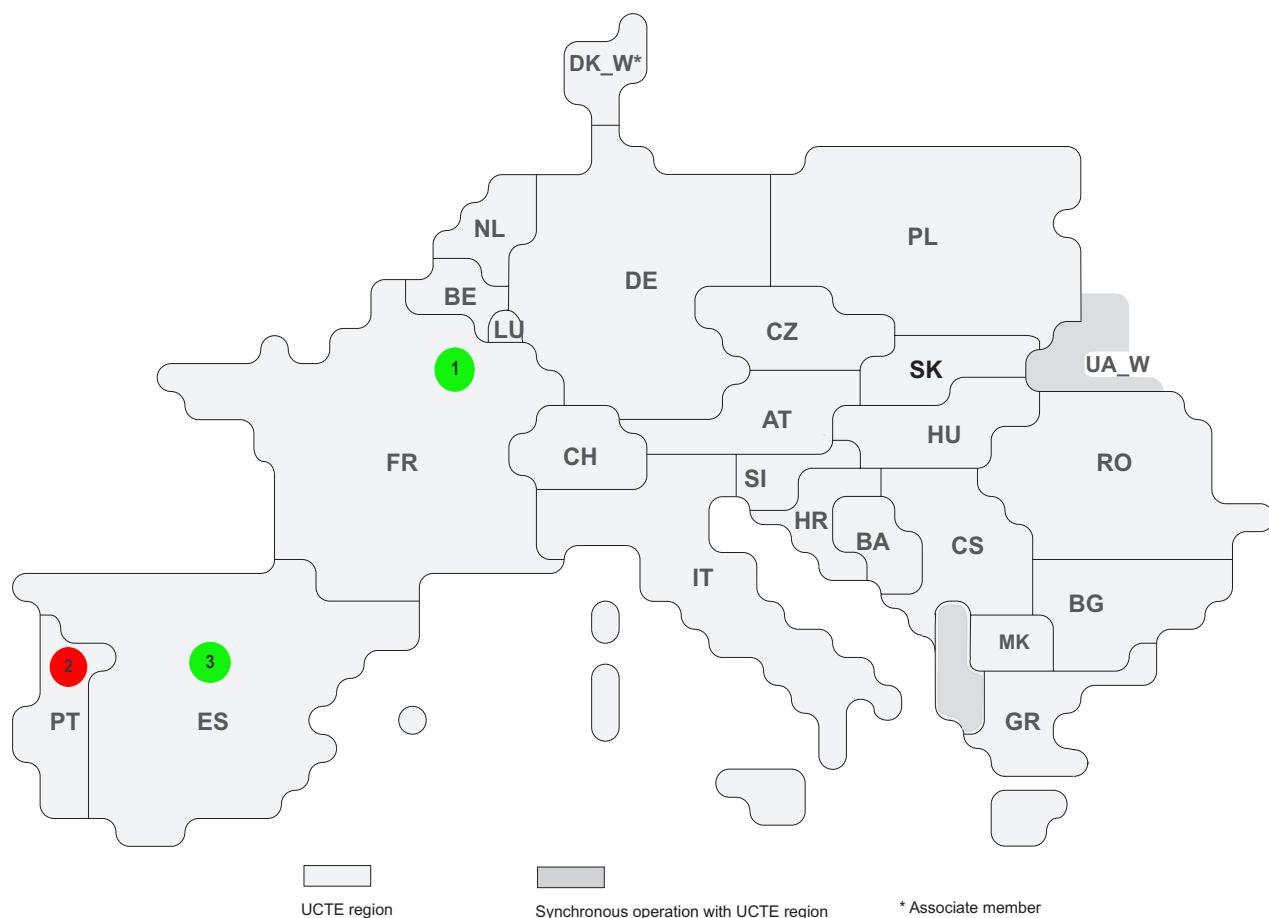


## Reasons:

R4	Overload (also calculated brake)	R8	Very exceptional conditions (weather, natural disaster, ...)
R5	False operation	R9	Other reasons
R6	Failure in protection device or other element	R10	Unknown reasons
R7	Outside impacts (animals, trees, fire, avalanches,...)		

Nbr	Country	Substation	Reason	Energy not supplied [ MWh ]	Total loss of power [ MW ]	Restoration time [ min ]	Equivalent time of interruption <sup>1</sup>
1	CH	Banlieue Ouest	R4,R6,R8	300	600	11	2,60
2	CH	Lachmatt	R6	15	40	22	0,13
3	CZ	Nosovice	R8	10	0	3	0,09
4	RO	Hasdat	R6	6	5	7	0,06

