Loan Agreement

(Hydropower Rehabilitation Project)

between

UKRAINE

and

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

Dated September 19, 2005
LOAN AGREEMENT

AGREEMENT, dated September 19, 2005, between UKRAINE (the Borrower) and the INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT (the Bank).

WHEREAS (A) the Borrower, having satisfied itself as to the feasibility and priority of the Project (the Project) described in Schedule 2 to this Agreement, has requested the Bank to assist in the financing of the Project;

(B) Parts A, B and C of the Project will be carried out by UKRHIDROENERGO (UHE, as further defined in paragraph (t) of Section 1.02 of this Agreement) with the Borrower’s assistance and, as part of such assistance, the Borrower will make a portion of the proceeds of the loan provided for in Article II of this Agreement (the Loan) available to UHE, as set forth in this Agreement; and

WHEREAS the Bank has agreed, on the basis, inter alia, of the foregoing, to extend the Loan to the Borrower upon the terms and conditions set forth in this Agreement and in the agreement of even date herewith between the Bank and UHE (the Project Agreement);

NOW THEREFORE the parties hereto hereby agree as follows:

ARTICLE I

General Conditions; Definitions

Section 1.01. The “General Conditions Applicable to Loan and Guarantee Agreements for Single Currency Loans” of the Bank, dated May 30, 1995 (as amended through May 1, 2004) with the modifications set forth below (the General Conditions) constitute an integral part of this Agreement:

(a) Section 5.08 of the General Conditions is amended to read as follows:

“Section 5.08. Treatment of Taxes
Except as otherwise provided in the Loan Agreement, the proceeds of the Loan may be withdrawn to pay for taxes levied by, or in the territory of, the Borrower or the Guarantor on the goods or services to be financed under the Loan, or on their importation, manufacture, procurement or supply. Financing of such taxes is subject to the Bank’s policy of requiring economy and efficiency in the use of the proceeds of its loans. To that end, if the Bank shall at any time determine that the amount of any taxes levied on or in respect of any item to be financed out of the proceeds of the Loan is excessive or otherwise unreasonable, the Bank may, by notice to the Borrower, adjust the percentage for withdrawal set forth or referred to in respect of such item in the Loan Agreement as required to be consistent with such policy of the Bank.”

(b) Section 6.03 (c) of the General Conditions is amended by replacing the words “corrupt or fraudulent” with the words “corrupt, fraudulent, collusive or coercive”.

Section 1.02. Unless the context otherwise requires, the several terms defined in the General Conditions and in the Preamble to this Agreement have the respective meanings therein set forth, and the following additional terms have the following meanings:

(a) “Commission” means the Commission for Energy Sector Reform and Development established by the Decision No. 1091 of the Cabinet of Ministers of Ukraine dated August 25, 2004, and referred to in paragraph 1 of Section A of Schedule 5 to this Agreement;

(b) “Eligible Categories” means: (i) in respect of Parts A, B and C of the Project, Categories (1) and (2)(a) set forth in the table in Part A.1 of Schedule 1 to this Agreement; (ii) in respect of Part D of the Project, Category (2)(b) set forth in the table in Part A.1 of Schedule 1 to this Agreement; and (iii) in respect of Part E of the Project, Category (2)(c) set forth in the table in Part A.1 of Schedule 1 to this Agreement;

(c) “Eligible Expenditures” means the expenditures for goods and consultants’ services referred to in Section 2.02 of this Agreement;

(d) “Energomarket” means the state enterprise “Energomarket”, which acts as a single buyer of electricity in the territory of the Borrower;

(e) “Environmental Action Plan” and “EMP” means the Borrower’s environmental management plan dated March 9, 2005, describing the environmental,
mitigation, monitoring and institutional measures to be undertaken under Parts A and B of the Project to ensure that all environmental concerns are adequately taken into account in the carrying out of the works and activities thereunder;

(f) “Financial Monitoring Report” or “FMR” means each report prepared in accordance with Section 4.02 of this Agreement;

(g) “Fiscal Year” means the twelve (12) month period corresponding to any of the Borrower’s fiscal years, which period commences on January 1 and ends on December 31 in each calendar year;

(h) “HPP” means hydropower plant;

(i) “MFE” means the Ministry of Fuel and Energy of Ukraine, established and functioning in accordance with the provisions of its charter approved by Decree No. 598 of the President of Ukraine dated April 14, 2000;

(j) “MFE Monitoring and Evaluation Indicators” means the agreed performance indicators set forth in a letter of even date herewith to be utilized by the Borrower to measure the progress in the implementation of Parts D and E of the Project and the degree to which the objectives thereof are being achieved;

(k) “NERC” means the National Electricity Regulation Commission, the Borrower’s central executive agency responsible for energy regulation and functioning in accordance with the provisions of its charter approved by Decree No. 213 of the President of Ukraine dated March 14, 1995;

(l) “Permanent Working Group” and “PWG” means the Permanent Working Group hired by MFE, and referred to in paragraph 2 of Section A of Schedule 5 to this Agreement;

(m) “Procurement Plan” means the Borrower’s procurement plan, dated May 11, 2005, covering the initial eighteen (18) month period (or longer) of Project implementation, as the same shall be updated from time to time in accordance with the provisions of Section 3.02 to this Agreement, to cover succeeding eighteen (18) month periods (or longer) of Project implementation;

(n) “Project Agreement” means the agreement between the Bank and UHE of even date herewith, as the same may be amended from time to time; and such term includes all schedules and agreements supplemental to the Project Agreement;
(o) “Report-based Disbursements” means the Borrower’s option for withdrawal of funds from the Loan Account referred to in Part A.4 of Schedule 1 to this Agreement;

(p) “Special Accounts” means the accounts referred to in Part B of Schedule 1 to this Agreement;

(q) “Statutes” means UHE Statutes dated September 16, 2004;

(r) “Subsidiary Loan” means the subsidiary loan proposed to be made by the Borrower out of the proceeds of the Loan to UHE for the purposes of carrying out Parts A, B and C of the Project;

(s) “Subsidiary Loan Agreement” means the agreement to be entered into between the Borrower and UHE pursuant to the provisions of Section 3.01(c) of this Agreement, as the same may be amended from time to time; and such term includes all schedules to the Subsidiary Loan Agreement;

(t) “UHE” means UkrHydroEnergo, a fully state-owed, open joint-stock company formed as a result of the merger of the Borrower’s two state-owned companies operating the hydropower plants on the Dnipro and Dnister Rivers; and

(u) “UHE Legislation” means the Order No. 831 of the Ministry of Power and Electrification of Ukraine dated December 31, 2003, according to which UHE has been established and is operating.

