

OVERVIEW OF ELECTRICAL ENERGY

AUGUST 2009

The purpose of this document is to provide information on the results of operation of the French public transmission network and power system during the past month. Information sources : electricity generators, ERDF, METEOFRANCE, RTE. The data published are interim figures dated **7 September 2009**, unless indicated otherwise.

NATIONAL ELECTRICITY CONSUMPTION - perimeter France

Results at end of past month

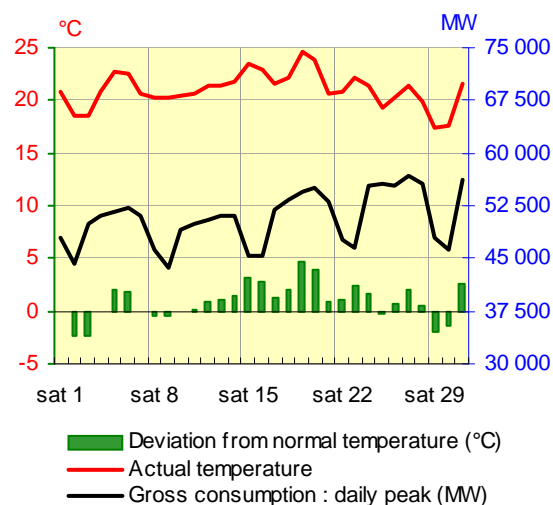
	August 2009		Trend compared with August 2008	Cumulative trend since 1 st January	Cumulative trend over last 12 months
Gross consumption	32,9	TWh	0,0%	-0,9%	-0,8%
Adjusted consumption *	32,7	TWh	-1,0%	-2,7%	-1,9%

* adjusted for winter and summer climate contingencies and the inclusion of 29 February 2008

Temperature

Monthly average	21,0 °C
Deviation from normal temperature	+ 0,9 °C/normal
Deviation from August 2008	+ 1,8 °C

RTE-in house reference drawn up on basis of METEOFRANCE data



In August 2009, with an average monthly temperature 1,8°C higher than August 2008, gross consumption remained stable. Adjusted for climatic contingencies, monthly consumption was down by 1,0%, despite a favourable calendar effect (15 August fell on a Saturday in 2009, having fallen on a Friday in 2008).

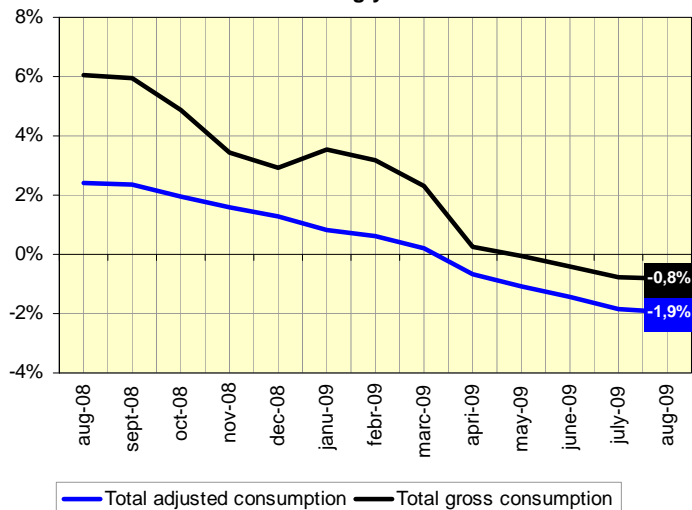
Cumulative trend over last 12 months

In cumulative figures, the rate of growth in gross consumption over a 12 month sliding period remained stable compared with the previous month, equal to -0,8% at the end of August 2009.

In cumulative figures over 12 months, the slowdown in adjusted consumption* continued, to a lesser extent in August ; the growth rate was -1,9% at the end of August, compared with -1,8% at the end of July 2009.

* adjusted for winter and summer climate contingencies and the inclusion of 29 February 2008

Evolution of National consumption in sliding year



BALANCE OF ELECTRICAL ENERGY IN FRANCE

Results at end of past month

	August 2009 (GWh)	Deviation from August 2008 (GWh)	Deviation from August 2008	Cumulative trend since 1st January	Cumulative trend over last 12 months
NET GENERATION					
Nuclear	28 224	-3 801	-11,9%	-5,3%	-4,3%
Fossil-fuel thermal generation	2 532	803	46,4%	-1,1%	-4,5%
Hydro-electric	3 882	-366	-8,6%	-4,3%	2,2%
Wind	356	-37	-9,4%	20,2%	25,7%
Other renewable sources *	391	46	13,3%	4,2%	4,8%
Total net generation	35,385	-3,355	-8,7%	-4,5%	-3,2%
GROSS NATIONAL CONSUMPTION					
End customers connected to the RTE network **	6 526	-661	-9,2%	-11,7%	-10,9%
Other customers and losses on all networks ***	26 423	659	2,6%	1,4%	1,4%
Total gross national consumption	32 949	-2	0,0%	-0,9%	-0,8%
Energy extracted for pumping	405	126	45,2%	12,6%	2,0%
Balance of physical exchanges (export)	2 031	-3 479	-63,1%	-37,4%	-28,6%

