

Aristotle University of Thessaloniki

Εκδήλωση ΣΒΕ - ΙΕΝΕ June 13, 2025

The Energy Challenge: Cost and Industry Competitiveness

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Current situation & targets for 2030

* **RES connection terms**:

- ✤ already connected RES: about 15 GW
- * connection terms to another 15 GW RES
- ☆ farmers + industry -> connection terms to another 2 GW RES
- ✤ it is expected another 1-2 GW RES to get connection terms in the next 5 years
- * reserved electrical space for 2 GW offshore wind parks
- it is expected to insert another 2 GW PV stations until December 2025 and another 3 GW PV stations in year 2026
- ✤ no connection of any new storage facility until October 2025, with least storage capacity until June 2026

* **BESS**: NECP target = **4.35 GW until 2030**

- * 1.2 GW connection terms through the RRF auctions
- * another 4.7 GW of BESS (either stand-alone or behind-the-meter) through a new mechanism
- ✤ 150 MW Heron plus about 2 GW of BESS applications at the common POC
- * Hydro-pumping stations: NECP target = 2.1 GW until 2030
 - ✤ 700 MW already operating
 - funding secured for another 680 MW (under construction)
 - funding possible for another 100 MW (to be constructed)
 - $\star\,$ 550 MW of new hydro-pumping stations developed by PPC in the old lignite units' mines



Scheduled RES curtailments – forecasts for 2024 & 2025

		Integra	ted Sch	edulina	Proces	ss : ISP2	2025-0	05-01 2	025043	023123	9							Πέυ	ιπτη, 0 [.]	1 Μαΐοι	J. 2025														
Non Dispatchable Load	00:00	00:30	01:00	01:30	02:00	02:30	03:00	03:30	04:00	04:30	05:00	05:30	06:00	06:30	07:00	07:30	08:00	08:30	09:00	09:30	10:00	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00
Greece Load	3 710	3 610	3 540	3 470	3 420	3 370	3 330	3 330	3 370	3 380	3 330	3 350	3 400	3 570	3 790	4 010	4 200	4 4 1 0	4 4 3 0	4 600	4 660	4 680	4 730	4 700	4 650	4 630	4 510	4 370	4 260	4 2 3 0	4 2 1 0	4 100	4 160	4 080	4 100
Greece Losses	88	85	83	82	81	79	78	78	79	79	77	75	74	71	62	54	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43	48	64
System Load+Losses	3 798	3 695	3 623	3 552	3 501	3 4 4 9	3 408	3 408	3 4 4 9	3 459	3 407	3 425	3 474	3 641	3 852	4 064	4 243	4 453	4 473	4 643	4 703	4 723	4 773	4 743	4 693	4 673	4 553	4 413	4 303	4 273	4 253	4 143	4 203	4 128	4 164
System Overview	00:00	00:30	01:00	01:30	02:00	02:30	03:00	03:30	04:00	04:30	05:00	05:30	06:00	06:30	07:00	07:30	08:00	08:30	09:00	09:30	10:00	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00
Mandatory Hydro Injections	0	0	0	0	0	0	0	0	0	0	26	26	26	26	84	84	58	58	71	71	26	26	26	26	0	0	0	0	0	0	0	0	0	0	13
Renewables	3 440	3 450	3 460	3 470	3 480	3 4 9 0	3 500	3 510	3 530	3 540	3 560	3 650	3 810	4 250	4 960	5 700	6 480	7 200	7 850	8 390	8 820	9 140	9 350	9 4 1 0	9 390	9 360	9 190	8 960	8 650	8 300	7 890	7 360	6 730	6 010	5 190
Thermal Units	1 678	1 467	1 452	1 373	1 373	1 373	1 373	1 373	1 373	1 383	1 358	1 343	1 333	1 343	1 248	1 265	1 150	1 169	1 187	1 247	1 217	1 254	1 133	1 133	1 177	1 167	1 173	1 163	1 108	1 118	1 082	1 062	1 4 1 4	1 466	1 778
Hydro Units	0	0	0	0	0	0	0	0	0	0	76	86	106	106	159	159	138	138	151	151	106	277	241	241	155	155	155	155	215	205	206	206	236	174	93
Total Production	1 678	1 467	1 452	1 373	1 373	1 373	1 373	1 373	1 373	1 383	1 434	1 429	1 439	1 4 4 9	1 407	1 424	1 288	1 307	1 338	1 398	1 323	1 531	1 374	1 374	1 332	1 322	1 328	1 318	1 323	1 323	1 288	1 268	1 650	1 640	1 871
Total Dispatchable Load	0	0	0	0	0	0	0	0	0	0	0	0	0	0	345	345	220	220	220	220	220	0	220	220	220	220	220	220	220	220	220	220	0	0	0