<sup>1</sup> ( year [in min] \* energy not supply ) / consumption last 12 months

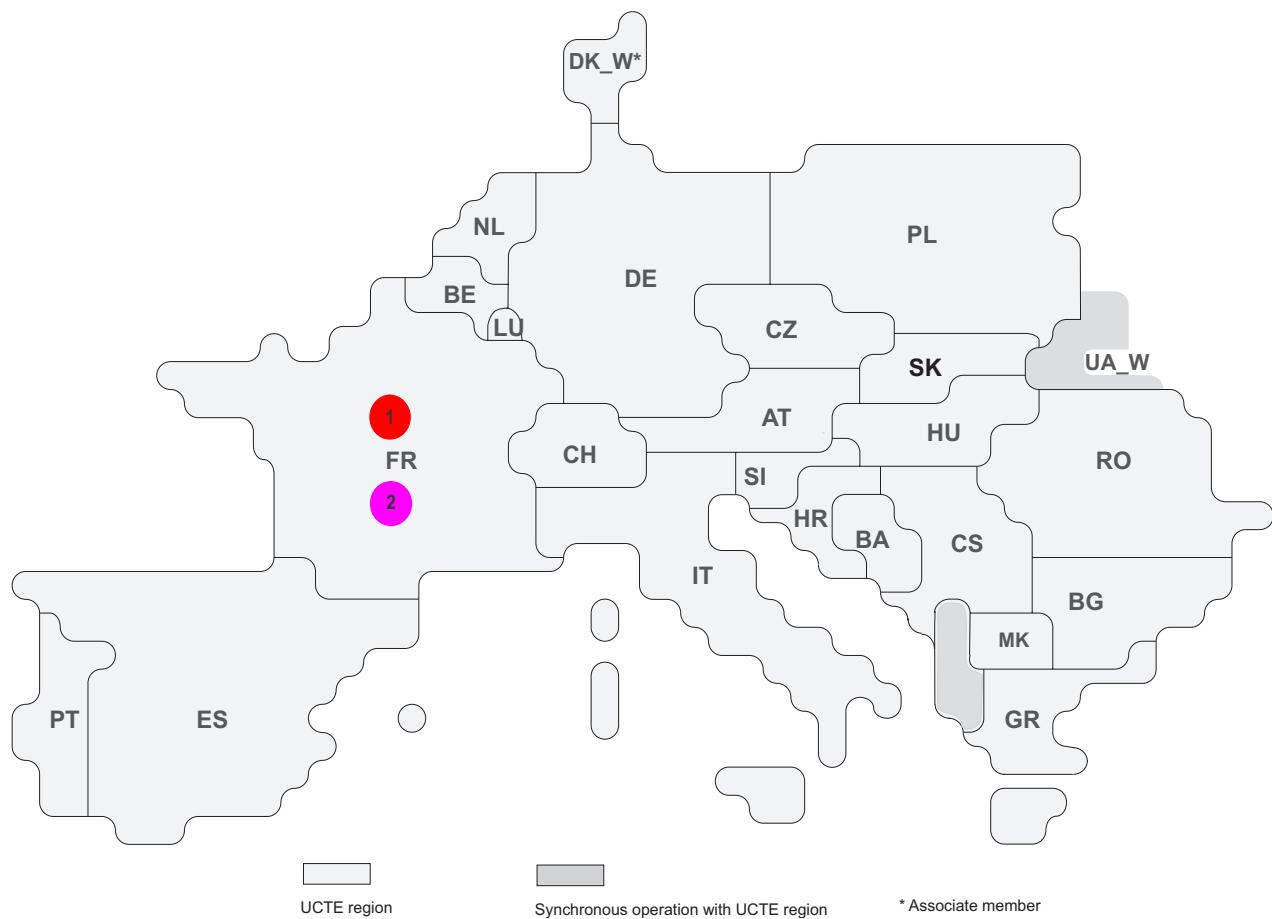


## Reasons:

R4	Overload (also calculated brake)	R8	Very exceptional conditions (weather, natural disaster, ...)
R5	False operation	R9	Other reasons
R6	Failure in protection device or other element	R10	Unknown reasons
R7	Outside impacts (animals, trees, fire, avalanches,...)		

Nbr	Country	Substation	Reason	Energy not supplied [ MWh ]	Total loss of power [ MW ]	Restoration time [ min ]	Equivalent time of interruption <sup>1</sup>
1	FR	Grande Synthe	R8	71	54	81	0,08
2	PT	Valdigem	R6	32	0	15	0,35
3	ES	Fuencarral	R7	28	0	60	0,06

<sup>1</sup> ( year [in min] \* energy not supply ) / consumption last 12 months

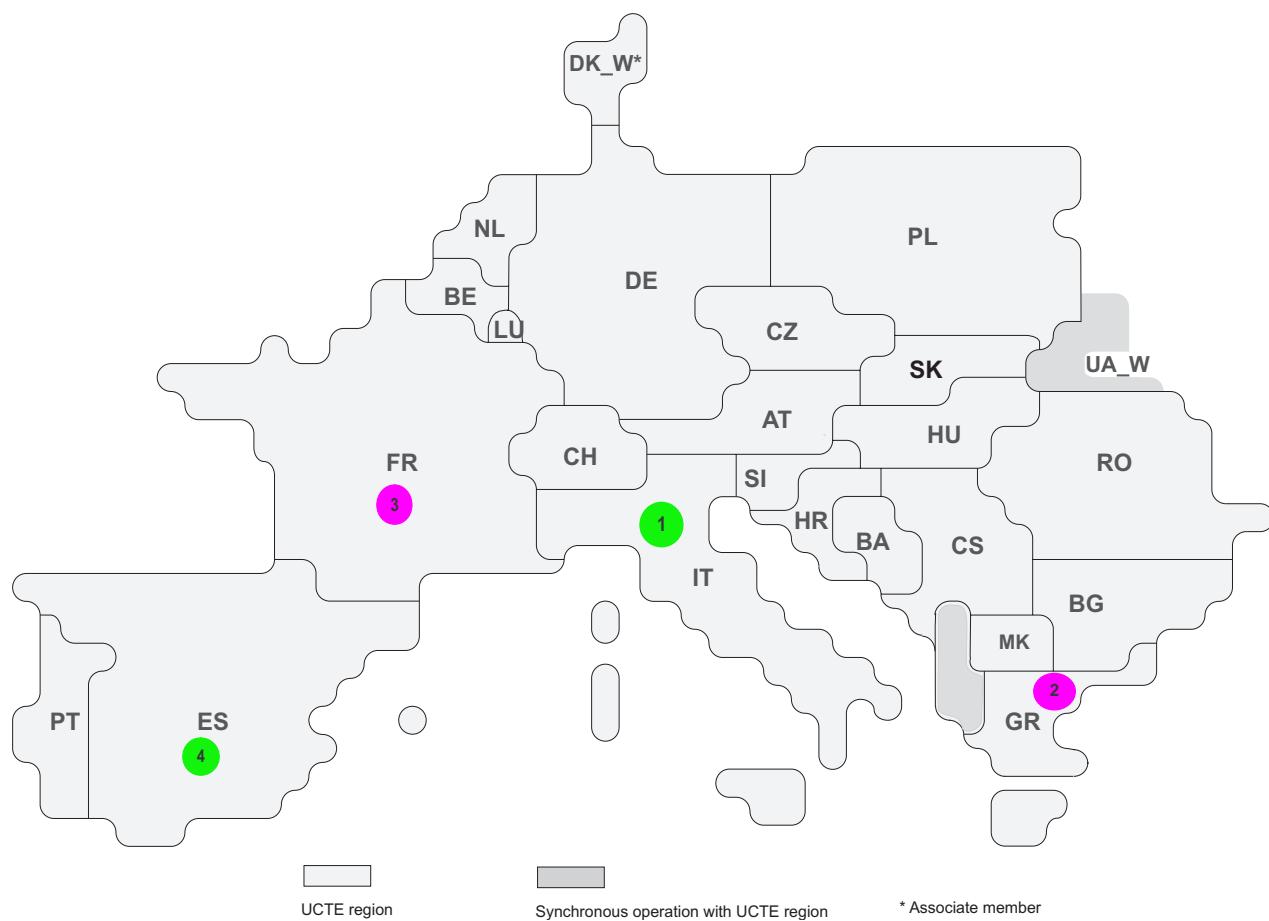


## Reasons:

R4	Overload (also calculated brake)	R8	Very exceptional conditions (weather, natural disaster, ...)
R5	False operation	R9	Other reasons
R6	Failure in protection device or other element	R10	Unknown reasons
R7	Outside impacts (animals, trees, fire, avalanches,...)		

Nbr	Country	Substation	Reason	Energy not supplied [ MWh ]	Total loss of power [ MW ]	Restoration time [ min ]	Equivalent time of interruption <sup>1</sup>
1	FR	Genissiat Poste	R6	16	36	30	0,02
2	FR	Colombe	R9	2	26	4	0,00

