

Technical condition of networks
Summary data about unplanned outages each month on borders of territorial zones of activity
of the company, caused by failures or unplanned outages of power grid facilities

The report on outages (faults) in the branches
of IDGC of Centre
for January – March 2013 (according to Form 16-Energo)

The report on outages in the branches of IDGC of Centre
for 1Q 2013

Branches	Outages under item 4. of the Rules to investigate causes of faults in the power industry		Outages under item 5. of the Rules to investigate causes of faults in the power industry		Undersupply of energy due to faults and incidents		Economic damage, thousand RUB
	In total	Including errors of personnel	In total	Including errors of personnel	electric energy, thousand kWh	heat energy, Gcal	
BELGORODENERGO							
January			107	0	11,2		363,173
February			119	0	12,41		572,048
March			188	0	22,8		917,426
TOTAL:	0	0	414	0	46,41		1852,647
BRYANSKENERGO							
January			98	0	11,99		63,104
February			134	0	14,59		67,503
March			129	0	21,67		314,822
TOTAL:	0	0	361	0	48,25	0	445,429
VORONEZHENERGO							
January			99	0	12,06		241,141
February			142	0	15,26		325,521
March			206	0	14,93		356,089
TOTAL:	0	0	447	0	42,25		922,751
KOSTROMAENERGO							
January			140	2	12,95		543,66
February			195	1	14,72		729
March			155	0	11,24		389,376
TOTAL:	0	0	490	3	38,91		1662,036
KURSKENERGO							
January			38	0	2,47		99,531
February			64	0	3,48		41,414
March			102	0	6,65		83,693
TOTAL:	0	0	204	0	12,6		224,638
LIPETSKENERGO							
January			33	0	7,49		231,301
February			86	0	20,78		546,158
March			124	0	24,8		670,916
TOTAL:	0	0	243	0	53,07		1448,375
ORELENERGO							
January			45	0	12,04		60,897
February			55	0	7,53		74,302
March			56	0	10,23		115,723
TOTAL:	0	0	156	0	29,8		250,922

SMOLENSKENERGO							
January			65	1	11,65		559,13
February			100	0	9,71		294,035
March			288	0	13,66		701,559
TOTAL:	0	0	453	1	35,02		1554,724
TAMBOVENERGO							
January			36	0	3,94		94,515
February			68	0	11,13		123,502
March			75	1	18,28		205,671
TOTAL:	0	0	179	1	33,35		423,688
TVERENERGO							
January			67	0	5,2		301,684
February			74	0	9,92		590,642
March			123	0	7,1		333,321
TOTAL:	0	0	264	0	22,22		1225,647
YARENERGO							
January			118	0	7,7		42,586
February			202	0	22,34		948,338
March			233	1	21,42		151,261
TOTAL:	0	0	553	1	51,46		1142,185
IDGC of Centre							
January	0	0	846	3	98,69	0	2 600,722
February	0	0	1 239	1	141,87	0	4 312,463
March	0	0	1 679	2	172,78	0	4 239,857
TOTAL:	0	0	3 764	6	413,34	0	11 153,042

Pursuant item 4 there are no faults.

Main causes of technological failures for Q1 2013 in %	
Impact of third parties	9
Insulation damage, fault, equipment aging	9
Influence of animals, birds, undetermined cause, errors of staff, incorrect action of relay protection and automation	43
Falling of trees, branches onto 6-110 kV Conductors (not weather conditions)	25
Influence of the spontaneous phenomena (thunderstorm, cyclones)	14

The main actions to increase reliability within the industrial activity:

1. Replacement of switches: for SF6 35-110 kV switches, vacuum 6-10 kV switches.
2. Replacement and installation of microprocessor relay protection equipment of 6-110 kV
3. Replacement of 110 kV current transformers.
4. Implementation of the target program to equip 6 – 10 kV switchgear and control gear with high-speed (arc) protection.
5. Implementation of technical measures to improve the reliability of control current circuits.
6. Expansion and clearing of ROWs along 6 – 110 kV conductors, Expansion and clearing of ROWs along 6 - 110 kV, cutting of threatening trees and trimming limbs of trees.