Total Demand Response	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	4	3	1	1	1	2	2	2	1	1	0	0	0	0	0	0	0	0	0
Energy Surplus	- 98	0	0	- 2	- 88	- 150	- 193	- 203	- 194	- 204	- 162	- 229	- 301	- 584	- 594	-1 135	-1 595	-2 125	-4 402	-4 832	-6 489	-7 217)	-6 964	-7 054	-7 089	-7 069	-6 893	-6 793	-6 545	-6 225	-5 968	-5 528	-5 425	-4 770	-1 537
Net CBS Schedules	1 222	1 222	1 289	1 289	1 264	1 264	1 272	1 272	1 260	1 260	1 425	1 425	1 474	1 474	1 576	1 576	1 706	1 706	92	92	-1 271	-12	-1 236	-1 236	-1 282	-1 282	-1 148	-1 148	-1 095	-1 095	-1 264	-1 264	-1 248	-1 248	1 360
Energy Marginal Prices	00:00	00:30	01:00	01:30	02:00	02:30	03:00	03:30	04:00	04:30	05:00	05:30	06:00	06:30	07:00	07:30	08:00	08:30	09:00	09:30	10:00	10::	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00
Price Energy Up		92,89	106,92	106,92	104,87	104,87	104,87	104,87	104,87	104,87	173,36	160,46	160,46	160,46	189,00	189,00	249,89	249,89	249,92	249,94	249,92	249	249,90	249,90	249,92	249,92	249,92	249,92	249,92	249,92	249,89	249,89	249,94	249,96	160,46
Price Energy Down	80,91	53,54	44,98	44,98	42,83	42,83	39,84	39,84	43,35	43,35	44,68	44,68										0,													
Greece Price Energy Up		92,89	106,92	106,92	104,87	104,87	104,87	104,87	104,87	104,87	173,36	160,46	160,46	160,46	189,00	189,00	249,89	249,89	249,92	249,94	249,92	249.	249,90	249,90	249,92	249,92	249,92	249,92	249,92	249,92	249,89	249,89	249,94	249,96	160,46
Greece Price Energy Down	80,91	53,54	44,98	44,98	42,83	42,83	39,84	39,84	43,35	43,35	44,68	44,68										0,0													
Cleared Energy	00:00	00:30	01:00	01:30	02:00	02:30	03:00	03:30	04:00	04:30	05:00	05:30	06:00	06:30	07:00	07:30	08:00	08:30	09:00	09:30	10:00	10:30	11:00	11:30	12:00	12:30	13:00	13:30	14:00	14:30	15:00	15:30	16:00	16:30	17:00
Cleared Energy Up	0,0	38,3	128,9	89,4	155,0	155,0	195,5	195,5	195,5	200,5	205,8	203,3	238,9	243,9	219,0	227,4	384,9	394,3	489,3	519,3	504,3	663,	529,9	529,9	521,8	516,8	520,0	515,0	517,5	517,5	500,0	490,0	495,0	475,0	269,5
Cleared Energy Down	131,7	275,5	228,8	228,8	212,8	212,8	198,9	198,9	215,2	215,2	221,4	221,4	152,5	152,5	85,0	87,2	57,2	56,6	55,6	55,6	55,6	1.	56,2	56,2	55,6	55,6	55,0	55,0	55,0	55,0	55,0	55,0	22,5	7,5	60,0
	0.0	20.2	128.0	89.4	155.0	155.0	195.5	195.5	195.5	200.5	205.8	203.3	238.9	243,9	219.0	227.4	384,9	394,3	489,3	519,3	504.3	663,	529,9	529,9	521,8	516,8	520,0	515.0	517.5	517,5	500,0	490,0	495,0	475,0	269,5
Greece Cleared Energy Up	0,0	30,3	120,0	00,4	100,0	100,0				,_	,_																								
Greece Cleared Energy Up Greece Cleared Energy Down	131,7	275,5	228,8	228,8	212,8	212,8	198,9	198,9	215,2	215,2	221,4	221,4	152,5	152,5	85,0	87,2	57,2	56,6	55,6	55,6	55,6	1,2	56,2	56,2	55,6	55,6	55,0	55,0	55,0	55,0	55,0	55,0	22,5	7,5	60,0
Greece Cleared Energy Up Greece Cleared Energy Down Thermal Units	131,7 00:00	275,5 00:30	228,8 01:00	228,8 01:30	212,8 02:00	212,8 02:30	198,9 03:00	198,9 03:30	215,2 04:00	215,2 04:30	221,4 05:00	221,4 05:30	152,5 06:00	152,5 06:30	85,0 07:00	87,2 07:30	57,2 08:00	56,6 08:30	55,6 09:00	55,6 09:30	55,6 10:00	1,2 10:30	56,2 1:00	56,2 11:30	55,6 12:00	55,6 12:30	55,0 13:00	55,0 13:30	55,0 14:00	55,0 14:30	55,0 15:00	55,0 15:30	22,5 16:00	7,5 16:30	60,0 17:00
Greece Cleared Energy Up Greece Cleared Energy Down Thermal Units AG_DIMITRIOS1	0,0 131,7 00:00 0	275,5 00:30	228,8 01:00 0	228,8 01:30 0	212,8 02:00 0	212,8 02:30 0	198,9 03:00 0	198,9 03:30 0	215,2 04:00 0	215,2 04:30 0	221,4 05:00 0	221,4 05:30 0	152,5 06:00 0	152,5 06:30 0	85,0 07:00 0	87,2 07:30 0	57,2 08:00 0	56,6 08:30 0	55,6 09:00 0	55,6 09:30 0	55,6 10:00 0	1,2 10:30 0	56,2 1:00 0	56,2 11:30 0	55,6 12:00 0	55,6 12:30 0	55,0 13:00 0	55,0 13:30 0	55,0 14:00 0	55,0 14:30 0	55,0 15:00 0	55,0 15:30 0	22,5 16:00 0	7,5 16:30 0	60,0 17:00 0