<sup>1</sup> ( year [in min] \* energy not supply ) / consumption last 12 months

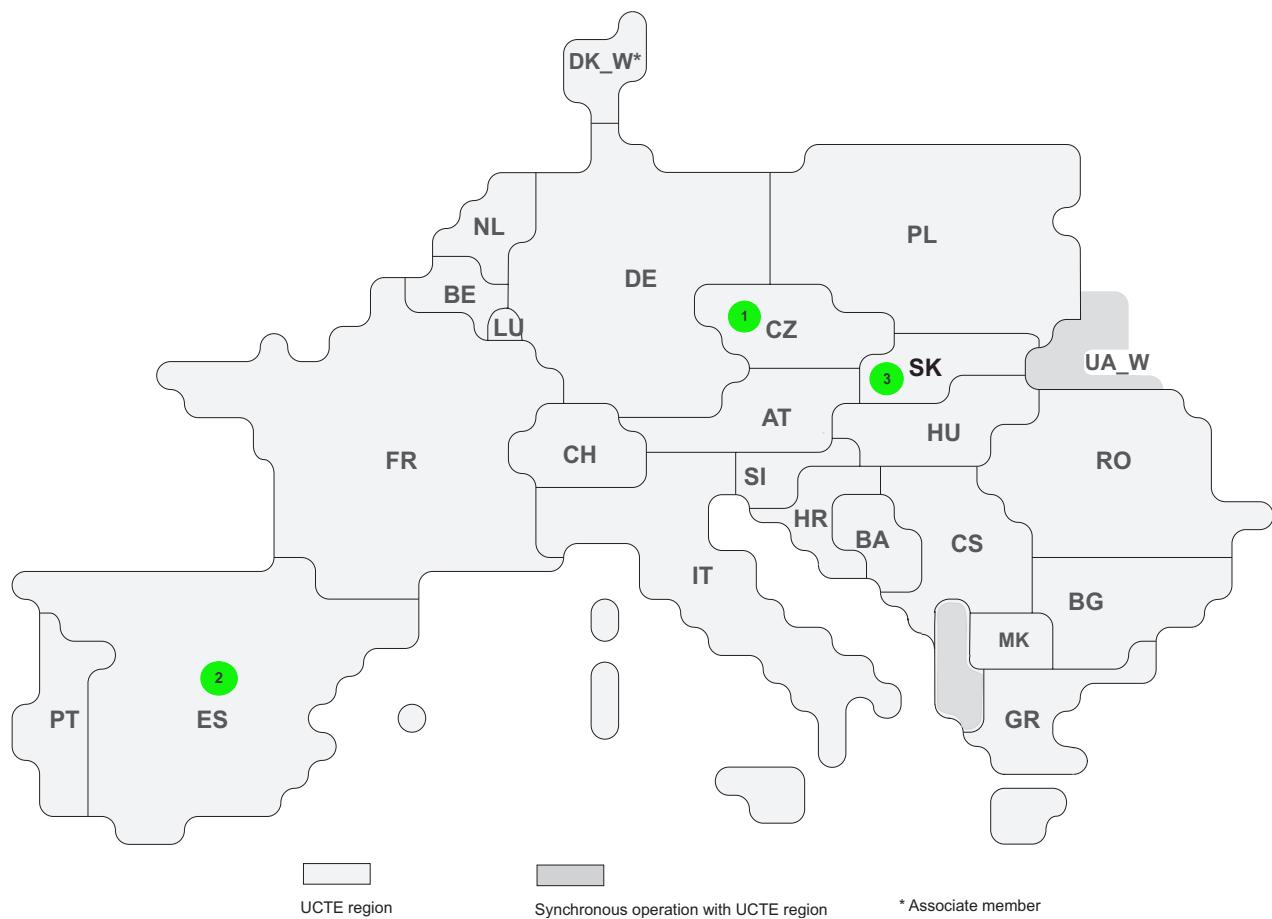


## Reasons:

R4	Overload (also calculated brake)	R8	Very exceptional conditions (weather, natural disaster, ...)
R5	False operation	R9	Other reasons
R6	Failure in protection device or other element	R10	Unknown reasons
R7	Outside impacts (animals, trees, fire, avalanches,...)		

Nbr	Country	Substation	Reason	Energy not supplied [ MWh ]	Total loss of power [ MW ]	Restoration time [ min ]	Equivalent time of interruption <sup>1</sup>
1	IT	Roma Nord	R8	50	250	52	0,08
2	GR	Pallini	R10	38	450	5	0,39
3	FR	Chevilly	R9	26	60	125	0,03
4	ES	Compostilla	R7	2	0	9	0,03

<sup>1</sup> ( year [in min] \* energy not supply ) / consumption last 12 months

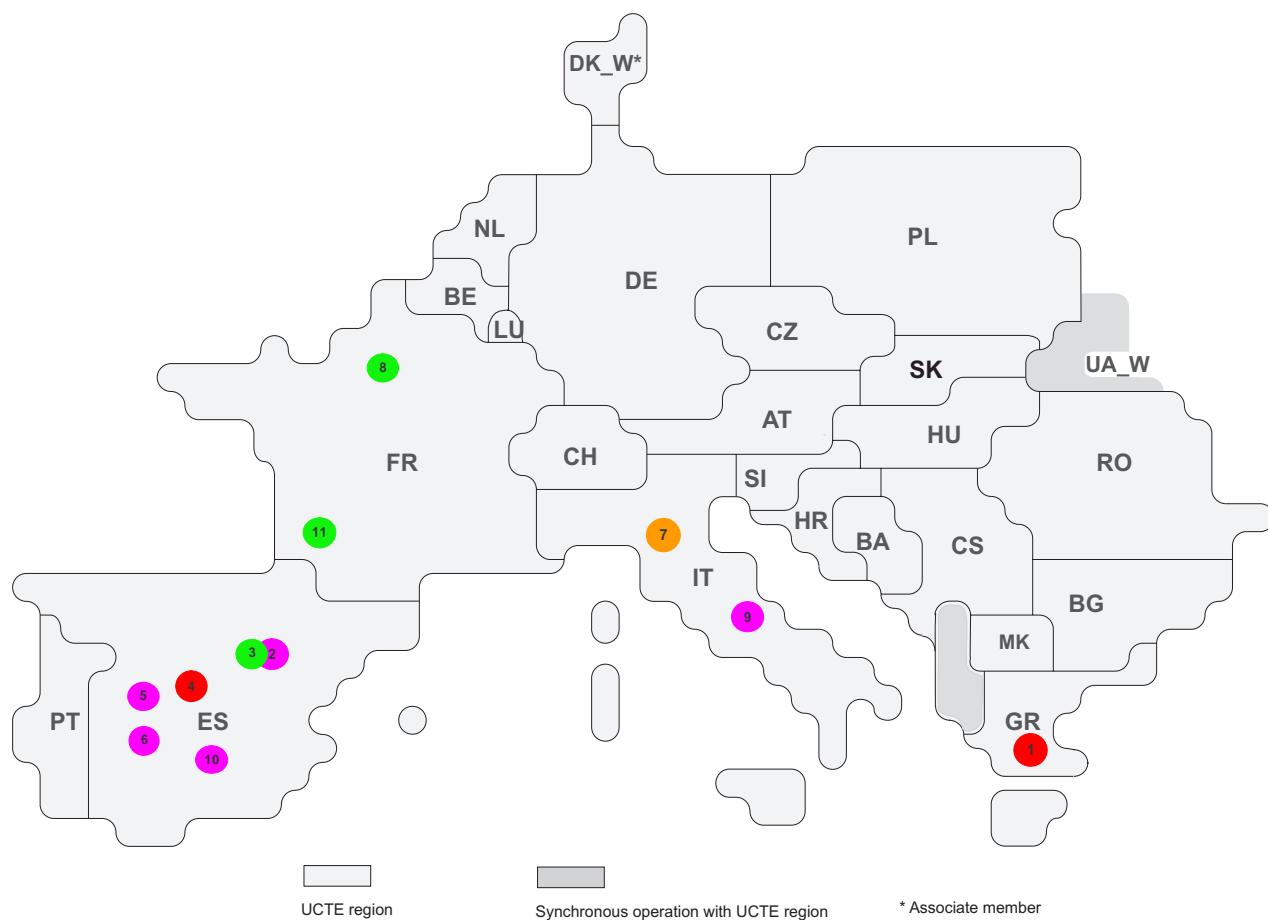


## Reasons:

R4	Overload (also calculated brake)	R8	Very exceptional conditions (weather, natural disaster, ...)
R5	False operation	R9	Other reasons
R6	Failure in protection device or other element	R10	Unknown reasons
R7	Outside impacts (animals, trees, fire, avalanches,...)		

