

Responsibility for the electricity service

The grid

Indicator	Unit	2011	2010	2009	Change 10-11	Change 10-11%
Power station						
380 kV						
stations	no.	147	141	136	6	4.3%
power transformed	MVA	93,448	92,498	88,284	950	1.0%
220 kV						
stations	no.	153	150	147	3	2.0%
power transformed	MVA	30,084	30,114	30,265	-30	-0.1%
Lower voltages (<150 kV)						
stations	no.	154	140	100	14	10.0%
power transformed	MVA	3,234	2,960	2,953	274	9.3%
Total						
stations	no.	454	431	383	23	5.3%
power transformed	MVA	126,765	125,571	121,501	1,194	1.0%
Power lines						
	Unit					
380 kV						
length of 3-conductor circuits	km	11,808	11,759	11,212	49	0.4%
length of lines	km	10,893	10,860	10,313	33	0.3%
220 kV						
length of 3-wire circuits	km	12,058	12,089	12,083	-31	-0.3%
length of lines	km	9,710	9,737	9,725	-27	-0.3%
Lower voltages (<150 kV)						
length of 3-conductor circuits	km	39,760	39,730	39,208	30	0.1%
length of lines	km	37,047	37,040	36,653	7	0.0%
Total						
length of 3-conductor circuits	km	63,626	63,578	62,503	48	0.1%
in underground cable	km	1,328	1,249	1,043	79	6.3%
in submarine cable	km	1,348	1,348	914	0	-
in 200, 400 and 500 kV direct current	km	2,066	2,066	1,560	0	-
length of lines	km	57,651	57,638	56,691	13	0.0%
in underground cable	km	1,328	1,249	1,043	79	6.3%
in underwater cable	km	1,348	1,348	914	0	-
in 200, 400 and 500 kV direct current	km	1,746	1,746	1,240	0	-
Incidence DC connections						
- 3-conductor circuits	%	3.3	3.2	2.5	0	0.0%
- lines	%	3.0	3.0	2.2	0	0.0%
Grid efficiency						
Power supplied	GWh/year	332,274	330,455 ⁽¹⁾	317,602	1,819	0.6%
Technical quality						
Service continuity indexes						
ASA (Average System Availability) ⁽²⁾	%	99.32	99.23	99.03	0.09	0.10%
SAIFI + MAIFI (System Average Interruption Frequency Index)	no.	0.14	0.14	0.19	0	0.00%
AIT (Average Interruption Time) ⁽³⁾	min	0.49	0.89	0.55	-0.4	-44.90%
ENSR (Regulated Energy Not Supplied) ⁽⁴⁾	MWh	1,210.00	1,238.00	800.00	-28	-2.30%

(1) The 2010 figure was recalculated using the final data of the same year, and thus is different from the one reported in the previous edition of the Sustainability Report, amounting to 326,165, which was calculated according to the provisional data for 2010.

(2) The indicator is the total ASA % (used in international benchmarks), calculated with regard to individual Local Areas or for the entire country taking into account: Planned Unavailability, Occasional Unavailability, Unavailability due to Malfunctioning, Unavailability due to External Events, and Unavailability due to Development Work.

(3) Average interruption time of the National Transmission Grid in a year, calculated as the ratio between the energy not supplied in a certain period (ENS value) and the average power absorbed by NTG in the period considered. The 2010 figure has been recalculated and is therefore different from the previously published one.

(4) Energy not supplied due to interruptions on the NTG during the period. Since 2008, with AEEG Resolution 341/07, the Authority adopted a different definition for the index. The new index also includes energy not supplied to Users directly connected, due to events on other connection grids that are not part of the NTG and a share of the energy not supplied due to force majeure events or significant incidents. By "significant incident" is meant any interruption during which the energy not supplied amounts to more than 250 MWh. The share affecting the ENSR index is a decreasing percentage of energy not supplied in the individual significant incident. The 2010 figure has been recalculated and is therefore different from the previously published one.