Section 1.03. Each reference in the General Conditions to the Project implementation entity shall be deemed as a reference to UHE, in respect of Parts A, B and C of the Project.

ARTICLE II

The Loan

Section 2.01. The Bank agrees to lend to the Borrower, on the terms and conditions set forth or referred to in the Loan Agreement, an amount equal to one hundred six million dollars ($106,000,000).

Section 2.02. The amount of the Loan may be withdrawn from the Loan Account in accordance with the provisions of Schedule 1 to this Agreement for
expenditures made (or, if the Bank shall so agree, to be made) in respect of the reasonable cost of goods and services required for the Project and to be financed out of the proceeds of the Loan and in respect of the fee referred to in Section 2.04 of this Agreement.

Section 2.03. The Closing Date shall be June 30, 2012 or such later date as the Bank shall establish. The Bank shall promptly notify the Borrower of such later date.

Section 2.04. The Borrower shall pay to the Bank a front-end fee in an amount equal to one percent (1%) of the amount of the Loan, subject to any waiver of a portion of such fee as may be determined by the Bank from time to time. On or promptly after the Effective Date, the Bank shall, on behalf of the Borrower, withdraw from the Loan Account and pay to itself the amount of such fee.

Section 2.05. The Borrower shall pay to the Bank a commitment charge at the rate of three-fourths of one percent (3/4 of 1%) per annum on the principal amount of the Loan not withdrawn from time to time.

Section 2.06. (a) The Borrower shall pay interest on the principal amount of the Loan withdrawn and outstanding from time to time, at a rate for each Interest Period equal to LIBOR Base Rate plus LIBOR Total Spread.

(b) For the purposes of this Section:

(i) “Interest Period” means the initial period from and including the date of this Agreement to, but excluding, the first Interest Payment Date occurring thereafter, and after the initial period, each period from and including an Interest Payment Date to, but excluding the next following Interest Payment Date.

(ii) “Interest Payment Date” means any date specified in Section 2.07 of this Agreement.

(iii) “LIBOR Base Rate” means, for each Interest Period, the London interbank offered rate for six-month deposits in dollars for value the first day of such Interest Period (or, in the case of the initial Interest Period, for value the Interest Payment Date occurring on or next preceding the first day of such Interest Period), as reasonably determined by the Bank and expressed as a percentage per annum.
(iv) “LIBOR Total Spread” means, for each Interest Period: (A) three-fourths of one percent (3/4 of 1%); (B) minus (or plus) the weighted average margin, for such Interest Period, below (or above) the London interbank offered rates, or other reference rates, for six-month deposits, in respect of the Bank’s outstanding borrowings or portions thereof allocated by the Bank to fund single currency loans or portions thereof made by it that include the Loan; as reasonably determined by the Bank and expressed as a percentage per annum.

(c) The Bank shall notify the Borrower of the LIBOR Base Rate and the LIBOR Total Spread for each Interest Period, promptly upon the determination thereof.

(d) Whenever, in light of changes in market practice affecting the determination of the interest rates referred to in this Section 2.06, the Bank determines that it is in the interest of its borrowers as a whole and of the Bank to apply a basis for determining the interest rates applicable to the Loan other than as provided in said Section, the Bank may modify the basis for determining the interest rates applicable to the Loan upon not less than six (6) months’ notice to the Borrower of the new basis. The new basis shall become effective on the expiry of the notice period unless the Borrower notifies the Bank during said period of its objection thereto, in which case said modification shall not apply to the Loan.

Section 2.07. Interest and other charges shall be payable semiannually in arrears on February 15 and August 15 in each year.

Section 2.08. The Borrower shall repay the principal amount of the Loan in accordance with the amortization schedule set forth in Schedule 3 to this Agreement.

ARTICLE III

Execution of the Project

Section 3.01. (a) The Borrower declares its commitment to the objectives of the Project and, to this end: (i) shall carry out, respectively: (A) Part D of the Project through the MFE; and (B) Part E of the Project through the NERC, all with due diligence and efficiency and in conformity with appropriate administrative, economic, energy, engineering, environmental and technical practices, and shall provide, promptly as needed, the funds, facilities, services and other resources required for Parts D and E of the Project; and (ii) without any limitation or restriction upon any of its other obligations under the Loan Agreement, shall cause UHE to perform in accordance with the provisions of the Project Agreement all the obligations of UHE therein set forth, shall
take or cause to be taken all action, including the provision of funds, facilities, services and other resources, necessary or appropriate to enable UHE to perform such obligations, and shall not take or permit to be taken any action which would prevent or interfere with such performance.

(b) Without limitation upon the provisions of paragraph (a) of this Section and except as the Borrower and the Bank shall otherwise agree, the Borrower shall carry out Parts D and E of the Project in accordance with the Implementation Program set forth in Schedule 5 to this Agreement.

(c) The Borrower shall make the proceeds of the Loan allocated from time to time to Categories (1) and (2)(a) available to UHE under a Subsidiary Loan Agreement to be entered into between the Borrower and UHE, under terms and conditions which shall have been approved by the Bank which shall include those stipulated in the Annex to Schedule 5 to this Agreement.

(d) The Borrower shall exercise its rights under the Subsidiary Loan Agreement in such manner as to protect the interests of the Borrower and the Bank and to accomplish the purposes of the Loan, and, except as the Bank shall otherwise agree, the Borrower shall not assign, amend, abrogate or waive the Subsidiary Loan Agreement or any provision thereof.