Nbr	Country	Substation	Reason	Energy not supplied [ MWh ]	Total loss of power [ MW ]	Restoration time [ min ]	Equivalent time of interruption <sup>1</sup>
1	CZ	Opocinek	R8	18	0	42	0,15
2	ES	Cacicedo	R7	8	0	6	0,02
3	SK	Levice	R8	4	70	3	0,08

<sup>1</sup> ( year [in min] \* energy not supply ) / consumption last 12 months

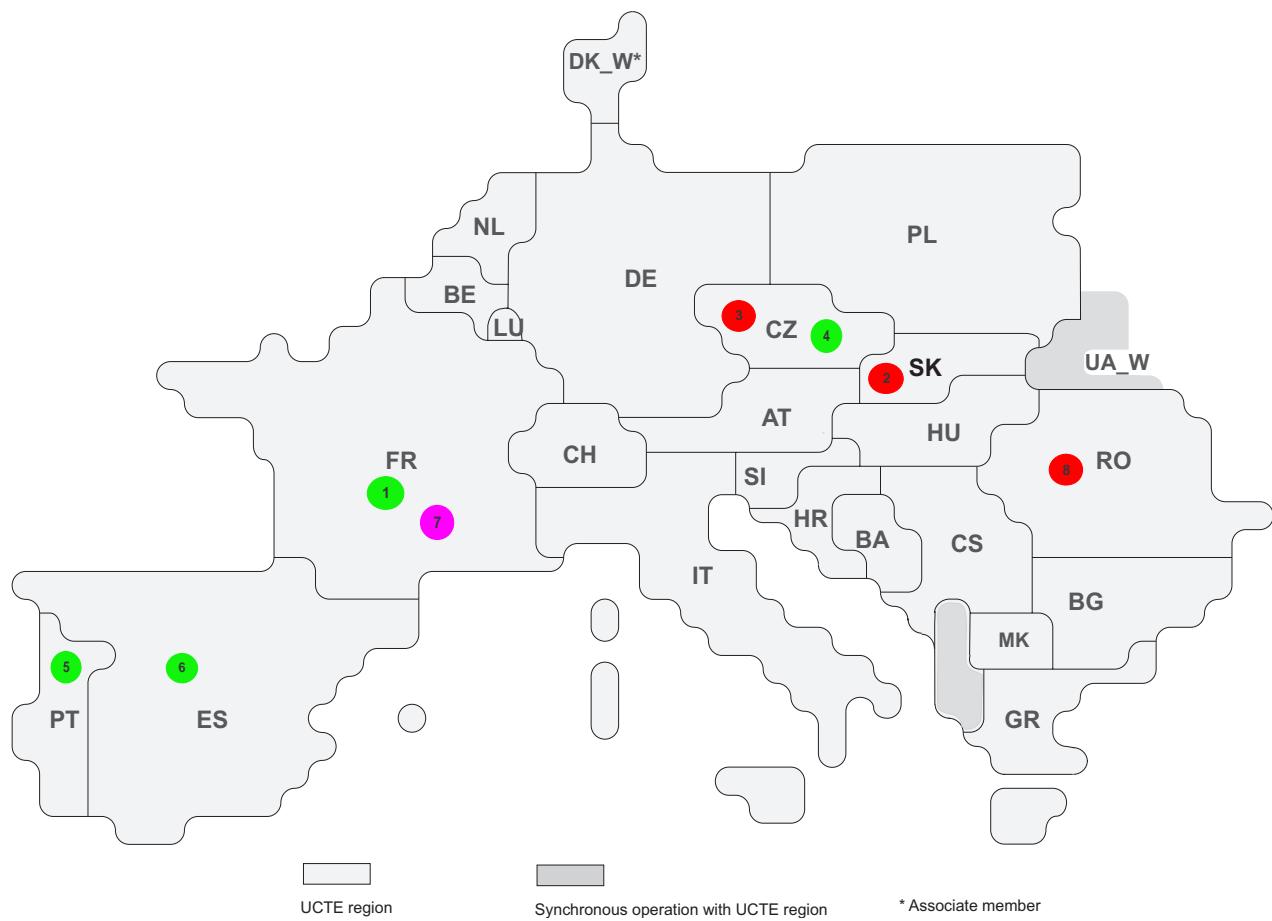


## Reasons:

**R4** Overload (also calculated brake)**R5** False operation**R6** Failure in protection device or other element**R7** Outside impacts (animals, trees, fire, avalanches,...)**R8** Very exceptional conditions (weather, natural disaster, ...)**R9** Other reasons**R10** Unknown reasons

Nbr	Country	Substation	Reason	Energy not supplied [ MWh ]	Total loss of power [ MW ]	Restoration time [ min ]	Equivalent time of interruption <sup>1</sup>
1	GR	Agios Dhmhtrios	R6	8250	550	900	83,16
2	ES	Penagos	R9	250	150	200	0,52
3	ES	Penagos	R7	124	75	100	0,26
4	ES	Dos Hermanas	R6	88	271	28	0,18
5	ES	Alcores	R10	20	0	8	0,08
6	ES	Villaverde	R9	19	135	53	0,04
7	IT	Brindisi	R4	20	69	29	0,03
8	FR	Chesnay	R8	19	12	247	0,02
9	IT	Salerno	R9	12	57	13	0,02
10	ES	Besos	R10	5	0	7	0,01
11	FR	Hospitalet	R8	5	5	56	0,01