Greece Cleared Energy Up Greece Cleared Energy Down Thermal Units AG_DIMITRIOS1 AG_DIMITRIOS2	0,0 131,7 00:00 0 0	275,5 00:30 0	228,8 01:00 0	228,8 01:30 0	212,8 02:00 0	212,8 02:30 0	198,9 03:00 0	198,9 03:30 0 0	215,2 04:00 0	215,2 04:30 0	221,4 05:00 0	221,4 05:30 0 0	152,5 06:00 0	152,5 06:30 0	85,0 07:00 0	87,2 07:30 0	57,2 08:00 0 0	56,6 08:30 0 0	55,6 09:00 0 0	55,6 09:30 0	55,6 10:00 0 0	1,2 10:30 0 0	56,2 1:00 0	56,2 11:30 0 0	55,6 12:00 0 0	55,6 12:30 0 0	55,0 13:00 0 0	55,0 13:30 0 0	55,0 14:00 0 0	55,0 14:30 0 0	55,0 15:00 0 0	55,0 15:30 0 0	22,5 16:00 0 0	7,5 16:30 0 0	60,0 17:00 0 0
Greece Cleared Energy Up Greece Cleared Energy Down Thermal Units AG_DIMITRIOS1 AG_DIMITRIOS2 AG_DIMITRIOS3	0,0 131,7 00:00 0 0 0	275,5 00:30 0 0	228,8 01:00 0 0	003,4 228,8 01:30 0 0 0	212,8 02:00 0 0	212,8 02:30 0 0	198,9 03:00 0 0 0	198,9 03:30 0 0 0	215,2 04:00 0 0 0	215,2 04:30 0 0 0	221,4 05:00 0 0 0	221,4 05:30 0 0 0	152,5 06:00 0 0 0	152,5 06:30 0 0 0	85,0 07:00 0 0	87,2 07:30 0 0 0	57,2 08:00 0 0 0	56,6 08:30 0 0 0	55,6 09:00 0 0 0	55,6 09:30 0 0 0	55,6 10:00 0 0	1,2 10:30 0 0 0	56,2 1:00 0 0	56,2 11:30 0 0	55,6 12:00 0 0	55,6 12:30 0 0 0	55,0 13:00 0 0	55,0 13:30 0 0	55,0 14:00 0 0	55,0 14:30 0 0	55,0 15:00 0 0	55,0 15:30 0 0 0	22,5 16:00 0 0	7,5 16:30 0 0	60,0 17:00 0 0
Greece Cleared Energy Up Greece Cleared Energy Down Thermal Units AG_DIMITRIOS1 AG_DIMITRIOS2 AG_DIMITRIOS3 AG_DIMITRIOS4	0,0 131,7 00:00 0 0 0 160	275,5 00:30 0 0 0 0 160	228,8 01:00 0 0 0 160	01:30 01:30 0 0 0 160	212,8 02:00 0 0 0 160	212,8 02:30 0 0 0 0 160	198,9 03:00 0 0 0 0 160	198,9 03:30 0 0 0 0 160	215,2 04:00 0 0 0 160	215,2 04:30 0 0 0 0 160	221,4 05:00 0 0 0 160	221,4 05:30 0 0 0 160	152,5 06:00 0 0 0 0 160	152,5 06:30 0 0 0 0 160	85,0 07:00 0 0 0 160	87,2 07:30 0 0 0 0 160	57,2 08:00 0 0 0 160	56,6 08:30 0 0 0 160	55,6 09:00 0 0 0 160	55,6 09:30 0 0 0 0 160	55,6 10:00 0 0 0 160	1,2 10:30 0 0 0 160	56,2 1:00 0 0 0 160	56,2 11:30 0 0 0 160	55,6 12:00 0 0 160	55,6 12:30 0 0 0 160	55,0 13:00 0 0 160	55,0 13:30 0 0 0 160	55,0 14:00 0 0 0 160	55,0 14:30 0 0 0 160	55,0 15:00 0 0 0 160	55,0 15:30 0 0 0 160	22,5 16:00 0 0 160	7,5 16:30 0 0 0 160	60,0 17:00 0 0 160
Greece Cleared Energy Up Greece Cleared Energy Down Thermal Units AG_DIMITRIOS1 AG_DIMITRIOS2 AG_DIMITRIOS3 AG_DIMITRIOS4 AG_DIMITRIOS5	0,0 131,7 00:00 0 0 0 160 0	275,5 00:30 0 0 0 0 160 0	228,8 01:00 0 0 0 160 0	228,8 01:30 0 0 0 0 160 0	212,8 02:00 0 0 0 0 0 160 0	212,8 02:30 0 0 0 0 0 160 0	198,9 03:00 0 0 0 0 0 160 0	198,9 03:30 0 0 0 0 0 160 0	215,2 04:00 0 0 0 0 160 0	215,2 04:30 0 0 0 0 160 0	221,4 05:00 0 0 0 160 0	221,4 05:30 0 0 0 0 160 0	152,5 06:00 0 0 0 0 160 0	152,5 06:30 0 0 0 0 160 0	85,0 07:00 0 0 0 0 160 0	87,2 07:30 0 0 0 0 160 0	57,2 08:00 0 0 0 0 160 0	56,6 08:30 0 0 0 0 160 0	55,6 09:00 0 0 0 0 160 0	55,6 09:30 0 0 0 0 160 0	55,6 10:00 0 0 0 160 0	1,2 10:30 0 0 0 160 0	56,2 1:00 0 0 160 0	56,2 11:30 0 0 0 160 0	55,6 12:00 0 0 160 0	55,6 12:30 0 0 0 160 0	55,0 13:00 0 0 160 0	55,0 13:30 0 0 0 160 0	55,0 14:00 0 0 0 0 160 0	55,0 14:30 0 0 0 160 0	55,0 15:00 0 0 0 160 0	55,0 15:30 0 0 0 160 0	22,5 16:00 0 0 0 160 0	7,5 16:30 0 0 0 160 0	60,0 17:00 0 0 0 160 0