Section 3.02. (a) Except as the Bank shall otherwise agree, the procurement of the goods and services required for Parts D and E of the Project and to be financed out of the proceeds of the Loan shall be governed by the provisions of Schedule 4 to this Agreement, as said provisions may be further elaborated in the Procurement Plan.

(b) The Borrower shall update the Procurement Plan and furnish such update to the Bank not later than twelve (12) months after the date of the preceding Procurement Plan, for the Bank’s approval.

Section 3.03. For the purposes of Section 9.07 of the General Conditions and without limitation thereto, the Borrower shall:

(a) prepare, on the basis of guidelines acceptable to the Bank, and furnish to the Bank not later than six (6) months before the Closing Date or such later date as may be agreed for this purpose between the Borrower and the Bank, a plan for the future operation of Parts D and E of the Project; and

(b) afford the Bank a reasonable opportunity to exchange views with the Borrower on said plan.
Section 3.04. The Bank and the Borrower hereby agree that the obligations set forth in Sections 9.04, 9.05, 9.06, 9.07, 9.08 and 9.09 of the General Conditions (relating to insurance, use of goods and services, plans and schedules, records and reports, maintenance and land acquisition, respectively) in respect of Parts A, B and C of the Project shall be carried out by UHE pursuant to Section 2.03 of the Project Agreement.
ARTICLE IV

Financial Covenants

Section 4.01. (a) The Borrower shall maintain a financial management system, including records and accounts, and prepare financial statements in accordance with consistently applied accounting standards acceptable to the Bank, adequate to reflect the operations, resources and expenditures related to Parts D and E of the Project.

(b) The Borrower shall:

(i) have the financial statements referred to in paragraph (a) of this Section for each Fiscal Year (or other period agreed to by the Bank) audited, in accordance with consistently applied auditing standards acceptable to the Bank, by independent auditors acceptable to the Bank;

(ii) furnish to the Bank as soon as available, but in any case not later than six (6) months after the end of each such year (or such other period agreed to by the Bank): (A) certified copies of the financial statements referred to in paragraph (a) of this Section for such year (or other period agreed to by the Bank), as so audited, and (B) an opinion on such statements by said auditors, in scope and detail satisfactory to the Bank; and

(iii) furnish to the Bank such other information concerning such records and accounts, and the audit of such financial statements, and concerning said auditors, as the Bank may from time to time reasonably request.

(c) For all expenditures with respect to which withdrawals from the Loan Account were made on the basis of the reports referred to in Part A.5 of Schedule 1 to this Agreement (Report-based Disbursements) or on the basis of statements of expenditure, the Borrower shall:

(i) retain, until at least one (1) year after the Bank has received the audit report for, or covering, the fiscal year in which the last withdrawal from the Loan Account was made, all records (contracts, orders, invoices, bills, receipts and other documents) evidencing such expenditures;
(ii) enable the Bank’s representatives to examine such records; and

(iii) ensure that such reports and statements of expenditure are included in the audit for each fiscal year (or other period agreed to by the Bank), referred to in paragraph (b) of this Section.

Section 4.02. (a) Without limitation upon the Borrower’s progress reporting obligations set out in paragraph 1 of Section C of Schedule 5 to this Agreement, the Borrower shall prepare and furnish to the Bank a financial monitoring report, in form and substance satisfactory to the Bank, which:

(i) sets forth sources and uses of funds for Parts D and E of the Project, both cumulatively and for the period covered by said report, showing separately funds provided under the Loan, and explains variances between the actual and planned uses of such funds;

(ii) describes physical progress in Parts D and E of the Project implementation, both cumulatively and for the period covered by said report, and explains variances between the actual and planned Project implementation; and

(iii) sets forth the status of procurement under Parts D and E of the Project, as at the end of the period covered by said report.

(b) The first FMR shall be furnished to the Bank not later than forty-five (45) days after the end of the first quarter after the Effective Date, and shall cover the period from the incurrence of the first expenditure under the Project through the end of such first quarter; thereafter, each FMR shall be furnished to the Bank not later than forty-five (45) days after each subsequent quarter, and shall cover such quarter.

Section 4.03. The Borrower shall cause NERC:

(a) to establish for Fiscal Year 2006, and thereafter maintain for each of the following Fiscal Years, tariffs for UHE sufficient and adequate to enable UHE to have available the Project counterpart funds in a timely and adequate manner;

(b) to ensure distribution of funds due from Energomarket to UHE in a timely and adequate manner and in accordance to the algorithm in place;
(c) to introduce not later than December 31, 2005, a two-tier tariff for UHE satisfactory to the Bank; and

(d) to introduce, in parallel with the suitable development of the balancing mechanism for the wholesale electricity market, a system service charge, to be paid to UHE.

ARTICLE V

Remedies of the Bank

Section 5.01. Pursuant to Section 6.02 (p) of the General Conditions, the following additional events are specified:

(a) UHE shall have failed to perform any of its obligations under the Project Agreement.

(b) As a result of events which have occurred after the date of the Loan Agreement, an extraordinary situation shall have arisen which shall make it improbable that UHE will be able to perform its obligations under the Project Agreement.

(c) UHE Legislation or the Statutes shall have been amended, suspended, abrogated, repealed or waived so as to affect materially and adversely the ability of UHE to perform any of its obligations under the Project Agreement.

Section 5.02. Pursuant to Section 7.01 (k) of the General Conditions, the following additional events are specified:

(a) The event specified in paragraph (a) of Section 5.01 of this Agreement shall occur and shall continue for a period of sixty (60) days after notice thereof shall have been given by the Bank to the Borrower.

(b) Any event specified in paragraph (c) of Section 5.01 of this Agreement shall occur.
ARTICLE VI

Effective Date; Termination

Section 6.01. The following events are specified as additional conditions to the effectiveness of the Loan Agreement within the meaning of Section 12.01 (c) of the General Conditions:

(a) that the Subsidiary Loan Agreement has been executed on behalf of the Borrower and UHE; and

(b) that UHE shall have selected an international Project management consultant under terms of reference and with qualifications satisfactory to the Bank.