<sup>1</sup> ( year [in min] \* energy not supply ) / consumption last 12 months

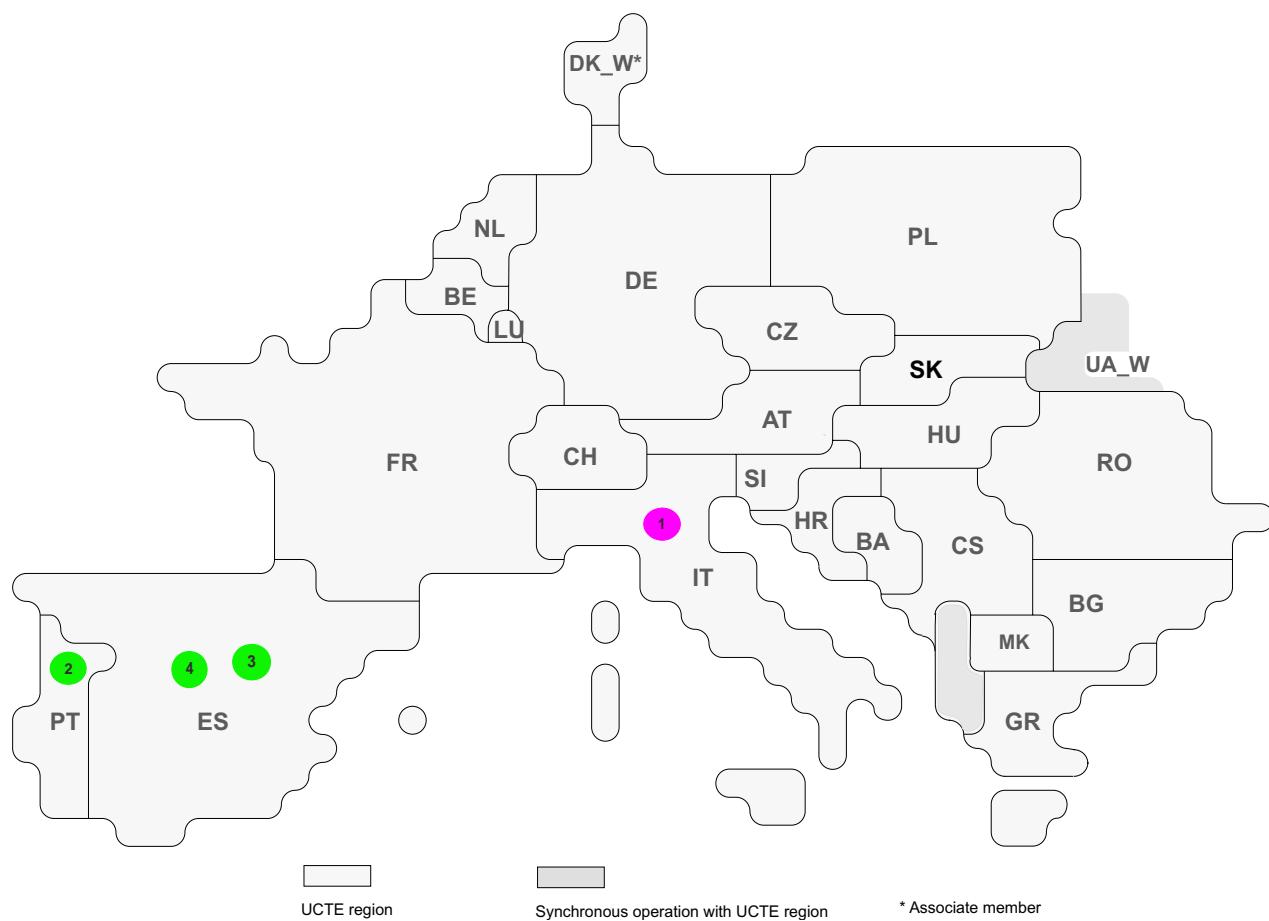


## Reasons:

R4	Overload (also calculated brake)	R8	Very exceptional conditions (weather, natural disaster, ...)
R5	False operation	R9	Other reasons
R6	Failure in protection device or other element	R10	Unknown reasons
R7	Outside impacts (animals, trees, fire, avalanches,...)		

Nbr	Country	Substation	Reason	Energy not supplied [ MWh ]	Total loss of power [ MW ]	Restoration time [ min ]	Equivalent time of interruption <sup>1</sup>
1	FR	Villarodin	R8	36	8	275	0,04
2	SK	Krizovany	R6	33	160	47	0,66
3	CZ	Liskovec	R5	11	71	5	0,09
4	CZ	Vitkov	R8	17	0	10	0,07
5	PT	Mogofores	R7	8	0	7	0,07
6	ES	Compostilla	R7	3	0	16	0,01
7	FR	Neuilly Sur Marne	R9	2	27	4	0,00
8	RO	Cernavoda	R6	0	706	3126	0,00

<sup>1</sup> ( year [in min] \* energy not supply ) / consumption last 12 months



## Reasons:

R4 Overload (also calculated brake)

R5 False operation

R6 Failure in protection device or other element

R7 Outside impacts (animals, trees, fire, avalanches,...)

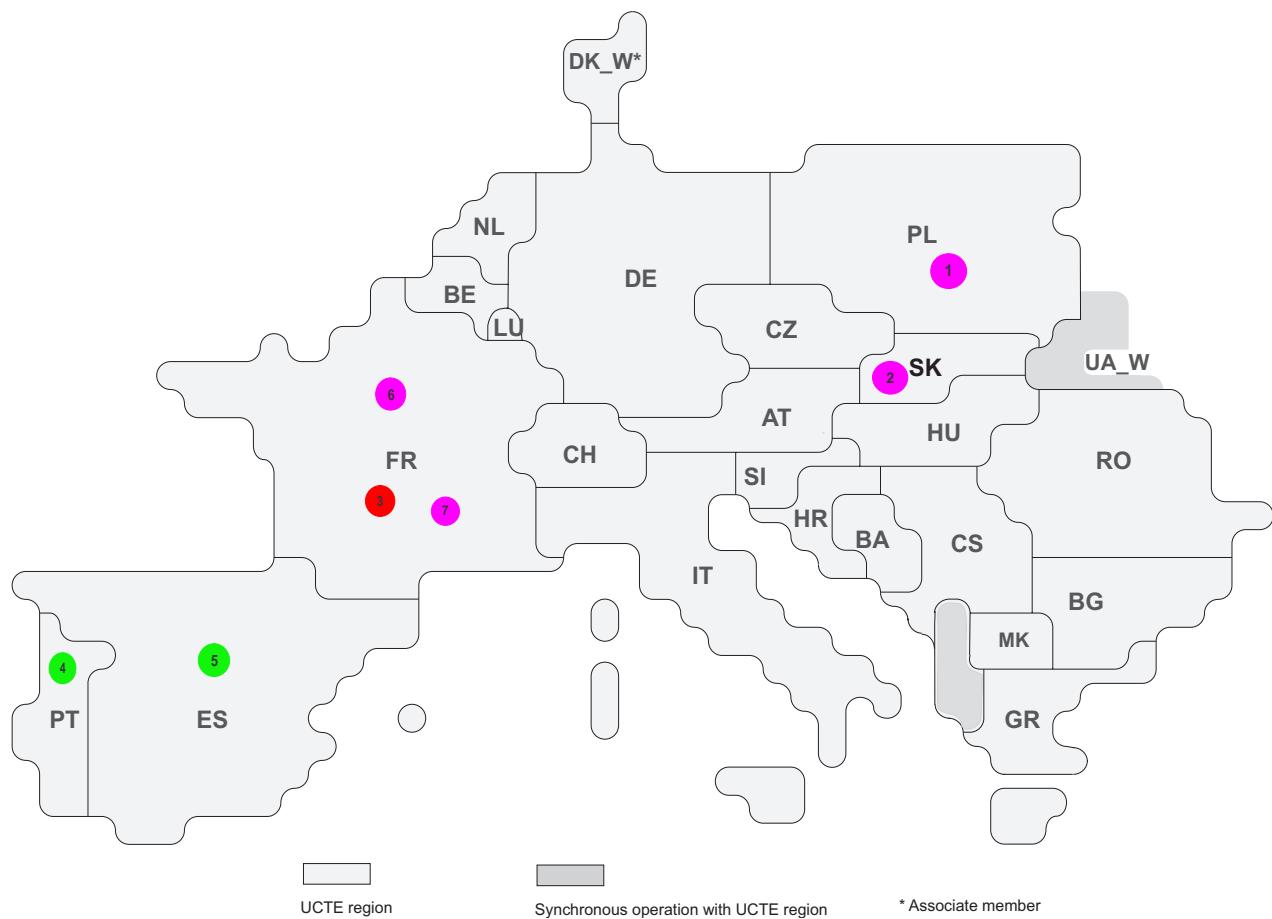
R8 Very exceptional conditions (weather, natural disaster, ...)