Greece Cleared Energy Up Greece Cleared Energy Down Thermal Units AG_DIMITRIOS1 AG_DIMITRIOS2 AG_DIMITRIOS3 AG_DIMITRIOS5 MEGALOPOLI4	0,0 131,7 00:00 0 0 0 160 0 0	275,5 00:30 0 0 0 0 160 0 0	120,3 228,8 01:00 0 0 0 0 160 0 0 0	228,8 01:30 0 0 0 0 160 0 0	212,8 02:00 0 0 0 0 160 0 0	212,8 02:30 0 0 0 0 0 160 0 0	198,9 03:00 0 0 0 0 0 160 0 0 0	198,9 03:30 0 0 0 0 0 160 0 0 0	215,2 04:00 0 0 0 160 0 0	215,2 04:30 0 0 0 0 160 0 0	221,4 05:00 0 0 0 160 0 0	221,4 05:30 0 0 0 0 160 0 0 0	152,5 06:00 0 0 0 0 160 0 0	152,5 06:30 0 0 0 0 160 0 0 0	85,0 07:00 0 0 0 0 160 0 0	87,2 07:30 0 0 0 0 160 0 0 0	57,2 08:00 0 0 0 0 160 0 0	56,6 08:30 0 0 0 0 160 0 0	55,6 09:00 0 0 0 160 0 0	55,6 09:30 0 0 0 0 160 0 0	55,6 10:00 0 0 0 160 0 0	1,2 10:30 0 0 0 160 0 0	56,2 1:00 0 0 160 0 0	56,2 11:30 0 0 0 160 0 0 0	55,6 12:00 0 0 0 160 0 0 0	55,6 12:30 0 0 0 160 0 0 0	55,0 13:00 0 0 160 0 0 0	55,0 13:30 0 0 0 160 0 0	55,0 14:00 0 0 0 160 0 0	55,0 14:30 0 0 0 160 0 0 0 0	55,0 15:00 0 0 160 0 0	55,0 15:30 0 0 0 160 0 0 0	22,5 16:00 0 0 0 160 0 0 0	7,5 16:30 0 0 0 160 0 0 0	60,0 17:00 0 0 0 160 0 0
Greece Cleared Energy Up Greece Cleared Energy Down Thermal Units AG_DIMITRIOS1 AG_DIMITRIOS2 AG_DIMITRIOS3 AG_DIMITRIOS3 AG_DIMITRIOS5 MEGALOPOLI4 MEGALOPOLI4	0,0 131,7 00:00 0 0 0 160 0 0 0 0 0	275,5 00:30 0 0 0 0 0 160 0 0 0 0 0	120,3 228,8 01:00 0 0 0 160 0 0 0 0 0	228,8 01:30 0 0 0 0 160 0 0 0 0	212,8 02:00 0 0 0 0 0 160 0 0 0 0 0	212,8 02:30 0 0 0 0 0 160 0 0 0 0 0	198,9 03:00 0 0 0 0 0 160 0 0 0 0 0	198,9 03:30 0 0 0 0 0 160 0 0 0 0	215,2 04:00 0 0 0 0 160 0 0 0 0 0	215,2 04:30 0 0 0 0 160 0 0 0 0	221,4 05:00 0 0 0 160 0 0 0 0	221,4 05:30 0 0 0 0 160 0 0 0 0 0	152,5 06:00 0 0 0 0 160 0 0 0 0	152,5 06:30 0 0 0 0 160 0 0 0 0	85,0 07:00 0 0 0 0 160 0 0 0 0	87,2 07:30 0 0 0 0 160 0 0 0 0 0	57,2 08:00 0 0 0 0 160 0 0 0 0	56,6 08:30 0 0 0 0 160 0 0 0 0	55,6 09:00 0 0 0 160 0 0 0 0	55,6 09:30 0 0 0 160 0 0 0 0	55,6 10:00 0 0 160 0 0 0 0	1,2 10:30 0 0 0 160 0 0 0 0	56,2 1:00 0 0 160 0 0 0 0	56,2 11:30 0 0 160 0 0 0 0 0 0	55,6 12:00 0 0 0 160 0 0 0 0 0 0	55,6 12:30 0 0 0 160 0 0 0 0 0 0	55,0 13:00 0 0 160 0 0 0 0 0 0	55,0 13:30 0 0 0 160 0 0 0 0	55,0 14:00 0 0 0 160 0 0 0 0 0	55,0 14:30 0 0 0 160 0 0 0 0 0 0	55,0 15:00 0 0 0 160 0 0 0 0	55,0 15:30 0 0 0 160 0 0 0 0 0	22,5 16:00 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0	7,5 16:30 0 0 0 160 0 0 0 0 0 0	60,0 17:00 0 0 160 0 0 0 0 0
Greece Cleared Energy Up Greece Cleared Energy Down Thermal Units AG_DIMITRIOS1 AG_DIMITRIOS2 AG_DIMITRIOS3 AG_DIMITRIOS4 AG_DIMITRIOS5 MEGALOPOLI4 MELITI ALIVERI5	0,0 131,7 00:00 0 0 0 160 0 0 0 0 0 250	38,3 275,5 00:30 0 0 0 160 0 0 0 0 327	120,9 228,8 01:00 0 0 0 160 0 0 0 0 0 0 0 352	228,8 01:30 0 0 0 0 160 0 0 0 0 274	100,0 212,8 02:00 0 0 0 160 0 0 0 0 259	212,8 02:30 0 0 0 0 160 0 0 0 0 259	198,9 03:00 0 0 0 0 160 0 0 0 0 0 274	198,9 03:30 0 0 0 0 160 0 0 0 274	215,2 04:00 0 0 0 160 0 0 0 0 0 0 280	215,2 04:30 0 0 0 0 160 0 0 0 0 280	221,4 05:00 0 0 0 160 0 0 0 273	221,4 05:30 0 0 0 160 0 0 0 0 273	152,5 06:00 0 0 0 0 160 0 0 0 0 280	152,5 06:30 0 0 0 160 0 0 0 280	85,0 07:00 0 0 0 160 0 0 0 0 0 116	87,2 07:30 0 0 0 0 160 0 0 0 0 0 116	57,2 08:00 0 0 0 160 0 0 0 0 0 156	56,6 08:30 0 0 0 160 0 0 0 156	55,6 09:00 0 0 0 160 0 0 0 280	55,6 09:30 0 0 0 160 0 0 0 280	55,6 10:00 0 0 160 0 0 0 280	1,2 10:30 0 0 0 160 0 0 0 0 248	56,2 1:00 0 0 160 0 0 0 276	56,2 11:30 0 0 160 0 0 0 276	55,6 12:00 0 0 160 0 0 0 280	55,6 12:30 0 0 0 160 0 0 0 280	55,0 13:00 0 0 160 0 0 0 280	55,0 13:30 0 0 0 160 0 0 0 280	55,0 14:00 0 0 0 160 0 0 0 251	55,0 14:30 0 0 0 160 0 0 0 0 261	55,0 15:00 0 0 160 0 0 276	55,0 15:30 0 0 0 160 0 0 0 0 256	22,5 16:00 0 0 160 0 0 0 280	7,5 16:30 0 0 160 0 0 0 0 280	60,0 17:00 0 0 160 0 0 0 213