* mainly : household waste, paper waste, biogas

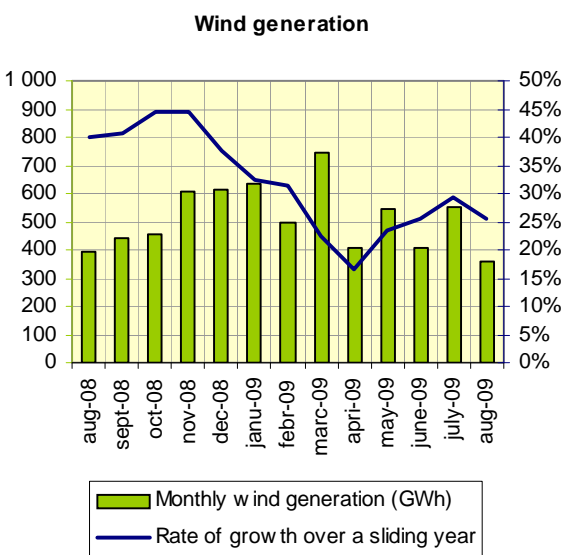
** extractions by these consumers on the RTE network

*** SME, SMI, business and private consumers supplied by the distribution networks + generation auto-consumed by industrials at their sites + losses on the transmission and distribution networks

The balance of physical exchanges was negative (i.e. net importing) in energy terms over 1 day on Tuesday 25th, and in power terms on one or more time intervals over a period of 18 days.

Development of wind generation in France

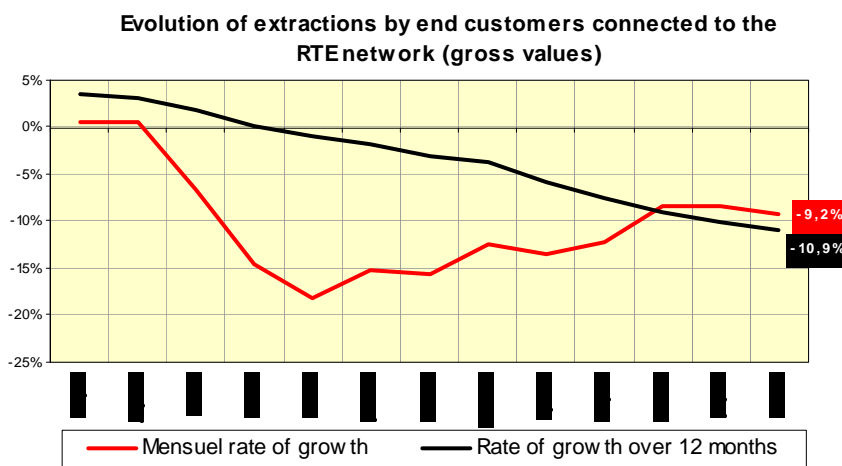
Despite a 1 200 MW increase in installed capacity at the end of August 2009 compared with the same time the previous year, monthly wind generation was down by 9,4%, reflecting the highly unpredictable nature of this type of generation. In cumulative terms over 12 months, the rate of growth in wind generation remains high with a value of +25,7% at the end of August.



Development of extractions by large-scale industry

In monthly figure, the fall in extraction by end customers connected to the RTE network reached its lowest value in December (-18,2%). Between January and May 2009, monthly extractions remained between 12% and 15% below those of the previous year, whereas over the months June-July-August they were down by around 9% compared to the same period of the previous year.

With the monthly trend in extractions by end customers connected to the RTE network remaining negative, the rate of growth in these extractions over a sliding year fell from -10,1% at the end of July to -10,9% at the end of August 2009. Adjusted for the impact of 29/02/2008, this rate is -10,7%.