R9 Other reasons

R10 Unknown reasons

Nbr	Country	Substation	Reason	Energy not supplied [ MWh ]	Total loss of power [ MW ]	Restoration time [ min ]	Equivalent time of interruption <sup>1</sup>
1	IT	Novi Ligure	R9	20	6	197	0,03
2	PT	Mogofores	R7	9	0	9	0,10
3	ES	Casa Campo	R7	5	13	24	0,008
4	ES	Mazarredo	R7	4	10	24	0,006

<sup>1</sup> ( year [in min] \* energy not supply ) / consumption last 12 months

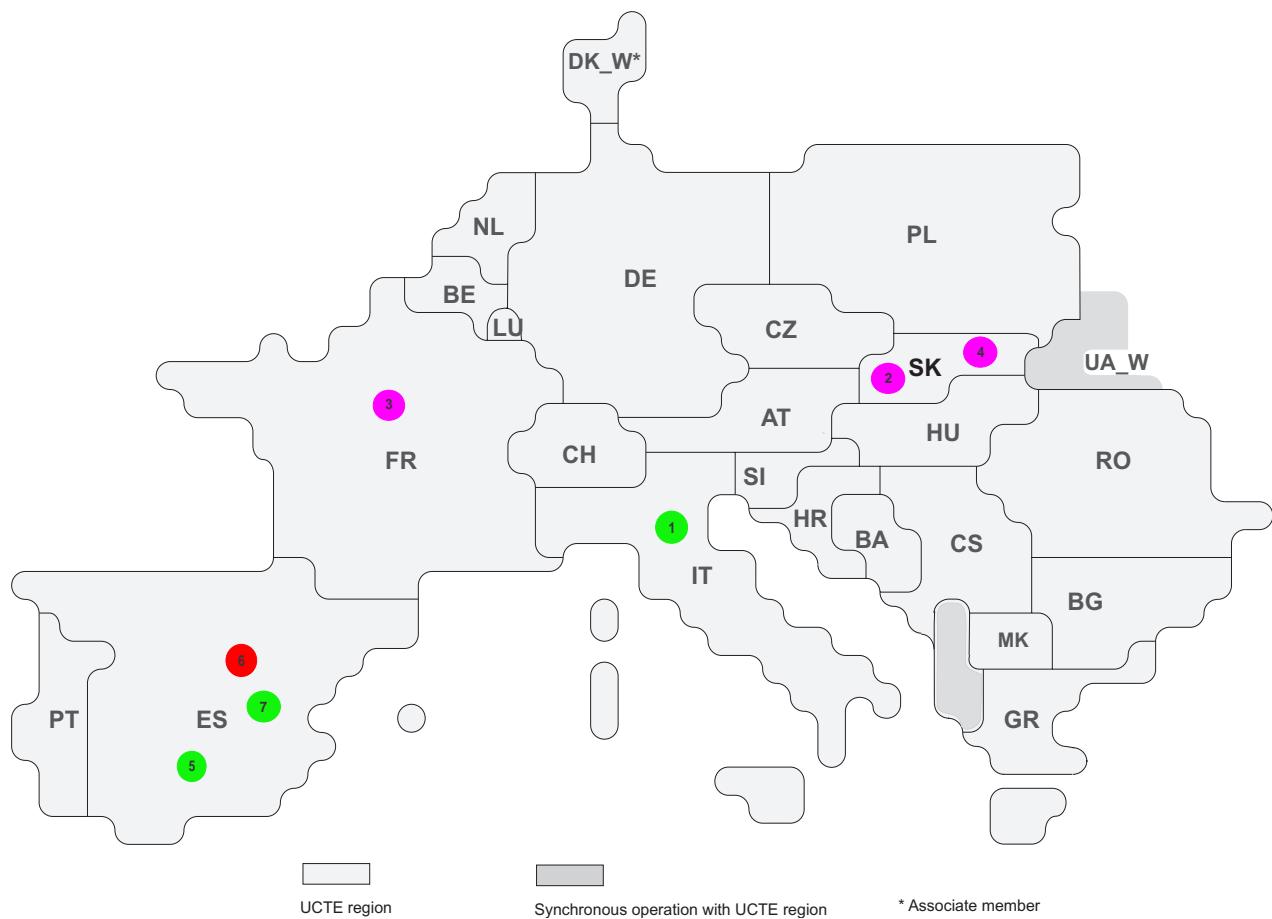


## Reasons:

R4	Overload (also calculated brake)	R8	Very exceptional conditions (weather, natural disaster, ...)
R5	False operation	R9	Other reasons
R6	Failure in protection device or other element	R10	Unknown reasons
R7	Outside impacts (animals, trees, fire, avalanches,...)		

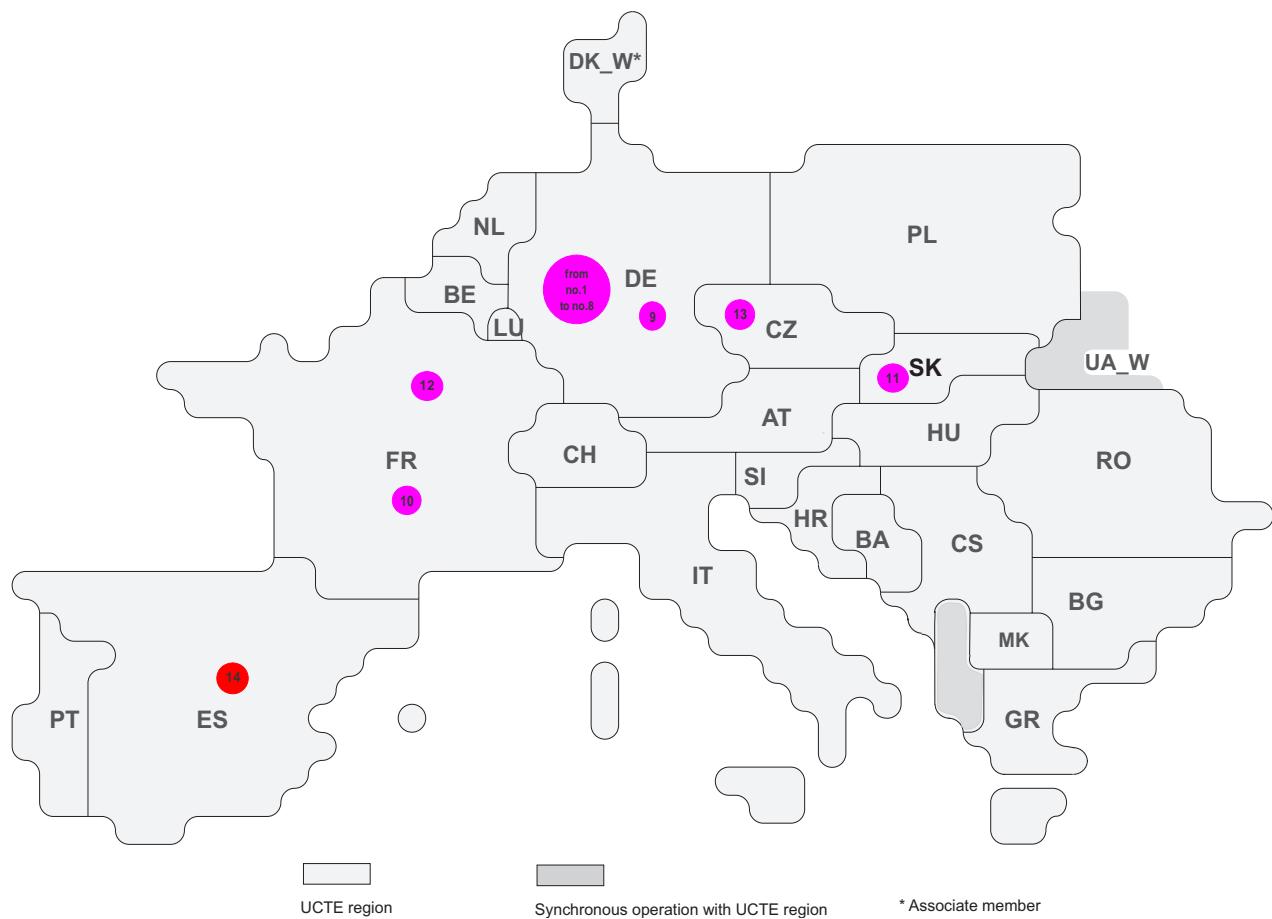
Nbr	Country	Substation	Reason	Energy not supplied [ MWh ]	Total loss of power [ MW ]	Restoration time [ min ]	Equivalent time of interruption <sup>1</sup>
1	PL	Patnow	R10	3490	600	349	14,14
2	SK	Medzibrod	R9	10	95	6	0,20
3	FR	Gien	R5	13	20	40	0,01
4	PT	Ferro	R7	4	0	8	0,06
5	ES	Casares	R8	6	76	5	0,02
6	FR	Roubaix Nord	R9	11	72	18	0,01
7	FR	Cretaine	R9	10	45	13	0,01