Greece Cleared Energy Up Greece Cleared Energy Down Thermal Units AG_DIMITRIOS1 AG_DIMITRIOS2 AG_DIMITRIOS3 AG_DIMITRIOS3 AG_DIMITRIOS5 MEGALOPOLI4 MELITI ALIVERI5 LAVRIO4	0,0 131,7 00:00 0 0 0 160 0 0 0 0 0 250 0 1 0	38,3 275,5 00:30 0 0 0 160 0 0 0 0 0 327 0	120,9 228,8 01:00 0 0 0 160 0 0 0 0 0 0 352 0	228,8 01:30 0 0 0 0 160 0 0 0 0 0 274 0	100,0 212,8 02:00 0 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0 0	212,8 02:30 0 0 0 0 160 0 0 0 0 0 0 259 0	198,9 03:00 0 0 0 0 0 160 0 0 0 0 274 0	198,9 03:30 0 0 0 0 160 0 0 0 0 274 0	215,2 04:00 0 0 0 160 0 0 0 0 280 0	215,2 04:30 0 0 0 0 160 0 0 0 0 280 0	221,4 05:00 0 0 160 0 0 273 0	221,4 05:30 0 0 0 160 0 0 0 273 0	152,5 06:00 0 0 0 160 0 0 0 280 0	152,5 06:30 0 0 0 160 0 0 0 280 0 0	85,0 07:00 0 0 0 160 0 0 0 0 116 0 0	87,2 07:30 0 0 0 0 160 0 0 0 0 116 0	57,2 08:00 0 0 160 0 0 0 156 0	56,6 08:30 0 0 0 160 0 0 0 156 0	55,6 09:00 0 0 160 0 0 280 0	55,6 09:30 0 0 0 160 0 0 280 0 0	55,6 10:00 0 0 160 0 0 0 280 0	1,2 10:30 0 0 0 160 0 0 0 248 0	56,2 1:00 0 0 160 0 0 276 0	56,2 11:30 0 0 160 0 0 0 276 0 0	55,6 12:00 0 0 160 0 0 0 280 0 0	55,6 12:30 0 0 160 0 0 280 0 0	55,0 13:00 0 0 160 0 0 280 0 0	55,0 13:30 0 0 0 160 0 0 280 0	55,0 14:00 0 0 160 0 0 0 251 0	55,0 14:30 0 0 0 160 0 0 0 261 0 0	55,0 15:00 0 0 160 0 0 276 0	55,0 15:30 0 0 160 0 0 0 256 0 0	22,5 16:00 0 0 160 0 0 0 280 0 0	7,5 16:30 0 0 0 160 0 0 0 280 0 0	60,0 17:00 0 0 160 0 0 0 213 0
Greece Cleared Energy Up Greece Cleared Energy Down Thermal Units AG_DIMITRIOS1 AG_DIMITRIOS2 AG_DIMITRIOS3 AG_DIMITRIOS3 AG_DIMITRIOS5 MEGALOPOLI4 MELITI ALIVERI5 LAVRIO5 KORO5	0,0 131,7 00:00 0 0 0 0 0 0 0 0 0 0 0 0	275,5 00:30 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	128,8 228,8 01:00 0 0 0 160 0 0 0 0 0 352 0 0 0	228,8 01:30 0 0 0 0 160 0 0 0 0 0 274 0 0	212,8 02:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	212,8 02:30 0 0 0 0 0 160 0 0 0 259 0 0	198,9 03:00 0 0 0 0 0 160 0 0 0 0 274 0 0	198,9 03:30 0 0 0 0 0 160 0 0 0 274 0 0	215.2 04:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	215,2 04:30 0 0 0 0 160 0 0 0 0 280 0 0 0	221,4 05:00 0 0 0 160 0 0 273 0 0	221,4 05:30 0 0 0 160 0 0 0 0 273 0 0 0	152,5 06:00 0 0 0 160 0 0 280 0 0 0	152,5 06:30 0 0 0 160 0 0 0 280 0 0 0	85,0 07:00 0 0 0 160 0 0 0 0 116 0 0 0	87,2 07:30 0 0 0 0 160 0 0 0 0 116 0 0 0	57,2 08:00 0 0 0 160 0 0 156 0 0	56,6 08:30 0 0 0 160 0 0 156 0 0	55,6 09:00 0 0 160 0 0 280 0 0 0	55,6 09:30 0 0 0 160 0 0 280 0 0 0	55,6 10:00 0 0 160 0 0 280 0 0 0	1,2 10:30 0 0 0 160 0 0 248 0 0	56,2 1:00 0 0 160 0 276 0 0	56,2 11:30 0 0 160 0 0 276 0 0 0 276 0 0 0 0 0 0 0 0 0 0 0 0 0	55,6 12:00 0 0 0 160 0 0 0 280 0 0 0 0 0 0 0 0 0 0 0 0 0	55,6 12:30 0 0 0 160 0 0 280 0 0 0 0 0 0 0 0 0 0 0 0 0	55,0 13:00 0 0 160 0 0 0 280 0 0 0 0 0 0 0 0 0 0 0 0 0	55,0 13:30 0 0 0 160 0 0 280 0 0 0	55,0 14:00 0 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0 0	55,0 14:30 0 0 0 160 0 0 0 261 0 0 0 261 0 0 0 0 0 0 0 0 0 0 0 0 0	55,0 15:00 0 0 0 0 160 0 0 276 0 0 0 0	55,0 15:30 0 0 0 160 0 0 256 0 0 0 256 0 0 0 0 0 0 0 0 0 0 0 0 0	22,5 16:00 0 0 160 0 0 0 280 0 0 0 0 0 0 0 0 0 0 0 0 0	7,5 16:30 0 0 0 160 0 0 0 280 0 0 0 0 0 0 0 0 0 0 0 0 0	60,0 17:00 0 0 160 0 0 213 0 0
Greece Cleared Energy Up Greece Cleared Energy Down Thermal Units AG_DIMITRIOS1 AG_DIMITRIOS2 AG_DIMITRIOS3 AG_DIMITRIOS4 AG_DIMITRIOS5 MEGALOPOLI4 MELITI ALIVERI5 LAVRIO4 LAVRIO5 KOMOTINI	0,0 131,7 00:00 0 0 0 0 0 0 0 0 0 0 0 0	36,3 275,5 00:30 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	228,8 01:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	228,8 01:30 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	212,8 212,8 02:00 0 0 0 0 0 0 0 0 0 0 0 0	212.8 02:30 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	198,9 03:00 0 0 0 0 0 0 0 0 0 0 274 0 0 0 0	198,9 03:30 0 