayes & Bartlett Ltd., 1996.

Report on Minenergo Management of State Share. Recommended Procedure for ESE Computer System Coordination, prepared by Electrowatt Engineering Ltd. and Putnam, Hayes & Bartlett Ltd., 1997.

NDC Promissory Note Program, prepared by Putnam, Hayes & Bartlett Ltd., 1997.

Technical Assistance for Reorganization and Market Transformation in the Power Industry, prepared by Putnam, Hayes & Bartlett Ltd., 1997.

Survey of Foreign Energy Ministries, prepared by Putnam, Hayes & Bartlett Ltd., 1997.

Ukraine: Electricity Financial Problems Analysis, prepared by Electrowatt Engineering Ltd. and Putnam, Hayes & Bartlett Ltd., 1997.

Recommended Privatization Strategy for the Ukrainian Electricity Industry - Final Report, prepared by Schroders and Baker & McKenzie, 1997.

Assistance to Ukraine Energo Market Funds Administrator - Evaluation Report, prepared by Lahmeyer International for TACIS, August 1997.

Energomarket: Buy/Sell or Consignment, prepared by Putnam, Hayes & Bartlett Ltd., 1998.

Financial Recovery Plan for the Power Sector of Ukraine, approved by Resolution of the Cabinet of Ministers of Ukraine #508 of April 18, 1998.

Ukraine Electricity Market Reforms, reports prepared by Technical Assistance Coordinating Consultant, 1998.

Information Systems Electricity Market Development Project Ukraine - System Needs Report,

prepared by Pacific Consultants International, 1998.

Information Systems Electricity Market Development Project Ukraine - Action Plan Report, prepared by Pacific Consultants International, 1999.

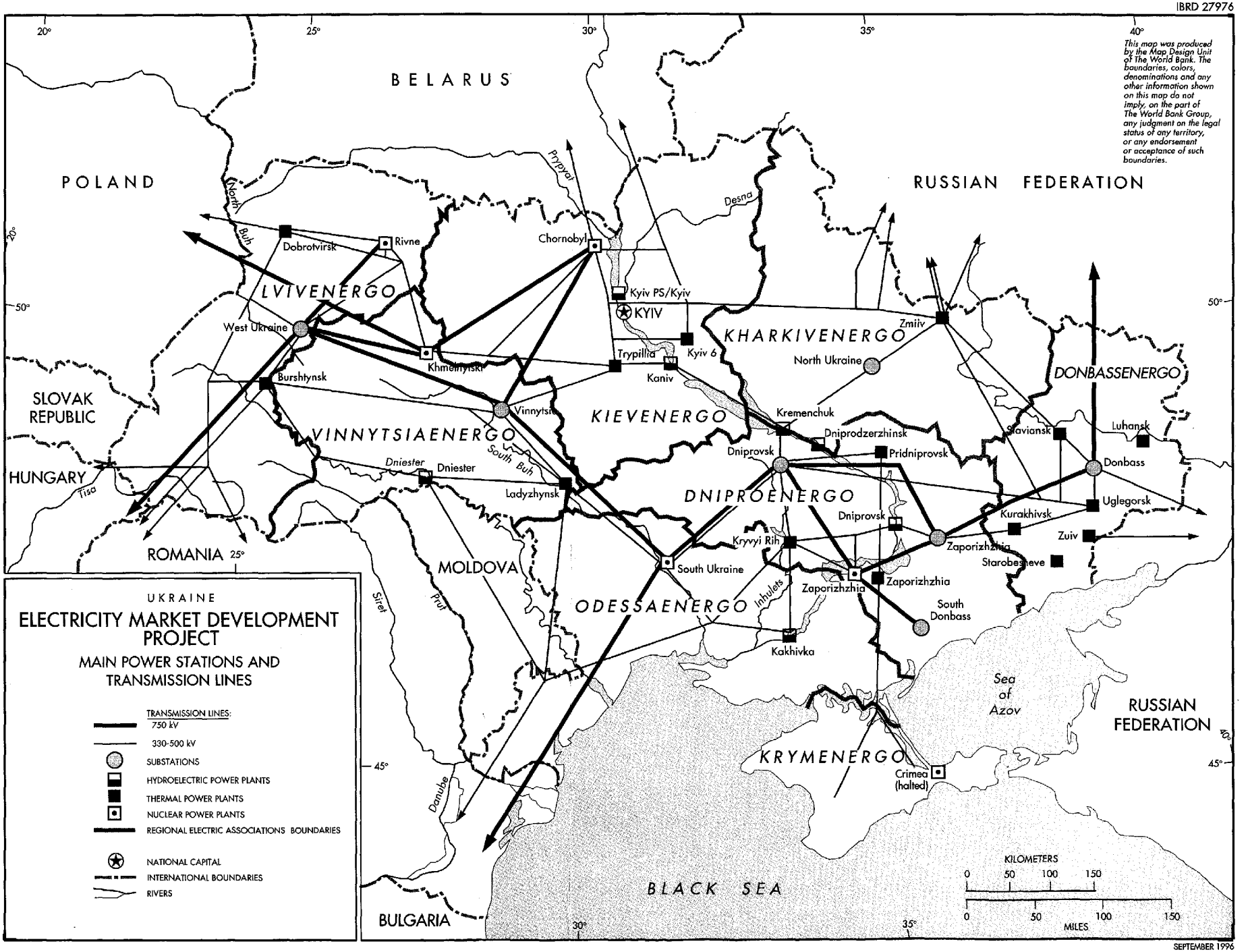
Information Systems Electricity Market Development Project Ukraine - Final Design Report. Management Information Systems (MIS), prepared by Pacific Consultants International, 1999.

Non-Payments and Barter Problems in Ukraine's Power Sector, prepared by the International Center for Policy Studies and the World Bank, April 1999.

Power Sector Reform Program Evaluation - Final Report, prepared by The Mitchell Group, Inc. for USAID, July 1999.

MAP SECTION

IBRD 27976



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SEPTEMBER 1996