Section 6.02. The following are specified as additional matters, within the meaning of Section 12.02 (c) of the General Conditions, to be included in the opinion or opinions to be furnished to the Bank:

(a) that the Project Agreement has been duly authorized or ratified by UHE, and is legally binding upon UHE in accordance with its terms; and

(b) that the Subsidiary Loan Agreement has been duly authorized or ratified by the Borrower and UHE and is legally binding upon the Borrower and UHE in accordance with its terms.

Section 6.03. The date ninety (90) days after the date of this Agreement is hereby specified for the purposes of Section 12.04 of the General Conditions.

ARTICLE VII

Representative of the Borrower; Addresses

Section 7.01. The Minister of Finance of the Borrower is designated as representative of the Borrower for the purposes of Section 11.03 of the General Conditions.

Section 7.02. The following addresses are specified for the purposes of Section 11.01 of the General Conditions:
For the Borrower:

Minister of Finance  
12/2 Hrushevsky St.  
Kyiv, 01008  
Ukraine

Telex: 131450  
Facsimile: (380-44) 253-82-43  
(380-44) 201-56-84

For the Bank:

International Bank for  
Reconstruction and Development  
1818 H Street, N.W.  
Washington, D.C. 20433  
United States of America

Cable address: INTBAFRAD  
Telex: 248423 (MCI) or  
64145 (MCI)  
Facsimile: (1-202) 477-6391
IN WITNESS WHEREOF, the parties hereto, acting through their duly authorized representatives, have caused this Agreement to be signed in their respective names in Kyiv, Ukraine, as of the day and year first above written.

UKRAINE

By: /s/ Ivan Plachkov
    Authorized Representative

INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT

By: /s/ Paul Bermingham
    Authorized Representative
SCHEDULE 1

Withdrawal of the Proceeds of the Loan

A. General

1. The table below sets forth the Categories of items to be financed out of the proceeds of the Loan, the allocation of the amounts of the Loan to each Category and the percentage of expenditures for items so to be financed in each Category:

<table>
<thead>
<tr>
<th>Category</th>
<th>Amount of the Loan Allocated (Expressed in dollars)</th>
<th>% of Expenditures to be financed</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Goods under Parts A, B and C of the Project</td>
<td>90,000,000</td>
<td>100% of foreign expenditures, 100% of local expenditures (ex-factory cost) and 80% of local expenditures for other items procured locally</td>
</tr>
<tr>
<td>(2) Consultants’ Services, including audit:</td>
<td></td>
<td>100%</td>
</tr>
<tr>
<td>(a) under Parts A, B and C of the Project</td>
<td>4,500,000</td>
<td></td>
</tr>
<tr>
<td>(b) under Part D of the Project</td>
<td>2,500,000</td>
<td></td>
</tr>
<tr>
<td>(c) under Part E of the Project</td>
<td>3,000,000</td>
<td></td>
</tr>
<tr>
<td>(3) Front-end fee</td>
<td>530,000</td>
<td>Amount due under Section 2.04 of this Agreement</td>
</tr>
<tr>
<td>(4) Unallocated</td>
<td>5,470,000</td>
<td></td>
</tr>
<tr>
<td>TOTAL</td>
<td>106,000,000</td>
<td></td>
</tr>
</tbody>
</table>
2. For the purposes of this Schedule:

   (a) the term “foreign expenditures” means expenditures in the currency of any country other than that of the Borrower for goods or services supplied from the territory of any country other than that of the Borrower; and

   (b) the term “local expenditures” means expenditures in the currency of the Borrower or for goods, works or services supplied from the territory of the Borrower.

3. Notwithstanding the provisions of paragraph 1 above, no withdrawals shall be made in respect of payments made for expenditures prior to the date of this Agreement.

4. The Bank may require withdrawals from the Loan Account to be made on the basis of statements of expenditure for expenditures under contracts for: (i) goods costing less than $200,000 equivalent per contract, except for those contracts referred to in paragraph (ii) of Section IV of Schedule 4 to this Agreement; (ii) for services of individual consultants costing less than $100,000 equivalent per contract; and (iii) for services of consulting firms under contracts costing less than $200,000 equivalent per contract, all under such terms and conditions as the Bank shall specify by notice to the Borrower.

5. The Borrower may request withdrawals from the Loan Account to be made on the basis of reports to be submitted to the Bank in form and substance satisfactory to the Bank, such reports to include the FMR and any other information as the Bank shall specify by notice to the Borrower (Report-based Disbursements). In the case of the first such request submitted to the Bank before any withdrawal has been made from the Loan Account, the Borrower shall submit to the Bank only a statement with the projected sources and applications of funds for the Project for the six-month period following the date of such request.

B. Special Accounts

1. The Borrower may, for the purposes, respectively, of each of Parts A, B and C, Part D and Part E of the Project, open and maintain in dollars three separate special deposit accounts in a Ukrainian or foreign commercial bank acceptable to the Bank, on terms and conditions satisfactory to the Bank, including appropriate protection against set-off, seizure and attachment.

2. After the Bank has received evidence satisfactory to it that the respective Special Account has been opened, withdrawals from the Loan Account of amounts to be deposited into the respective Special Account shall be made as follows:
(a) if the Borrower is not making Report-based Disbursements, withdrawals shall be made in accordance with the provisions of Annex A to this Schedule 1; and

(b) if the Borrower is making Report-based Disbursements, withdrawals shall be made in accordance with the provisions of Annex B to this Schedule 1.

3. Payments out of the respective Special Account shall be made exclusively for Eligible Expenditures. For each payment made by the Borrower out of the respective Special Account, the Borrower shall, at such time as the Bank shall reasonably request, furnish to the Bank such documents and other evidence showing that such payment was made exclusively for Eligible Expenditures.