0 0 0 0 0 0 0 0 0 0 274 0 0 0 0	215.2 04:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	215,2 04:30 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	221,4 05:00 0 0 0 0 0 160 0 0 0 273 0 0 0 0	221,4 05:30 0 0 0 0 160 0 0 0 273 0 0 0 0 0	152,5 06:00 0 0 160 0 0 280 0 0 0 0 0	152,5 06:30 0 0 0 160 0 0 0 280 0 0 0 0 0 0	85,0 07:00 0 0 0 0 160 0 0 0 0 116 0 0 0 0 0	87,2 07:30 0 0 0 0 160 0 0 0 116 0 0 0 0	57,2 08:00 0 0 0 160 0 0 0 156 0 0 0 0	56,6 08:30 0 0 0 0 160 0 0 0 156 0 0 0 0	55,6 09:00 0 0 0 160 0 0 0 280 0 0 0 0 0 0	55,6 09:30 0 0 0 160 0 0 0 280 0 0 0 0 0	55,6 10:00 0 0 0 160 0 0 0 280 0 0 0 0 0 0	1,2 10:30 0 0 0 160 0 0 248 0 0 0 0	56,2 1:00 0 0 160 0 0 0 276 0 0 0 0 0	56,2 11:30 0 0 0 160 0 0 276 0 0 0 0 0 0 0 0 0 0 0 0 0	55,6 12:00 0 0 160 0 0 280 0 0 0 0 0 0 0 0 0 0 0 0 0	55,6 12:30 0 0 0 160 0 0 280 0 0 0 0 0 0 0 0 0 0 0 0 0	55,0 13:00 0 0 0 160 0 0 280 0 0 0 0 0 0 0 0 0 0 0 0 0	55,0 13:30 0 0 0 160 0 0 280 0 0 0 0 0 0 0 0 0 0 0 0 0	55,0 14:00 0 0 0 0 0 160 0 0 0 0 251 0 0 0 0 0 0	55,0 14:30 0 0 0 0 160 0 0 0 261 0 0 0 0 0 0 0 0 0 0 0 0 0	55,0 15:00 0 0 0 0 0 0 0 0 0 0 0 0	55,0 15:30 0 0 0 0 160 0 0 0 256 0 0 0 0 0 0 0 0 0 0 0 0 0	22,5 16:00 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0	7,5 16:30 0 0 0 160 0 0 0 280 0 0 0 0 0 0 0 0 0 0 0 0 0	60,0 17:00 0 0 160 0 0 213 0 0 0 0 0 0 0 0 0 0 0 0 0
Greece Cleared Energy Up Greece Cleared Energy Down Thermal Units AG_DIMITRIOS1 AG_DIMITRIOS2 AG_DIMITRIOS2 AG_DIMITRIOS3 AG_DIMITRIOS5 MEGALOPOLI4 MELITI ALVERI5 LAVRIO4 LAVRIO5 KOMOTINI MEGALOPOLI V UEROMU	0,0 131,7 00:00 0 0 0 0 0 0 0 0 0 0 0 0	38,3 275,5 00:30 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	228,8 01:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	228,8 01:30 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	212,8 212,8 02:00 0 0 0 0 0 0 0 0 0 0 0 0	212.8 02:30 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	198,9 03:00 0 0 0 0 0 0 0 0 0 274 0 0 0 0 0 0 0 0 0 0 0 0 0	198,9 03:30 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	215.2 04:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	215,2 04:30 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	221,4 05:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	221,4 05:30 0 0 0 160 0 0 0 273 0 0 0 0 0 0 0 0 0 0 0 0	152,5 06:00 0 0 0 160 0 0 0 280 0 0 0 0 0 0 0 0	152,5 06:30 0 0 0 160 0 0 0 280 0 0 0 0 0 0 0 0	85.0 07:00 0 0 0 0 160 0 0 0 0 116 0 0 0 0 0 0 0	87,2 07:30 0 0 0 0 160 0 0 0 116 0 0 0 0 0 0 0 0	57,2 08:00 0 0 0 160 0 0 0 0 156 0 0 0 0 0 0 0 0	56,6 08:30 0 0 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0	55,6 09:00 0 0 0 160 0 0 0 280 0 0 0 0 0 0 0	55,6 09:30 0 0 0 160 0 0 0 280 0 0 0 0 0 0	55,6 10:00 0 0 160 0 0 0 0 280 0 0 0 0 0 0 0 0 0 0	1,2 10:30 0 0 0 160 0 0 0 248 0 0 0 0 0 0	56,2 1:00 0 0 160 0 0 0 276 0 0 0 0 0 0	56,2 11:30 0 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0	55,6 12:00 0 0 160 0 0 0 280 0 0 0 0 0 0 0 0 0 0 0 0 0	55,6 12:30 0 0 0 160 0 0 280 0 0 0 0 0 0 0 0 0 0 0 0 0	55,0 13:00 0 0 160 0 0 0 280 0 0 0 0 0 0 0 0 0 0 0 0 0	55,0 13:30 0 0 0 0 160 0 0 280 0 0 0 0 0 0 0 0 0 0 0 0 0	55,0 14:00 0 0 0 0 0 160 0 0 0 0 251 0 0 0 0 0 0 0 0 0 0	55,0 14:30 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0	55,0 15:00 0 0 0 0 0 0 0 0 0 0 0 0	55,0 15:30 0 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0	22,5 16:00 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0	7,5 16:30 0 0 160 0 0 0 280 0 0 0 0 30 30	60,0 17:00 0 0 160 0 0 213 0 0 0 0 30 0 0 0 0 0 0 0 0 0 0 0 0 0