EXTREME values for consumption, exchanges – perimeter France*

		August		Last 12 months		Absolute **	
Gross national consumption	Maximum	1 187 GWh	Thursday 27	2 035 GWh	07/01/2009	2 035 GWh	07/01/2009
		56 657 MW	Thursday 27	92 400 MW	07/01/2009	92 400 MW	07/01/2009
	Minimum	903 GWh	Sunday 9	903 GWh	09/08/2009	856 GWh	06/08/2006
		31 456 MW	Sunday 9	31 456 MW	09/08/2009	29 816 MW	06/08/2006
Balance of physical exchanges ***	Maximum	146 GWh	Sunday 9	264 GWh	11/11/2008	298 GWh	08/05/2008
		8 298 MW	Wednesday 12	13 746 MW	11/11/2008	13 746 MW	11/11/2008
	Minimum	-9 GWh	Tuesday 25	-50 GWh	02/07/2009	-95 GWh	02/03/2006
		- 2 838 MW	Tuesday 25	- 5 109 MW	01/07/2009	- 6 690 MW	02/03/2006

* Excluding Corsica . ** The minimum values concern the last 30 years for the balance of physical exchanges, and the last 5 years for consumption.

*** A positive value indicates a net export balance, a negative value indicates a net import balance.

ELECTRICITY MARKET MECHANISMS

CONTRACTUAL CROSS-BORDER ELECTRICITY EXCHANGES

	EXPORTS			IMPORTS			CUMULATIVE TOTAL			EXPORT BALANCE *		
	August 2009 (GWh)	Trend / August 2008	Cumulative trend since 1st Jan	August 2009 (GWh)	Trend / August 2008	Cumulative trend since 1st Jan	August 2009 (GWh)	Trend / August 2008	Cumulative trend since 1st Jan	August 2009 (GWh)	Trend / August 2008	Cumulative trend since 1st Jan
Belgium	84	-91%	-72%	421	94%	n.s.**	504	-56%	-37%	-337	-148%	-113%
Germany	895	-15%	10%	1 416	60%	-12%	2 312	19%	-6%	-521	n.s.**	-24%
Switzerland	2 057	-8%	0%	822	63%	43%	2 879	5%	9%	1 234	-28%	-16%
Italy	1 029	-16%	1%	15	-38%	-67%	1 044	-17%	-4%	1 014	-16%	7%
Spain	428	-8%	-2%	280	71%	29%	708	12%	7%	148	-51%	-28%
Great Britain	672	-48%	-32%	231	n.s.**	215%	903	-31%	-20%	442	-66%	-46%
TOTAL	5 165	-28%	-16%	3 185	77%	+20%	8 350	-7%	-6%	1 980	-63%	-37%

* A negative value indicates a net import balance. ** Since the beginning of 2009, the volume of imports from Belgium totals 3 660 GWh, compared with 707 GWh in 2008 ; imports from Great Britain totalled 6 GWh in August 2008 ; the balance of exports to Germany was +165 GWh in August 2008.

BALANCING MECHANISM - BALANCE RESPONSIBLE ENTITIES

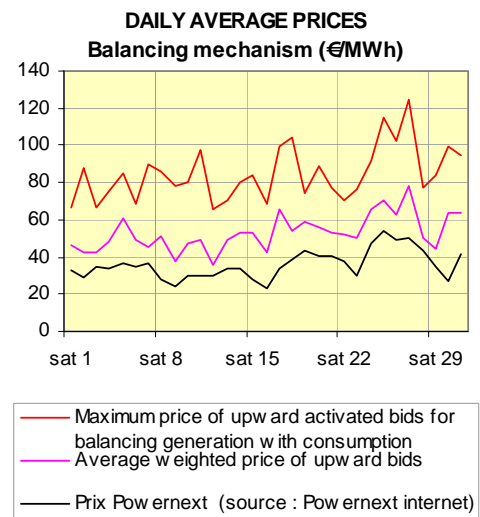
	August 2009	Deviation compared with August 2008	Trend compared with August 2008	Cumul. trend since 1st January
Balancing Mechanism				

Total energy activated upward	241 GWh	82 GWh	51%	42%
Total energy activated downward	359 GWh	38 GWh	-10%	1%
Number of actors	36	+1		

Exchanges between Balance Responsible entities* (BR) via block exchange notifications (NEB)

Energy exchanged between BR via NEB	20 530 GWh	-1 605 GWh	-7%	-6%
Number of BR	149	+11		

* Balance Responsible Entity : any legal entity who is committed to RTE, under a Balance Responsible contract, to settling the costs of the imbalances calculated a posteriori, on behalf of one or more network users attached to its scope. These imbalances result from the difference between all of the supplies and consumption for which it is responsible.



TRANSMISSION NETWORK DEVELOPMENT

In August, the following installations entered service :

- the new supply to the 63 kV Anna substation, with a double connection from the Lutterbach substation near Mulhouse in the Haut-Rhin department, as well as the 63 kV Anna-Ile Napoléon, Anna-Lutterbach and Ile Napoléon-Lutterbach lines following replacement of conductors ;
- the 63 kV Cusset-Vénissieux line near Lyons in the Rhône department, after work to install part of the line underground.