

**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 – December 2012 (according to Form 16-Energo)**

The report on outages in the branches of IDGC of Centre  
for 2012

<b>Branches</b>	Outages under item 5. of the Rules		Undersupply of energy due to faults and incidents		Economic damage, thousand RUB
	In total	Including errors of personnel	electric energy, thousand kWh	heat energy, Gcal	
<b>BELGORODENERGO</b>					
January	161	1	19		900,745
February	168	0	5,84		700,083
March	258	1	21		918,349
April	282	0	19,19		56880,785
May	547	0	10,59		1237,05
June	648	0	16,56		2048,99
July	682	0	33,21		1540,639
August	953	0	35,78		1644,953
September	250	0	34,02		772,591
October	477	0	24,85		1142,228
November	168	0	17,75		906,951
December	330	0	22,84		859,211
<b>TOTAL:</b>	<b>4924</b>	<b>2</b>	<b>260,63</b>		<b>68645,624</b>
<b>BRYANSKENERGO</b>					
January	142	0	21,81		281,746
February	93	1	14,15		225,112
March	305	0	24,07		126,561
April	278	0	18,42		176,925
May	351	0	21,13		177,024
June	548	0	46,45		320,621
July	441	0	22,75		269,915
August	449	0	28,82		237,919
September	241	0	25,4		163,946
October	337	0	24,1		132,532
November	161	0	20,02		149,766
December	204	0	22,14		121,505
<b>TOTAL:</b>	<b>3550</b>	<b>1</b>	<b>289,26</b>	<b>0</b>	<b>2233,806</b>

<b>VORONEZHENERGO</b>					
January	410	0	56,72		348,106
February	250	0	27,11		943,854
March	359	1	21,81		514,91
April	339	1	38,86		859,058
May	530	0	43,33		1008,568
June	973	1	98,17		1859,15
July	727	0	41,9		1371,512
August	839	0	129,37		2241,159
September	307	0	31,68		630,625
October	501	0	34,27		931,134
November	182	0	18,53		483,787
December	263	0	41,4		535,575
<b>TOTAL:</b>	<b>5680</b>	<b>3</b>	<b>564,62</b>		<b>11243,651</b>
<b>KOSTROMAENERGO</b>					
January	167	0	14,09		348,435
February	119	0	9,55		382,036
March	80	0	15,65		284,156
April	193	0	19,95		763,99
May	460	0	56,07		1870,73
June	406	0	26,86		1441,471
July	316	1	17,97		1768,042
August	259	0	19,32		789,924
September	232	0	16,93		666,613
October	260	0	16,88		680,84
November	191	0	14,03		578,166
December	128	0	33,32		611,108
<b>TOTAL:</b>	<b>2811</b>	<b>1</b>	<b>246,59</b>		<b>9607,345</b>
<b>KURSKENERGO</b>					
January	107	0	15,34		93,653
February	105	0	10,53		76,268
March	238	0	16,38		116,121
April	132	0	9,48		116,884
May	358	0	24,32		530,769
June	424	0	48,78		414,073
July	374	0	29,72		474,264
August	381	0	33,33		492,922
September	147	0	9,6		98,755
October	252	0	18,28		303,316
November	72	0	4,33		173,163
December	172	0	14,75		157,325
<b>TOTAL:</b>	<b>2762</b>	<b>0</b>	<b>230,51</b>		<b>2874,35</b>
<b>LIPETSKENERGO</b>					
January	203	0	39,9		608,342
February	136	0	24,56		390,08
March	327	1	78,71		1158,54
April	241	1	52		726,61
May	350	0	108,64		987,297

June	683	2	338,57	6829,253
July	400	2	240,54	56551,015
August	417	0	109,21	4259,991
September	169	0	30,88	602,025
October	280	0	52,46	1084,718
November	92	1	21,94	435,493
December	159	1	37,55	654,313
<b>TOTAL:</b>	<b>3457</b>	<b>8</b>	<b>1113,02</b>	<b>73852,184</b>
<b>ORELENERGO</b>				
January	59	0	6,16	49,723
February	46	0	6,47	48,058
March	148	0	37,14	219,438
April	118	0	22,32	492,495
May	185	0	17,15	473,495
June	372	0	16,93	320,749
July	282	0	29,34	376,194
August	250	0	19,57	415,838
September	108	0	12,69	116,684
October	168	0	20,32	254,399
November	65	0	8,52	63,790
December	77	0	12,63	68,008
<b>TOTAL:</b>	<b>1878</b>	<b>0</b>	<b>200,72</b>	<b>2835,081</b>
<b>SMOLENSKENERGO</b>				
January	227	0	24,56	474,442
February	176	0	23,25	808,673
March	333	0	21,96	528,733
April	541	0	58,34	1248,502
May	446	0	28,89	1062,161
June	524	0	50,27	1094,052
July	564	0	44,85	1210,616
August	882	0	102,63	2707,49
September	352	0	39,27	844,075
October	487	0	42,62	1131,641
November	228	0	23,71	969,257
December	180	0	17,38	1272,194
<b>TOTAL:</b>	<b>4940</b>	<b>0</b>	<b>454,02</b>	<b>12382,579</b>
<b>TAMBOVENERGO</b>				
January	127	0	22,66	295,551
February	91	1	38,66	268,999
March	98	0	16,14	265,601
April	141	0	25,91	345,595
May	532	0	474,16	2503,696
June	631	1	101,05	1634,514
July	398	1	36,22	1315,486
August	393	0	43,04	1471,783
September	143	0	13,46	401,936
October	239	0	39,07	530,965
November	86	0	14,06	232,995