Greece Cleared Energy Up Greece Cleared Energy Down Thermal Units AG_DIMITRIOS1 AG_DIMITRIOS2 AG_DIMITRIOS3 AG_DIMITRIOS3 AG_DIMITRIOS5 MEGALOPOLI4 MELTI ALIVERI5 LAVRIO4 LAVRIO5 KOMOTINI MEGALOPOLI_V HERON1	0,0 131,7 00:00 0 0 0 0 0 0 0 0 0 0 0 0	36,3 275,5 00:30 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	228,8 01:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	228,8 01:30 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	212,8 212,8 02:00 0 0 0 0 0 0 0 0 0 0 0 0	212,8 02:30 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	198,9 03:00 0 0 0 0 160 0 0 0 274 0 0 0 0 0 0 0 0 0 0 0 0	198,9 03:30 0 0 0 0 160 0 0 0 274 0 0 0 0 0 0 0 0 0 0 0 0	215.2 04:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	215.2 04:30 0 0 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0	221.4 05:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	221,4 05:30 0 0 0 160 0 0 0 273 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	152,5 06:00 0 0 0 160 0 0 0 280 0 0 0 0 0 0 0 0 0	152,5 06:30 0 0 0 160 0 0 0 280 0 0 0 0 0 0 0 0 0 0 0 0 0 0	85.0 07:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	87,2 07:30 0 0 0 0 160 0 0 0 116 0 0 0 0 0 0 0 0	57,2 08:00 0 0 0 160 0 0 0 156 0 0 0 0 0 0 0 0 0 0 0	56,6 08:30 0 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0 0	55,6 09:00 0 0 160 0 0 0 280 0 0 0 0 0 0 0 0 0 0	55,6 09:30 0 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0 0	55,6 10:00 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0	1,2 10:30 0 0 0 160 0 0 0 0 248 0 0 0 0 0 0 0 0	56,2 1:00 0 160 0 0 0 276 0 0 0 0 0 0 0 0	56,2 11:30 0 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0	55,6 12:00 0 0 160 0 0 0 280 0 0 0 0 0 0 0 0 0 0 0 0 0	55,6 12:30 0 0 160 0 0 0 280 0 0 0 0 0 0 0 0 0 0 0 0 0	55,0 13:00 0 0 160 0 0 0 280 0 0 0 0 0 0 0 0 0 0 0 0 0	55,0 13:30 0 0 0 0 160 0 0 280 0 0 0 0 0 0 0 0 0 0 0 0 0	55,0 14:00 0 0 0 0 0 0 0 0 0 0 0 0	55,0 14:30 0 0 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0	55,0 15:00 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0	55,0 15:30 0 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0	22,5 16:00 0 0 160 0 0 0 280 0 0 0 0 0 0 0 0 0 0 0 0 0	7,5 16:30 0 0 160 0 0 280 0 0 0 30 0 0 0 0 0 0 0 0 0 0 0 0 0	60,0 17:00 0 0 160 0 0 213 0 0 0 0 0 30 0 0 0 0 0 0 0 0 0 0 0 0 0
Greece Cleared Energy Up Greece Cleared Energy Down Thermal Units AG_DIMITRIOS1 AG_DIMITRIOS2 AG_DIMITRIOS3 AG_DIMITRIOS4 AG_DIMITRIOS4 AG_DIMITRIOS5 MEGALOPOLI4 MELITI ALVERI5 LAVRIO4 LAVRIO5 KOMOTINI MEGALOPOLI_V HERON1 HERON2	0,0 131,7 00:00 0 0 0 0 0 0 0 0 0 0 0 0	36,3 275,5 00:30 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	228,8 01:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	228,8 01:30 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	212,8 02:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	212,8 02:30 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	198,9 03:00 0 0 0 160 0 0 0 274 0 0 0 0 0 0 0 0 0 0 0	198,9 03:30 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	215.2 04:00 0 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0 0	215.2 04:30 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	221.4 05:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	221,4 05:30 0 0 0 160 0 0 273 0 0 0 0 0 0 0 0 0 0 0 0 0	152,5 06:00 0 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0 0	152,5 06:30 0 0 0 160 0 0 0 280 0 0 0 0 0 0 0 0 0 0 0 0 0 0	85,0 07:00 0 0 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0	87,2 07:30 0 0 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0	57,2 08:00 0 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0 0	56,6 08:30 0 0 0 160 0 0 0 0 156 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	55,6 09:00 