4. Notwithstanding the provisions of Part B.2 of this Schedule, the Bank shall not be required to make further deposits into any Special Account:

(a) if the Bank, at any time, is not satisfied that the reports referred to in Part A.5 of this Schedule 1 adequately provide the information required for Report-based Disbursements;

(b) if the Bank determines at any time that all further withdrawals for payment of Eligible Expenditures should be made by the Borrower directly from the Loan Account; or

(c) if the Borrower shall have failed to furnish to the Bank, within the period of time specified in Section 4.01 (b) (ii) of this Agreement, any of the audit reports required to be furnished to the Bank pursuant to said Section in respect of the audit of: (A) the records and accounts for the Special Accounts; or (B) the records and accounts reflecting expenditures with respect to which withdrawals were Report-based Disbursements or were made on the basis of statements of expenditure, as the case may be.

5. The Bank shall not be required to make further deposits into any Special Account in accordance with the provisions of Part B.2 of this Schedule if, at any time, the Bank shall have notified the Borrower of its intention to suspend in whole or in part the right of the Borrower to make withdrawals from the Loan Account pursuant to Section 6.02 of the General Conditions. Upon such notification, the Bank shall determine, in its sole discretion, whether further deposits into any Special Account may be made and what procedures should be followed for making such deposits, and shall notify the Borrower of its determination.

6. (a) If the Bank determines at any time that any payment out of any Special Account was made for an expenditure which is not an Eligible Expenditure, or was not
justified by the evidence furnished to the Bank, the Borrower shall, promptly upon notice from the Bank, provide such additional evidence as the Bank may request, or deposit into the respective Special Account (or, if the Bank shall so request, refund to the Bank) an amount equal to the amount of such payment. Unless the Bank shall otherwise agree, no further deposit by the Bank into any Special Account shall be made until the Borrower has provided such evidence or made such deposit or refund, as the case may be.

(b) If the Bank determines at any time that any amount outstanding in any Special Account will not be required to cover payments for Eligible Expenditures during the six-month period following such determination, the Borrower shall, promptly upon notice from the Bank, refund to the Bank such outstanding amount.

(c) The Borrower may, upon notice to the Bank, refund to the Bank all or any portion of the funds on deposit in the Special Accounts.

(d) Refunds to the Bank made pursuant to subparagraph (a), (b) or (c) of this paragraph 6 shall be credited to the Loan Account for subsequent withdrawal or for cancellation in accordance with the provisions of the Loan Agreement.
Annex A
to
SCHEDULE 1

Operation of Special Accounts
When Withdrawals Are Not
Report-based Disbursements

1. For the purposes of this Annex, the term “Authorized Allocation” means the amount of $1,000,000 in respect of the Special Account for Parts A, B and C of the Project, an amount of $500,000 in respect of the Special Account for Part D of the Project, and an amount of $500,000 in respect of the Special Account for Part E of the Project, to be withdrawn from the Loan Account and deposited into the Special Accounts pursuant to paragraph 2 of this Annex.

2. Withdrawals of the Authorized Allocation and subsequent withdrawals to replenish the respective Special Account shall be made as follows:

   (a) For withdrawals of the Authorized Allocation, the Borrower shall furnish to the Bank a request or requests for deposit into the respective Special Account of an amount or amounts which in the aggregate do not exceed the Authorized Allocation. On the basis of each such request, the Bank shall, on behalf of the Borrower, withdraw from the Loan Account and deposit into the respective Special Account such amount as the Borrower shall have requested.

   (b) For replenishment of the respective Special Account, the Borrower shall furnish to the Bank requests for deposit into the respective Special Account at such intervals as the Bank shall specify. Prior to or at the time of each such request, the Borrower shall furnish to the Bank the documents and other evidence required pursuant to Part B.3 of Schedule 1 to this Agreement for the payment or payments in respect of which replenishment is requested. On the basis of each such request, the Bank shall, on behalf of the Borrower, withdraw from the Loan Account and deposit into the respective Special Account such amount as the Borrower shall have requested and as shall have been shown by said documents and other evidence to have been paid out of the respective Special Account for Eligible Expenditures. Each such deposit into the respective Special Account shall be withdrawn by the Bank from the Loan Account under one or more of the Eligible Categories.

3. The Bank shall not be required to make further deposits into any Special Account, once the total unwithdrawn amount of the Loan for the respective Special Account for Parts A, B and C, for Part D and for Part E of the Project, respectively, minus the total amount of all outstanding special commitments entered into by the Bank pursuant to Section 5.02 of the General Conditions Account for Parts A, B and C, for
Part D and for Part E of the Project, respectively, shall equal the equivalent of twice the amount of the Authorized Allocation. Thereafter, withdrawal from the Loan Account of the remaining unwithdrawn amount of the Loan Account for Parts A, B and C, for Part D and for Part E of the Project, respectively, shall follow such procedures as the Bank shall specify by notice to the Borrower. Such further withdrawals shall be made only after and to the extent that the Bank shall have been satisfied that all such amounts remaining on deposit in the respective Special Account as of the date of such notice will be utilized in making payments for Eligible Expenditures.
Annex B
to
SCHEDULE 1

Operation of Special Accounts
When Withdrawals Are
Report-based Disbursements

1. Withdrawals from the Loan Account shall be deposited by the Bank into the respective Special Account in accordance with the provisions of Schedule 1 to this Agreement. Each such deposit into the respective Special Account shall be withdrawn by the Bank from the Loan Account under one or more of the Eligible Categories.

2. Upon receipt of each application for withdrawal of an amount of the Loan, the Bank shall, on behalf of the Borrower, withdraw from the Loan Account and deposit into the respective Special Account an amount equal to the lesser of: (i) the amount so requested; and (ii) the amount which the Bank has determined, based on the reports referred to in Part A.5 of this Schedule 1 applicable to such withdrawal application, is required to be deposited in order to finance Eligible Expenditures during the six-month period following the date of such reports.
SCHEDULE 2

Description of the Project

The objectives of the Project are: (i) to improve operational stability and reliability of power supply through increased regulating capacity, efficiency and safety of hydroelectric plants; (ii) to enhance the institutional development of UHE; and (iii) to support the MFE and NERC in developing and implementing an energy sector reform and development program, including the Wholesale Electricity Market concept.