<sup>1</sup> ( year [in min] \* energy not supply ) / consumption last 12 months

**Reasons:****R4** Overload (also calculated brake)**R5** False operation**R6** Failure in protection device or other element**R7** Outside impacts (animals, trees, fire, avalanches,...)**R8** Very exceptional conditions (weather, natural disaster, ...)**R9** Other reasons**R10** Unknown reasons

Nbr	Country	Substation	Reason	Energy not supplied [ MWh ]	Total loss of power [ MW ]	Restoration time [ min ]	Equivalent time of interruption <sup>1</sup>
1	IT	Misterbianco	R8	43	221	21	0,07
2	SK	H. Zdana	R10	21	257	5	0,42
3	FR	Mouche	R9	9	31	17	0,01
4	SK	S.N.Ves	R10	3	148	1	0,06
5	ES	Aljarafe	R8	27	87	18	0,07
6	ES	Sabón	R6	24	9	25	0,06
7	ES	Foix	R8	10	60	54	0,02

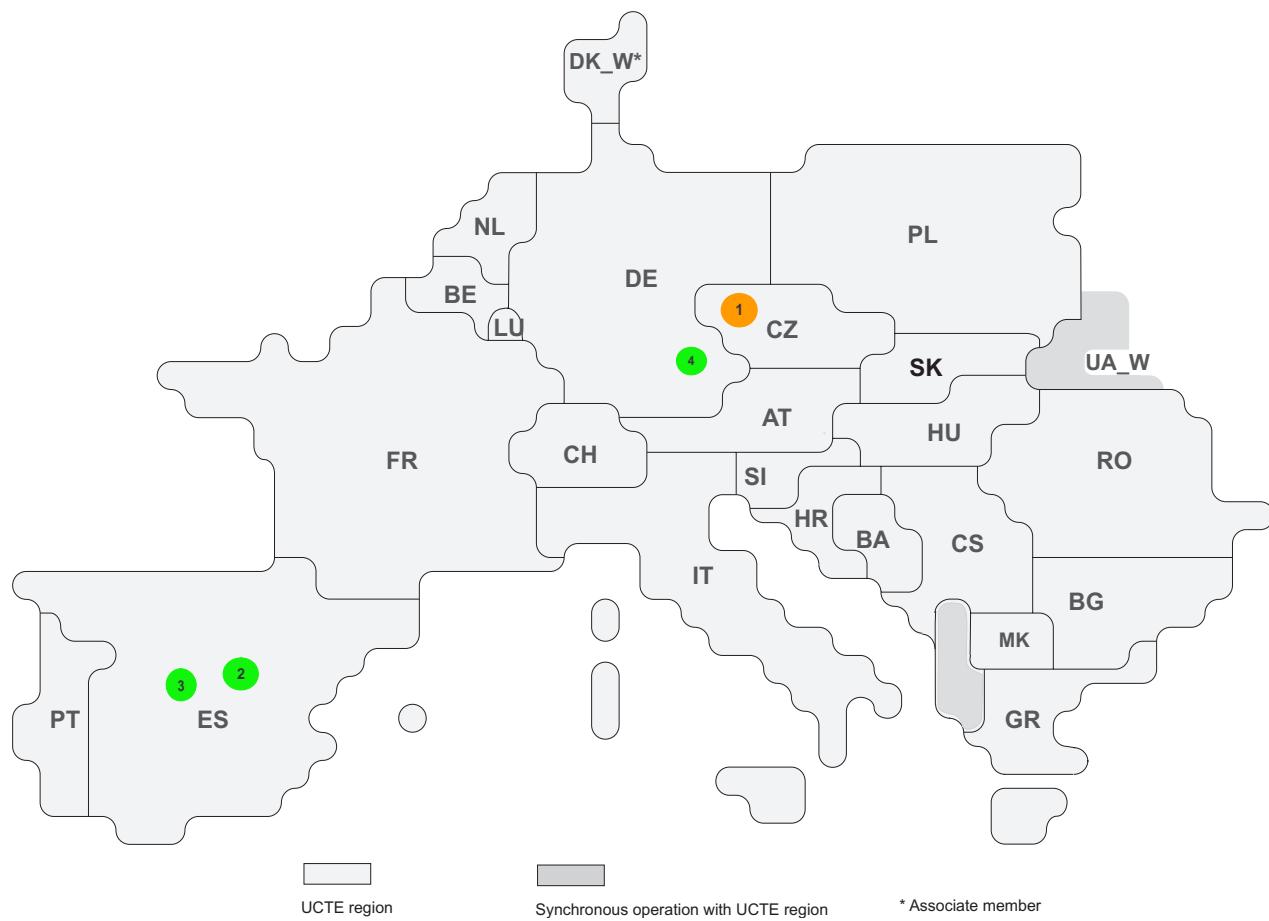
<sup>1</sup> ( year [in min] \* energy not supply ) / consumption last 12 months

**Reasons:**

R4	Overload (also calculated brake)	R8	Very exceptional conditions (weather, natural disaster, ...)
R5	False operation	R9	Other reasons
R6	Failure in protection device or other element	R10	Unknown reasons
R7	Outside impacts (animals, trees, fire, avalanches,...)		

No	Country	Substation	Reason	Energy not supplied [ MWh ]	Total loss of power [ MW ]	Restoration time [ min ]	Equivalent time of interruption <sup>1</sup>
1	DE	Ibbenbüren	R9	9505	705	809	8,98
2	DE	Walsum	R9	702	1080	117	0,66
3	DE	Hesseln	R9	18	220	10	0,02
4	DE	Luestringen	R9	42	500	30	0,04
5	DE	Voerde	R9	216	1290	20	0,20
6	DE	Wehrendorf	R9	25	310	15	0,02
7	DE	Westerkappeln	R9	26	300	10	0,02
8	DE	St.Huelle	R9	12	140	0	0,01
9	DE	Remptendorf	R9	5564	1435	2676	5,26
10	FR	Cusset Poste	R9	155	87	107	0,17
11	SK	Krizovany	R10	20	150	8	0,40
12	FR	Vénissieux	R9	36	30	71	0,04
13	CZ	Milin	R9	10	0	8	0,09
14	ES	Pinar del Rey	R5	5	4	85	0,01

<sup>1</sup> ( year [in min] \* energy not supply ) / consumption last 12 months

**Reasons:****R4** Overload (also calculated brake)**R5** False operation**R6** Failure in protection device or other element**R7** Outside impacts (animals, trees, fire, avalanches,...)**R8** Very exceptional conditions (weather, natural disaster, ...)**R9** Other reasons**R10** Unknown reasons

