



## Second Power Transmission Project (P146788)

EUROPE AND CENTRAL ASIA | Ukraine | Energy & Extractives Global Practice |  
IBRD/IDA | Investment Project Financing | FY 2015 | Seq No: 3 | ARCHIVED on 21-Jul-2016 | ISR24668 |

Implementing Agencies: National Power Company Ukrenergo (UE), Ministry of Energy and Coal Industry of Ukraine

### Key Dates

#### Key Project Dates

Bank Approval Date:22-Dec-2014

Effectiveness Date:09-Jun-2015

Planned Mid Term Review Date:12-Mar-2018

Actual Mid-Term Review Date:--

Original Closing Date:30-Jun-2020

Revised Closing Date:30-Jun-2020

### Project Development Objectives

Project Development Objective (from Project Appraisal Document)

To improve the reliability of power transmission system and support implementation of the Wholesale Electricity Market in Ukraine.

Has the Project Development Objective been changed since Board Approval of the Project Objective?

No

### Components

Name

Rehabilitation of Transmission Substations:(Cost \$268.00 M)

Electricity Market Enhancement:(Cost \$107.92 M)

Improving of Institutional Capacity of MoECI for Reform Implementation:(Cost \$2.50 M)

### Overall Ratings

Name	Previous Rating	Current Rating
Progress towards achievement of PDO	● Moderately Satisfactory	● Moderately Satisfactory
Overall Implementation Progress (IP)	● Moderately Satisfactory	● Moderately Satisfactory
Overall Risk Rating	● Moderate	● Moderate

### Implementation Status and Key Decisions



On June 9, 2015 Second Power Transmission Project become effective and now Ukrenergo and Consultants are finalizing major part of Tender Documents to start tendering in late 2016.





## Risks

### Systematic Operations Risk-rating Tool

Risk Category	Rating at Approval	Previous Rating	Current Rating
Political and Governance	--	● Substantial	● Substantial
Macroeconomic	--	● Moderate	● Moderate
Sector Strategies and Policies	--	● Moderate	● Moderate
Technical Design of Project or Program	--	● Low	● Low
Institutional Capacity for Implementation and Sustainability	--	● Low	● Low
Fiduciary	--	● Low	● Low
Environment and Social	--	● Low	● Low
Stakeholders	--	● Low	● Low
Other	--	--	--
Overall	--	● Moderate	● Moderate

## Results

### Project Development Objective Indicators

#### ► Number of outages at rehabilitated SSs is reduced (Number, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	0.00
Date	31-May-2014	04-Dec-2015	20-Jul-2016	30-Jun-2020

#### ▲ Sumy (Number, Custom Breakdown)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	27.00	27.00	27.00	7.00
Date	31-May-2014	04-Dec-2015	20-Jul-2016	30-Jun-2020



#### ▲ Cherkaska (Number, Custom Breakdown)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	12.00	12.00	12.00	3.00
Date	31-May-2014	04-Dec-2015	20-Jul-2016	30-Jun-2020

#### ▲ Novokyyiska (Number, Custom Breakdown)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	35.00	35.00	35.00	8.00
Date	31-May-2014	04-Dec-2015	20-Jul-2016	30-Jun-2020

#### ▷ Kremenchug (Number, Custom Breakdown)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	37.00	37.00	37.00	9.00
Date	31-May-2014	04-Dec-2015	20-Jul-2016	30-Jun-2020

#### ▷ October (Number, Custom Breakdown)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	23.00	23.00	23.00	5.00
Date	31-May-2014	04-Dec-2015	20-Jul-2016	30-Jun-2020

#### ▷ Zhytomyrska (Number, Custom Breakdown)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	28.00	28.00	28.00	7.00



Date	31-May-2014	04-Dec-2015	20-Jul-2016	30-Jun-2020

► Decrease in power usage for own needs of Substations which were reconstructed (Megawatt hour(MWh), Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	0.00
Date	31-May-2014	04-Dec-2015	20-Jul-2016	30-Jun-2020

▲ North Region SS Cherkaska, Sumy (Megawatt hour(MWh), Custom Breakdown)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	3299.00	--	3299.00	3091.00
Date	31-May-2014	--	20-Jul-2016	30-Jun-2020

▲ Central Region SS Novokyyivska, October, Kremenchug, Zhytomyrska (Megawatt hour(MWh), Custom Breakdown)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	3863.00	3863.00	3863.00	3546.00
Date	31-May-2014	04-Dec-2015	20-Jul-2016	30-Jun-2020