The Project consists of the following parts, subject to such modifications thereof as the Borrower and the Bank may agree upon from time to time to achieve such objectives:

Part A: Hydropower Rehabilitation

Rehabilitation of nine (9) hydroelectric plants, the Kyiv HPP, the Kyiv pumped storage plant, the Kaniv HPP, the Kremenchug HPP, the Dniprodzerzhinsk HPP, the Dniprovska HPP1 and HPP2, the Kahovka HPP and the Dnister HPP, including: (i) refurbishment of their forty-six (46) hydroelectric units; (ii) replacement of protective relaying, metering, telecommunication systems, monitoring and control systems; and (iii) refurbishment of plant switchyards and associated auxiliary systems.

Part B: Dam Safety

Strengthening of the safety of existing dams on the Dnipro and Dnister rivers, encompassing: (i) installation of computer-aided dam safety monitoring systems for the Dniprovska, Dniprodzerzhinsk, Kaniv and Dnister dams and hydropower plants; (ii) rehabilitation of: (A) drainage facilities; (B) design profiles (rehabilitation of subsidence); (C) slope protections; (D) concrete spillways and other reinforced concrete works at Kyiv, Kaniv, Dniprovska and Dniprodzerzhinsk dams; (iii) protection against higher phreatic lines (high piezometric levels) in the dam embankments at Kaniv, Kremenchug, Dniprodzerzhinsk and Kahovka; (iv) rehabilitation and/or replacement of the needed hydro-mechanical gates for the Dniprovska and Dniprodzerzhinsk dams/spillways; (v) carrying out of a detailed review of the necessity of rehabilitation/replacement of any of the spillway gates for Kremenchug and Kahovka dams; and (vi) provision of technical assistance as required for: (A) a study for the safe design floods for the Kyiv and Kaniv reservoirs; (B) upgrading/replacement of hydrological instrumentation for the HydroMet, for more reliable measurements, assessments, and flood forecasting; (C) a study, assessment and analysis of the reservoir sedimentation for the Kyiv dam; and (D) training of professionals in dam safety management, optimal operation of the multi-purpose cascade of hydropower dams and
reservoirs, including specialized training in the fields of computer-aided monitoring system design, system operation and maintenance, and dam safety inspection.

Part C: UHE Institutional Development

Enhancement of UHE institutional capacity, including: (i) the development and establishment of a modern corporate-wide management information system (MIS) in UHE; and (ii) provision of technical assistance as required for: (A) procurement and Project management under Part A of the Project; (B) design and phased implementation of the MIS; (C) revaluation of UHE’s fixed assets; and (D) carrying out of the audit of the Project and UHE’s accounts.

Part D: Implementation of the Energy Sector Reform and Development Program

Provision to the MFE of the required advisory services by the Permanent Working Group and other consultants in order to assist the MFE in developing and implementing: (i) an action plan for legal and technical harmonization of the Borrower’s energy market with the European Union Internal Energy Market; and (ii) a program of priority investments in energy infrastructure.

Part E: Implementation of the Wholesale Electricity Market Concept

Provision of technical assistance to NERC in implementing the Wholesale Electricity Market (WEM) concept, as required for: (i) clarifying the market design and main principles of market operations; (ii) drafting of main codes and market rules; and (iii) defining technical requirements for the supporting tools such as software for market operation, telecommunications systems and metering.

* * *

The Project is expected to be completed by December 31, 2011.
## SCHEDULE 3

### Amortization Schedule

<table>
<thead>
<tr>
<th>Date Payment Due</th>
<th>Payment of Principal (Expressed in dollars)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 15, 2012</td>
<td>3,620,000</td>
</tr>
<tr>
<td>August 15, 2012</td>
<td>3,685,000</td>
</tr>
<tr>
<td>February 15, 2013</td>
<td>3,745,000</td>
</tr>
<tr>
<td>August 15, 2013</td>
<td>3,810,000</td>
</tr>
<tr>
<td>February 15, 2014</td>
<td>3,870,000</td>
</tr>
<tr>
<td>August 15, 2014</td>
<td>3,935,000</td>
</tr>
<tr>
<td>February 15, 2015</td>
<td>4,005,000</td>
</tr>
<tr>
<td>August 15, 2015</td>
<td>4,070,000</td>
</tr>
<tr>
<td>February 15, 2016</td>
<td>4,140,000</td>
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<tr>
<td>August 15, 2016</td>
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<tr>
<td>February 15, 2017</td>
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<tr>
<td>August 15, 2017</td>
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<tr>
<td>February 15, 2018</td>
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</tr>
<tr>
<td>August 15, 2018</td>
<td>4,500,000</td>
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<td>February 15, 2019</td>
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</tr>
<tr>
<td>August 15, 2019</td>
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</tr>
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<td>February 15, 2020</td>
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</tr>
<tr>
<td>August 15, 2020</td>
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<tr>
<td>February 15, 2023</td>
<td>5,225,000</td>
</tr>
<tr>
<td>August 15, 2023</td>
<td>5,310,000</td>
</tr>
</tbody>
</table>

* The figures in this column represent the amount in dollars to be repaid, except as provided in Section 4.04 (d) of the General Conditions.
SCHEDULE 4

Procurement and Consultants’ Services

Section I. General

A. All goods and services (other than consultants’ services) shall be procured in accordance with the provisions of Section I of the “Guidelines: Procurement under IBRD Loans and IDA Credits” dated May 2004 (the Procurement Guidelines), and with the provisions of this Schedule.

B. All consultants’ services shall be procured in accordance with Sections I and IV of the “Guidelines: Selection and Employment of Consultants by World Bank Borrowers” dated May 2004 (the Consultant Guidelines), and with the provisions of this Schedule.

C. The capitalized terms used below in this Schedule to describe particular procurement methods or methods of review by the Bank of particular contracts, have the meanings ascribed to them in the Procurement Guidelines, or Consultant Guidelines, as the case may be.

Section II. Particular Methods of Procurement of Goods and Services (other than Consultants’ Services)

A. International Competitive Bidding. Except as otherwise provided in Part B of this Section, contracts shall be awarded on the basis of International Competitive Bidding. The provisions of paragraphs 2.55 and 2.56 of the Procurement Guidelines, providing for domestic preference in the evaluation of bids, shall apply to goods manufactured in the territory of the Borrower.