No	Country	Substation	Reason	Energy not supplied [ MWh ]	Total loss of power [ MW ]	Restoration time [ min ]	Equivalent time of interruption <sup>1</sup>
1	CZ	Chrast	R4	5	60	5	0,04
2	ES	Mazarredo	R7	25	36	60	0,01
3	ES	Mequinenza	R8	6	13	30	0,01
4	DE	KHT	R8	0	250	44	0,00

<sup>1</sup> ( year [in min] \* energy not supply ) / consumption last 12 months

Country	Conventional thermal units						Nuclear thermal units		
	Number	MW	Number	MW	Number	MW	Number	MW	
AT <sup>1</sup>	57	2941	9	2796	0	0	66	5737	0
BA	9	512	6	1445	0	0	15	1957	0
BE <sup>2</sup>	72	3415	11	3366	3	1380	86	8161	7
BG	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	5802
CH	17	282	0	0	0	0	17	282	n.a.
CS	14	1104	15	4056	2	1240	31	6400	5
CZ	169	9590	0	0	1	460	170	10050	0
DE <sup>4</sup>	403	23572	66	20178	47	27749	516	71499	18
ES	563	16023	55	18880	15	8899	633	43802	9
FR	268	7037	24	5908	16	9640	308	22585	59
GR	22	2477	18	5124	0	0	40	7601	0
HR <sup>3</sup>	24	1137	2	508	0	0	26	1645	0
HU	54	2552	14	2918	0	0	68	5470	4
IT	1650	18983	75	24482	30	18885	1755	62350	0
LU	0	0	1	385	0	0	1	385	0
MK <sup>3</sup>	2	301	3	606	0	0	5	907	0
NL	95	3906	19	5783	14	8177	128	17866	1
PL	255	12767	63	15409	2	1008	320	29184	0
PT	31	1598	16	4888	0	0	47	6486	0
RO	100	6662	14	4065	0	0	114	10727	1
SI <sup>3</sup>	2	267	1	312	1	676	4	1255	655
SK	23	2055	1	214	0	0	24	2269	1
<b>UCTE</b>	<b>3830</b>	<b>117181</b>	<b>413</b>	<b>121323</b>	<b>131</b>	<b>78114</b>	<b>4374</b>	<b>316618</b>	<b>117</b>
DK_W	27	822	8	2776	1	626	36	4224	0
UA_W	16	2500	0	0	0	0	16	2500	0

<sup>1</sup> Values on conventional thermal units as of 31 December 2003<sup>2</sup> The conventional thermal units include the other renewable units.<sup>3</sup> Values on conventional thermal units as of 31 December 2004<sup>4</sup> Values on conventional thermal units as of 31 December 2000

Country	Commissioning				Decommissioning			
	Thermal conventional		Thermal nuclear		Thermal conventional		Thermal nuclear	
	Number	MW	Number	MW	Number	MW	Number	MW
AT	0	0	0	0	0	0	0	0
BA	0	0	0	0	0	0	0	0
BE <sup>1</sup>	2	408	0	0	0	0	0	0
BG	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
CH	0	0	0	0	0	0	0	0
CS	0	0	0	0	0	0	0	0
CZ	0	0	0	0	0	0	0	0
DE	1	500	0	0	1	170	0	0
ES	64	5418	0	0	2	427	1	340
FR	0	0	0	0	8	1758	0	0
GR	1	389	0	0	0	0	0	0
HR	0	0	0	0	0	0	0	0
HU	2	29	0	0	0	0	0	0
IT	41	4071	0	0	93	472	0	0
LU	0	0	0	0	0	0	0	0
MK	0	0	0	0	0	0	0	0
NL	0	0	0	0	0	0	0	0
PL	1	449	0	0	3	96	0	0
PT	3	489	0	0	1	47	0	0
RO	0	0	0	0	0	0	0	0
SI	0	0	0	0	0	0	0	0
SK	0	0	0	0	1	13	0	0
<b>UCTE</b>	<b>115</b>	<b>11753</b>	<b>0</b>	<b>0</b>	<b>109</b>	<b>2983</b>	<b>1</b>	<b>340</b>
DK_W	1	25	0	0	0	0	0	0
UA_W	0	0	0	0	0	0	0	0

<sup>1</sup> The conventional thermal units include the other renewable units.

## Inventory of hydro power units

Country	Number	MW	Number	MW	Number	MW	Number	MW	Total	
									1 MW ≤ x < 10 MW	10 MW ≤ x < 50 MW
AT <sup>1</sup>	208	650	101	2526	20	1492	26	6698	355	11366
BA	2	10	16	335	12	774	7	945	37	2064
BE	28	101	0	0	0	0	7	1308	35	1409
BG	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
CH	180	642	101	2482	39	2655	36	7442	356	13221
CS	11	30	37	870	8	583	11	2014	67	3497
CZ	53	163	8	178	0	0	5	1711	66	2052
DE <sup>3</sup>	234	898	78	1648	14	1026	15	4841	341	8413
ES	474	1602	132	3002	42	2891	38	10969	686	18464
FR	500	1617	178	4330	41	3025	58	16002	777	24974
GR	21	79	3	63	2	120	11	2846	37	3108
HR <sup>2</sup>	22	69	21	576	6	453	8	978	57	2076
HU	10	46	0	0	0	0	0	0	10	46
IT	605	1986	229	5376	29	1960	42	11601	905	20923
LU	3	20	1	11	0	0	1	1096	5	1127
MK <sup>2</sup>	22	36	3	73	3	265	1	150	29	524
NL	0	0	3	35	0	0	0	0	3	35
PL	62	177	4	79	3	224	5	1672	74	2152
PT	90	416	37	882	33	2204	8	1395	168	4897
RO	147	851	107	2352	13	887	11	2004	278	6094
SI <sup>2</sup>	1	8	11	288	5	319	2	230	19	845
SK	29	176	36	700	10	820	6	734	81	2430
<b>UCTE</b>	<b>2702</b>	<b>9577</b>	<b>1106</b>	<b>25306</b>	<b>280</b>	<b>19698</b>	<b>298</b>	<b>74636</b>	<b>4386</b>	<b>129717</b>
<b>DK_W</b>	<b>3</b>	<b>7</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>7</b>
<b>UA_W</b>	<b>3</b>	<b>27</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>27</b>

<sup>1</sup> Values as of 31 December 2003  
<sup>2</sup> Values as of 31 December 2004  
<sup>3</sup> Values as of 31 December 2000

Country	Commissioning		Decommissioning	
	Number	MW	Number	MW
AT	0	0	0	0
BA	0	0	0	0
BE	0	0	0	0
BG	n.a.	n.a.	n.a	n.a.
CH	1	2	0	0
CS	0	0	0	0
CZ	0	0	0	0
DE	0	0	0	0
ES	0	0	0	0
FR	0	0	0	0
GR	0	0	0	0
HR	0	0	0	0
HU	0	0	0	0
IT	14	338	3	74,5
LU	0	0	0	0
MK	0	0	0	0
NL	0	0	0	0
PL	1	2	0	0
PT	3	197	0	0
RO	2	12	0	0
SI	0	0	0	0
SK	0	0	0	0
<b>UCTE</b>	<b>21</b>	<b>551</b>	<b>3</b>	<b>74,5</b>
DK_W	0	0	0	0
UA_W	0	0	0	0