December	121	0	20,72		263,103
<b>TOTAL:</b>	<b>3000</b>	<b>3</b>	<b>831,09</b>		<b>9297,229</b>
<b>TVERENERGO</b>					
January	121	0	49,81		244,02
February	137	0	17,26		382,62
March	220	0	29,87		649,43
April	302	0	21,38		718,08
May	619	0	68,41		2125,387
June	584	1	47,83		1804,37
July	577	0	61,65		2262,467
August	528	0	96,19		2080,54
September	340	0	29,74		941,62
October	433	0	37,37		1398,16
November	205	0	12,57		748,420
December	266	0	27,08		812,91
<b>TOTAL:</b>	<b>4332</b>	<b>1</b>	<b>486,59</b>		<b>13419,604</b>
<b>YARENERGO</b>					
January	151	0	12,19		105,539
February	112	0	8,53		45,321
March	155	0	11,11		50,778
April	259	0	33,85		131,658
May	829	0	86,49		1023,783
June	599	0	59,95		278,95
July	590	0	36,42		327,571
August	402	0	23,43		206,216
September	335	0	26,84		180,919
October	467	0	59,26		330,93
November	277	1	52,07		198,620
December	149	0	19,39		89,094
<b>TOTAL:</b>	<b>4325</b>	<b>1</b>	<b>377,46</b>		<b>2770,759</b>
<b>IDGC of Centre</b>					
January	<b>1 875</b>	<b>1</b>	<b>282,24</b>	<b>0</b>	<b>3 750,302</b>
February	<b>1 433</b>	<b>2</b>	<b>185,91</b>	<b>0</b>	<b>4 271,104</b>
March	<b>2 521</b>	<b>3</b>	<b>293,84</b>	<b>0</b>	<b>4 832,617</b>
April	<b>2 826</b>	<b>2</b>	<b>319,70</b>	<b>0</b>	<b>62 460,582</b>
May	<b>5 207</b>	<b>0</b>	<b>939,18</b>	<b>0</b>	<b>12 999,960</b>
June	<b>6 392</b>	<b>5</b>	<b>851,42</b>	<b>0</b>	<b>18 046,193</b>
July	<b>5 351</b>	<b>4</b>	<b>594,57</b>	<b>0</b>	<b>67 467,721</b>
August	<b>5 753</b>	<b>0</b>	<b>640,69</b>	<b>0</b>	<b>16 548,735</b>
September	<b>2 624</b>	<b>0</b>	<b>270,51</b>	<b>0</b>	<b>5 419,789</b>
October	<b>3 901</b>	<b>0</b>	<b>369,48</b>	<b>0</b>	<b>7 920,863</b>
November	<b>1 727</b>	<b>2</b>	<b>207,53</b>	<b>0</b>	<b>4 940,408</b>
December	<b>2 049</b>	<b>1</b>	<b>269,20</b>	<b>0</b>	<b>5 444,346</b>
<b>TOTAL:</b>	<b>41 659</b>	<b>20</b>	<b>5 224,27</b>	<b>0</b>	<b>214 102,620</b>

Pursuant item 4 there are no faults.

<b>Main causes of technological failures for 12 of 2012 in %</b>	
Impact of third parties, undetermined cause	<b>16</b>
Insulation damage, fault	<b>14</b>
Influence of animals, birds	<b>6</b>
Falling of trees, branches onto 6-10 kV Conductors (not weather)	<b>26</b>
Falling of trees, branches onto 35-110 kV Conductors (not weather) 5	<b>6</b>
Influence of the spontaneous phenomena (thunderstorm, cyclones)	<b>32</b>

**The main actions to increase reliability within the industrial activity:**

1. Expansion of ROWs along 6 – 110 kV conductors, cutting down of threatening trees and trimming limbs of trees.
2. Replacement of switches (circuit breakers, isolating and short-circuiting switches) 6-110 kV, which have been in operation over 25 years.
3. Implementation of the target program to equip 6 – 10 kV switchgear and control gear with high-speed (arc) protection.
4. Improvement of the reliability of control current circuits, as well auxiliary power supply.
5. Replacement of pole and rod insulation.
6. Implementation of technical measures to improve the reliability of 6 – 10 kV automatic transfer switches.