► Share of electricity traded on bilateral basis and day ahead market in WEM of Ukraine (Percentage, Custom)



	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	70.00
Date	31-May-2014	04-Dec-2015	20-Jul-2016	30-Jun-2020

## Overall Comments

As Rehabilitation have not started yet - there is no data to track changes

## Intermediate Results Indicators

► Implementation progress of SS Rehabilitation in 1. Novokyyivska 2. October 3. Kremenchug 4. Zhytomyrska 5. Cherkaska 6. Sumy (Text, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0	--	works have not started yet. Tender Documents are under preparation.	Works continue on High Voltage Units 330 kV/ Contracts Completed
Date	31-May-2014	04-Dec-2015	20-Jul-2016	30-Jun-2020

► Reduced operating and maintenance costs at the rehabilitated SSs: 1. Novokyyivska 2. October 3. Kremenchug 4. Zhytomyrska 5. Cherkaska 6. Sumy (Percentage, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	--	0.00	50.00
Date	31-May-2014	--	20-Jul-2016	30-Jun-2020

► Electricity losses per year in the project area (Percentage, Core)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.50	0.50	0.50	0.20
Date	31-May-2014	04-Dec-2015	20-Jul-2016	30-Jun-2020



▲ Electricity losses per year in the project area- Non-Technical (Percentage, Core Supplement)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	0.00

▲ Electricity losses per year in the project area- Technical (Percentage, Core Supplement)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.50	0.50	0.50	0.20

▲ Total net injected generation (Megawatt hour(MWh), Core Supplement)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	147200.00	147200.00	147200.00	164640.00

► Energy Not Served reduced by 50% (Gigawatt-hour (GWh), Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	0.00
Date	31-May-2014	04-Dec-2015	20-Jul-2016	30-Jun-2020





#### ▲ North Region (Gigawatt-hour (GWh), Custom Breakdown)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	7.00	7.00	7.00	50.00
Date	31-May-2014	04-Dec-2015	20-Jul-2016	30-Jun-2020

#### ▲ Central Region (Gigawatt-hour (GWh), Custom Breakdown)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	35.00	35.00	35.00	50.00
Date	31-May-2014	04-Dec-2015	20-Jul-2016	30-Jun-2020

#### ► Voltage at bus bars 35kV at the rehabilitated SSs are within operating limits +-5% (Volts, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	0.00
Date	31-May-2014	04-Dec-2015	20-Jul-2016	30-Jun-2020

#### ▲ Kamenets-Podilska (Volts, Custom Breakdown)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	42.00	42.00	42.00	36.00
Date	31-May-2014	04-Dec-2015	20-Jul-2016	30-Jun-2020



#### ▲ Shepetivka (Volts, Custom Breakdown)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	41.00	41.00	41.00	36.00
Date	31-May-2014	04-Dec-2015	20-Jul-2016	30-Jun-2020

#### ▲ Kove (Volts, Custom Breakdown)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	40.00	--	40.00	36.00
Date	31-May-2014	--	20-Jul-2016	30-Jun-2020

#### ▲ Novovolynskaya (Volts, Custom Breakdown)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	40.00	--	40.00	35.00
Date	31-May-2014	--	20-Jul-2016	30-Jun-2020

#### ▲ Lutsk Pivdenna (Volts, Custom Breakdown)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	40.00	--	40.00	35.00
Date	31-May-2014	--	20-Jul-2016	30-Jun-2020



## ► Implementation progress of Smart Grid (Text, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	Feasibility study completed	--	Feasibility Study to be completed by December 31, 2015. UE is Selecting Consultant as part of Component 2.4 for the Preparation of Tender Documents.	System fully Supplied and Tested/ Contract Completed
Date	31-May-2014	--	20-Jul-2016	30-Jun-2020

## ► Implementation of Balancing Market (Text, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	Feasibility study completed	--	The Preparation of Tender Documents is under way. First draft TD have been provided and commented by WB Procurement expert suggesting to revise DSI package to use IT procurement.	Modifications to BM. Balancing Market Operational / Balancing Market Operational
Date	31-May-2014	04-Dec-2015	20-Jul-2016	30-Jun-2020

## ► Implementation progress of MIS (Text, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	Feasibility study completed	--	By end of December Feasibility Study for MIS has been completed and finalized. Next step would be for UE to launch procedure to hire consultant as part of Subcomponent 2.4 to develop Technical Specifications and Tender Documents. REoI has been published on September 18, 2015 and by October 30, 2015 UE has received REoI from interested consultants. This consultant is to be selected by end of March, 2016.	Testing and staff training completed System operational



Date	31-May-2014	--	20-Jul-2016	30-Jun-2020
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► Tons of GHG emissions reduced or avoided based on Electricity Savings (Tones/year, Custom)

	Baseline	Actual (Previous)	Actual (Current)	End Target
Value	0.00	0.00	0.00	220700.00
Date	31-May-2014	04-Dec-2015	20-Jul-2016	30-Jun-2020

Overall Comments  
Tenders are ongoing.