B. Other Procurement Procedures

1. National Competitive Bidding. Goods estimated to cost less than $200,000 equivalent per contract may be procured under contracts awarded on the basis of National Competitive Bidding and the following additional provisions:

   (a) Eligibility

   Bidding shall not be restricted to domestic firms. Foreign firms shall not be excluded from the national competitive bidding process irrespective of the contract value.
(b) Procedures

(i) “Open tender procedures” shall be followed in all cases.

(ii) Invitations to bid shall be advertised in the Borrower’s Bulletin of State Procurement “Visnyk Derzhavnykh Zakupivel” and in at least one (1) widely circulated national daily newspaper allowing a minimum of thirty (30) days for the preparation and submission of bids.

(iii) Bids shall not be invited on the basis of percentage premium or discount over the estimated cost.

c) Pre-qualification

(i) Prequalification, where used, shall be based on a “pass/fail” system.

(ii) Minimum experience, technical, and financial requirements shall be explicitly stated in the pre-qualification documents.

d) Participation by Government-owned Enterprises

(i) Government-owned enterprises in the Borrower’s territory shall be eligible to participate in bidding only if they can establish that they are legally and financially autonomous, operate under commercial law, and are not financed by, and do not receive funding from, the state budget.

(ii) Government-owned enterprises will be subject to the same bid and performance security requirements as other bidders.

e) Bidding Documents

(i) Procuring entities shall use the appropriate Bank’s sample bidding documents, including pre-qualification documents, for the procurement of goods or technical services (other than consultants' services), all acceptable to the Bank.
(ii) Bidding documents shall be made available to all those companies that have paid the required fee.

(f) Bid Opening and Bid Evaluation

(i) Bids shall be opened in public, immediately after the deadline for submission of bids.

(ii) Evaluation of bids shall be made in strict adherence to the monetarily quantifiable criteria declared in the bidding documents.

(iii) No domestic preference shall be allowed in evaluating bids.

(iv) Contracts shall be awarded to qualified bidders having submitted the lowest evaluated substantially responsive bid and no negotiations shall be carried out prior to contract award.

(g) Rejection of Bids

(i) No bid shall be rejected purely on the basis that the bid price is higher than the estimated budget for that procurement.

(ii) All bids shall not be rejected and new bids solicited without the Bank’s prior concurrence.

(h) Securities

Bid security shall not exceed two percent (2%) of the estimated cost of the contract. Performance security shall not exceed ten percent (10%) of the contract price. No advance payments shall be made to contractors without a suitable advance payment security. The format of all such securities shall be included into the bidding documents and shall be acceptable to the Bank.

2. Shopping. Goods estimated to cost less than $100,000 equivalent per contract may be procured under contracts awarded on the basis of Shopping in accordance with the provisions of paragraph 3.5 of the Procurement Guidelines.
3. **Direct Contracting.** Goods which the Bank agrees meet the requirements for Direct Contracting may be procured in accordance with the provisions of paragraphs 3.6 and 3.7 of the Procurement Guidelines.

**Section III. Particular Methods of Procurement of Consultants’ Services**

A. **Quality- and Cost-based Selection.** Except as otherwise provided in Part B of this Section, consultants’ services shall be procured under contracts awarded on the basis of Quality- and Cost-based Selection. For purposes of paragraph 2.7 of the Consultant Guidelines, the short list of consultants for services estimated to cost less than $200,000 equivalent per contract may comprise entirely national consultants.

B. **Other Procedures**

1. **Quality-based Selection.** Services for assignments which the Bank agrees meet the requirements set forth in paragraph 3.2 of the Consultant Guidelines may be procured under contracts awarded on the basis of Quality-based Selection in accordance with the provisions of paragraphs 3.1 through 3.4 of the Consultant Guidelines.

2. **Selection Under a Fixed Budget.** Services for assignments which the Bank agrees meet the requirements of paragraph 3.5 of the Consultant Guidelines may be procured under contracts awarded on the basis of a Fixed Budget in accordance with the provisions of paragraphs 3.1 and 3.5 of the Consultant Guidelines.

3. **Least-cost Selection.** Services for assignments which the Bank agrees meet the requirements of paragraph 3.6 of the Consultant Guidelines may be procured under contracts awarded on the basis of Least-cost Selection in accordance with the provisions of paragraphs 3.1 and 3.6 of the Consultant Guidelines.

4. **Selection Based on Consultants’ Qualifications.** Services estimated to cost less than $200,000 equivalent per contract may be procured under contracts awarded in accordance with the provisions of paragraphs 3.1, 3.7 and 3.8 of the Consultant Guidelines.

5. **Single Source Selection.** Services for tasks in circumstances which meet the requirements of paragraph 3.10 of the Consultant Guidelines for Single Source Selection, may, with the Bank’s prior agreement, be procured in accordance with the provisions of paragraphs 3.9 through 3.13 of the Consultant Guidelines.

6. **Individual Consultants.** Services for assignments that meet the requirements set forth in the first sentence of paragraph 5.1 of the Consultant Guidelines may be procured
under contracts awarded to individual consultants in accordance with the provisions of paragraphs 5.2 through 5.3 of the Consultant Guidelines. Under the circumstances described in paragraph 5.4 of the Consultant Guidelines, such contracts may be awarded to individual consultants on a sole-source basis, subject to prior approval of the Bank.

Section IV. Review by the Bank of Procurement Decisions

Except as the Bank shall otherwise determine by notice to the Borrower, the following contracts shall be subject to Prior Review by the Bank: (i) each contract for goods and services (other than consultants’ services) estimated to cost the equivalent of $200,000 or more or procured on the basis of International Competitive Bidding or Direct Contracting; (ii) the first contract to be procured on the basis of National Competitive Bidding or Shopping, regardless of the cost thereof; and (iii) each contract for consultants’ services provided by a firm estimated to cost the equivalent of $200,000 or more. In addition, with respect to each contract for the employment of individual consultants estimated to cost the equivalent of $100,000 or more, the report on the qualifications and experience of all evaluated candidates, the terms of reference and the terms of employment of the consultants shall be subject to prior approval by the Bank. All other contracts shall be subject to Post Review by the Bank.
SCHEDULE 5

Implementation Program

Section A: Institutional Arrangements

1. Commission for Energy Sector Reform and Development

The Commission shall, inter alia, act as the focal point for the Project coordination and implementation. To this end, the Borrower shall ensure that the Commission is maintained throughout Project implementation under terms of reference satisfactory to the Bank. More specifically, the Commission shall coordinate and supervise the implementation of the conceptual plan for legal and technical harmonization of the Borrower’s energy market with the European Union Internal Energy Market, including the overall monitoring of the investment projects and technical assistance under the Project.

