

## **IDGC OF CENTRE**

## Key projects as part of Investment Program of IDGC of Centre, JSC for 2011







Name of Facility	Division	Major project/ commissio ning of facility	Capital costs, million RUR, without VAT	Project short description
Reconstruction of SS 110/6 kV "Sovetskaya" (2 <sup>nd</sup> stage)	Bryanskenergo	Major project 2009-2012	410 982	SS "Sovetskaya" was commissioned in 1964. The operated equipment is obsolete. The decision on the reconstruction of SS "Sovetskaya" was taken in accordance with Minutes of the joint meeting on the power supply of the central and northwestern boroughs of Sovetsky district in the city of Bryansk, approved by acting mayor of Bryansk.
Cable Line-110 kV from SS #2 to SS #10	Voronezhenergo	Major project 2009-2012	360 060	The construction project «Cable Line-110 kV from SS #2 to SS #10" provides for the construction of the cable line 110 kV voltage. The aim of this project is power supply of SS #10. The construction of the cable line was started in 2009 and will be completed in 2012. The commissioned facility will be 3.0 km. Currently contractor -"Technology 21" LLC has been selected. 30 million RUR has been disbursed on the construction and installation work.
110 kV Conductor Zavolzhskaya 110 kV Conductor reconstruction with replacement of cables and poles and SS "Central", "North"	Kostromaenergo	Major project 2011-2012	362 785	110 kV Retail Wheeling Conductor "Motordetal-Kostroma-1" and 110 kV Conductor "Zavolzhskaya-1,2" is the main supply line of Kostroma. Year of construction - 1960. When this project is implemented modern high-tech equipment and materials, including metal multi-faceted poles, gas-insulated circuit breakers110 kV voltage; microprocessor relay protection and automation; fiber optic cables will be used. Following the implementation of the reconstruction the costs required to repair and maintain SS and Conductor will be significantly reduced, the outage time of Conductor and probability of electrical energy not supplied related to possible unplanned outages will be largely reduced.



## Key investment projects of IDGC of Centre for 2011

		Major project/ commissioni ng of facility	Capital costs, million RUR, without VAT	
Name of Facility	Division			Project short description
Expansion of SS 110 kV "Bugor" with replacement of existing transformes for 2x63 MVA	Lipetskenergo	Major project 2009-2012	386 133	Reconstruction of SS 110 kV "Bugor" is being performed in accordance with the "Scheme of development of Lipetsk electric grid 35-110 kV for 2010 and with prospects up to 2015". Three transformers15, 25, and 15 MVA power are installed at SS "Bugor". Transformers 15 MVA were commissioned in 1961 and have been in operation almost double their life cycle. The replacement of existing transformers for 2 by 63 MVA will solve the problem of power shortage. The project is implemented in two stages. For the first stage selected contractor - "TeploTsentrStroy" LLC has been selected. The amount of the contract is 75 million rubles. 25 million rubles has been disbursed on the construction and installation work. Currently, the construction part has been completed.
Reconstruction of SS- 110 kV "Plastics"	Orelenergo	Commissionin g of facility 2011-2012	30 000	SS "Plastics" - one-ended SS, in operation since 1972, installed under the simplified scheme (Isolating Switch – Short-circuiting Switch) and supplies electricity to consumers of the city of Livny and agricultural consumers of Livensky district of Orel region. SS equipment is obsolete and outdated.
Construction of SS 110/10/6 kV Novoselki with transformer 2x40 MVA.	Yarenergo	Major project 2006-2012	307 172	Administration of the YaroslavI region has included the design and construction of transformer substation 110/10 kV «Novoselki» of 2x40 MVA power into R&D in order to provide technical capabilities for technological connection to electric grid of existing and future residents in the area of investment site «Novoselki-1". The first stage includes: the ground-work of the indoor TS building, TS fencing, drip culvert, intrasite sewage and plumbing network, portals of switchyard 110 kV, the construction part of Conductor 110 kV, inner tracks and the substation site levelling.

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