## Data on Financial Performance

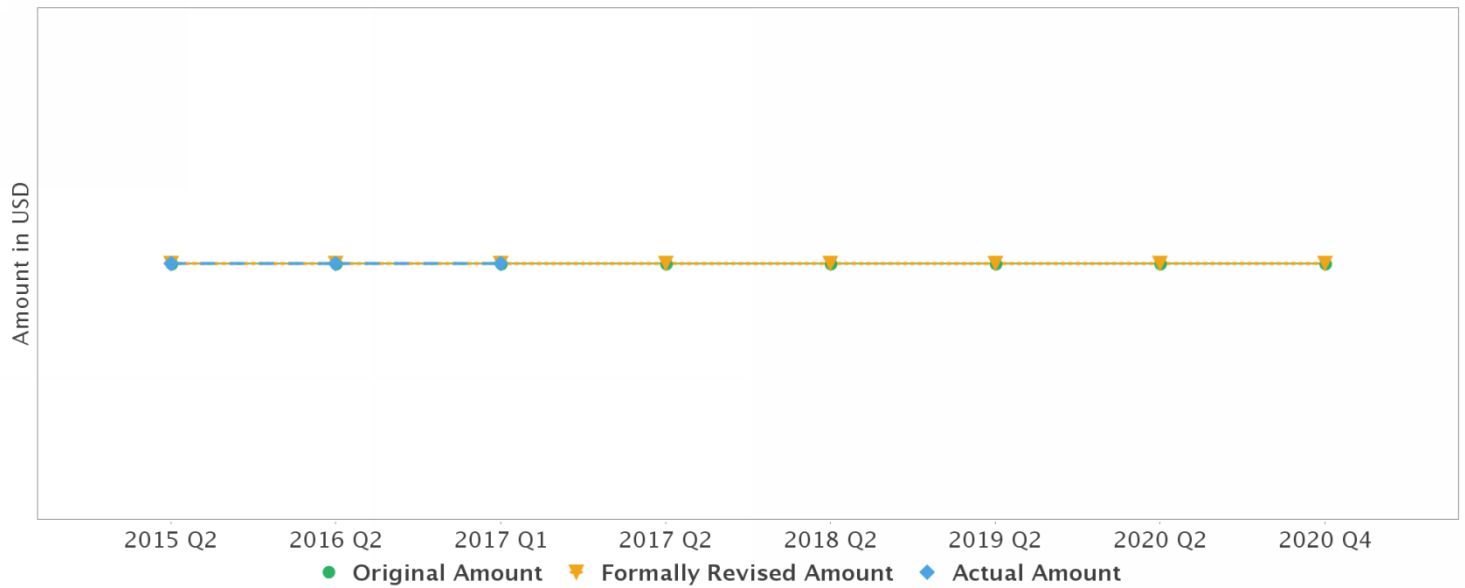
### Disbursements (by loan)

Project	Loan/Credit/TF	Status	Currency	Original	Revised	Cancelled	Disbursed	Undisbursed	Disbursed
P146788	IBRD-84620	Effective	USD	330.00	330.00	0.00	0.83	329.18	0%
P146788	TF-17661	Effective	USD	48.43	48.43	0.00	0.22	48.21	0%

### Key Dates (by loan)

Project	Loan/Credit/TF	Status	Approval Date	Signing Date	Effectiveness Date	Orig. Closing Date	Rev. Closing Date
P146788	IBRD-84620	Effective	22-Dec-2014	10-Feb-2015	09-Jun-2015	30-Jun-2020	30-Jun-2020
P146788	TF-17661	Effective	22-Dec-2014	10-Feb-2015	09-Jun-2015	30-Jun-2020	30-Jun-2020

### Cumulative Disbursements



### Restructuring History

There has been no restructuring to date.

### Related Project(s)

There are no related projects.