2. Permanent Working Group

The PWG shall act as the Commission Secretariat and shall be vested responsibility for: (i) preparing and updating a conceptual plan for legal and technical harmonization of the Borrower’s energy market with the European Union Internal Energy Market; (ii) developing a program of priority investments and technical assistance in the energy sector; (iii) establishing communication and documentation procedures under the Project; (iv) managing the technical consultants employed to assist in Project preparation; and (v) assisting the UHE in meeting the Project requirements. For such purposes, the Borrower shall ensure that the PWG is maintained throughout Project implementation under terms of reference and with a composition satisfactory to the Bank.

Section B: Implementation Arrangements

1. Environmental Action Plan

The Borrower shall take all measures necessary on its behalf to carry out, or to enable UHE to carry out, the measures identified under the Environmental Management Plan at all times in a timely manner, ensuring that adequate information on the implementation of said measures is suitably included in the Project progress reports to be prepared pursuant to the provisions of paragraph 1 of Section C of this Schedule.
2. **Dam Safety**

   The Borrower shall take all action required on its behalf to enable UHE to comply with the provisions stipulated in paragraph 2, Section B, of Schedule 2 to the Project Agreement regarding the establishment and operation of the Dam Safety Center, the design and carrying out of works under Part B of the Project, and the implementation of plans and continuation of safety inspections of the dams.

3. **Study Tours and Training under Parts D and E of the Project**

   For the purposes of the study tours and training to be provided under Parts D and E of the Project, the Borrower shall:

   (a) furnish to the Bank for its approval every six (6) months, the content of each such training, including an explanation on how such study tours and training is consistent and conducive to the objectives of the Project and whether it offers the best price/quality ratio, as well as the schedule for its implementation;

   (b) select the attendees and trainees in accordance with a transparent process and criteria satisfactory to the Bank;

   (c) not later than December 1 of each year, exchange views with the Bank on the training to be carried out during the following calendar year; and

   (d) furnish to the Bank a report of such scope and detail as the Bank shall reasonably request, on the results of each training and the benefits to be derived therefrom.

**Section C: Reporting and Review**

1. **Progress Reports**

   Without limitation upon the provisions of Section 9.07 of the General Conditions, the Borrower, through the MFE shall, commencing on March 31, 2006, and thereafter, not later than March 31 in each calendar year and until Project completion, prepare and furnish to the Bank a progress report, of such scope and in such detail as the Bank shall reasonably request, describing, in accordance with the MFE Monitoring and Evaluation Indicators, the progress achieved in the implementation of Parts D and E of the Project during the preceding calendar year and the updated Technical Assistance Monitoring and Evaluation Indicators for the upcoming calendar year.
2. **Mid-Term Review**

The Borrower, through the MFE shall:

(a) maintain policies and procedures adequate to enable it to monitor and evaluate on an ongoing basis, in accordance with the MFE Monitoring and Evaluation Indicators, the carrying out of Parts D and E of the Project and the achievement of the objectives thereof;

(b) prepare, under terms of reference satisfactory to the Bank, and furnish to the Bank, on or about September 30, 2008, a report integrating the results of the monitoring and evaluation activities performed pursuant to paragraph (a) of this Section, on the progress achieved in the carrying out of Parts D and E of the Project during the period preceding the date of said report and setting out the measures recommended to ensure the efficient carrying out of Parts D and E of the Project and the achievement of the objectives thereof during the period following such date; and

(c) review with the Bank, by December 31, 2008, or such later date as the Bank shall request, the report referred to in paragraph (b) of this Section, and, thereafter, take all measures required to ensure the efficient completion of Parts D and E of the Project and the achievement of the objectives thereof, based on the conclusions and recommendations of the said report and the Bank’s views on the matter.
Annex to SCHEDULE 5

Terms and Conditions of the Subsidiary Loan Agreement

1. Except as the Bank and the Borrower shall otherwise agree, the provisions set forth or referred to in this Annex shall apply for the purposes of Section 3.01 (c) of this Agreement.

2. The principal amount of the Subsidiary Loan repayable to the Borrower under the Subsidiary Loan Agreement shall: (i) be denominated in dollars; and (ii) be the equivalent in dollars (determined as of the date or respective dates of repayment of the principal amount of the Loan specified in Schedule 3 to this Agreement) of the value of the currency or currencies withdrawn from the Loan Account or paid out of the Special Account for Parts A, B and C of the Project on account of the cost of goods and services for Parts A, B and C of the Project to be financed under the Subsidiary Loan out of the proceeds of the Loan allocated from time to time to Categories (1) and (2)(a).

3. UHE shall pay to the Borrower: (i) interest on the principal amount of the Subsidiary Loan withdrawn and outstanding from time to time at the rate applicable from time to time to the Loan pursuant to the provisions of Section 2.06 of this Agreement, plus a margin at a rate to be determined according to the terms of the Subsidiary Loan Agreement; (ii) a commitment fee equal to the rate applicable from time to time to the Loan pursuant to the provisions of Section 2.05 of this Agreement calculated on the principal amount of the Subsidiary Loan not withdrawn from time to time; and (iii) a front-end fee in the amount determined according to the provisions of Section 2.04 of this Agreement, to be deducted from the amount of the Subsidiary Loan.

4. UHE shall repay to the Borrower the principal amount of the Subsidiary Loan in accordance with an amortization schedule not exceeding the maturity of the Loan, inclusive of a grace period not exceeding six (6) years.