0 0 160 0 0 0 280 0 0 0 0 0 0 0 0 0 0 0 0 0 0	55,6 09:30 0 0 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0	55,6 10:00 0 0 160 0 0 280 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1,2 10:30 0 0 0 160 0 0 248 0 0 0 0 0 0 0 0 0 0 0	56,2 1:00 0 160 0 0 0 276 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	56,2 11:30 0 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0	55,6 12:00 0 0 160 0 0 280 0 0 0 0 0 0 0 0 0 0 0 0 0	55,6 12:30 0 0 160 0 0 0 280 0 0 0 0 0 0 0 0 0 0 0 0 0	55,0 13:00 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0	55,0 13:30 0 0 0 160 0 0 0 280 0 0 0 0 0 0 0 0 0 0 0 0 0	55,0 14:00 0 0 0 0 0 0 0 0 0 0 0 0	55,0 14:30 0 0 0 0 0 0 0 0 0 0 0 0 0	55,0 15:00 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0	55,0 15:30 0 0 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0	22,5 16:00 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0	7,5 16:30 0 0 160 0 0 280 0 0 0 0 0 0 0 0 0 0 0 0 0	60,0 17:00 0 0 160 0 0 213 0 0 0 0 0 0 0 0 0 0 0 0 0
Greece Cleared Energy Up Greece Cleared Energy Down Thermal Units AG_DIMITRIOS1 AG_DIMITRIOS2 AG_DIMITRIOS2 AG_DIMITRIOS5 MEGALOPOLI4 MELITI ALVERI5 LAVRIO4 LAVRIO5 KOMOTINI MEGALOPOLI_V HERON1 HERON2 HERON3 UFDOL 00	0,0 131,7 00:00 0 0 0 0 0 0 0 0 0 0 0 0	36,3 275,5 00:30 0 0 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0	228,8 01:00 0 0 0 0 0 0 0 0 0 0 0 0	228,8 01:30 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	212,8 02:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	212,8 02:30 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	198,9 03:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	198,9 03:30 0 0 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0	215.2 04:00 0 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0 0	215.2 04:30 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	221.4 05:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	221,4 05:30 0 0 0 160 0 0 0 273 0 0 0 0 0 0 0 0 0 0 0 0 0	152,5 06:00 0 0 0 160 0 0 280 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	152,5 06:30 0 0 0 160 0 0 280 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	85,0 07:00 0 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0 0	87,2 07:30 0 0 0 160 0 0 0 116 0 0 0 0 0 0 0 0 0	57,2 08:00 0 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0 0	56,6 08:30 0 0 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0	55,6 09:00 0 0 160 0 0 280 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	55,6 09:30 0 0 0 160 0 0 280 0 0 0 0 0 0 0 0 0 0 0 0 0	55,6 10:00 0 0 160 0 0 280 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	1,2 10:30 0 0 160 0 0 248 0 0 0 0 0 0 0 0 0 0 0 0 0 0	56,2 1:00 0 0 160 0 0 276 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	56,2 11:30 0 0 0 160 0 0 276 0 0 0 0 0 0 0 0 0 0 0 0 0	55,6 12:00 0 0 160 0 0 0 280 0 0 0 0 0 0 0 0 0 0 0 0 0	55,6 12:30 0 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0	55,0 13:00 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0	55,0 13:30 0 0 0 160 0 0 280 0 0 0 0 0 0 0 0 0 0 0 0 0	55,0 14:00 0 0 0 0 0 0 0 0 0 0 0 0	55,0 14:30 0 0 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0	55,0 15:00 0 0 0 0 0 0 0 0 0 0 0 0	55,0 15:30 0 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0	22,5 16:00 0 0 160 0 0 280 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	7,5 16:30 0 0 160 0 0 280 0 0 0 0 0 0 0 0 0 0 0 0 0	60,0 17:00 0 0 160 0 0 213 0 0 0 30 0 0 0 100 100 0 100 0 100 0 0 100 0 0 0 0 0 0 0 0 0 0 0 0
Greece Cleared Energy Up Greece Cleared Energy Down Thermal Units AG_DIMITRIOS1 AG_DIMITRIOS2 AG_DIMITRIOS2 AG_DIMITRIOS3 AG_DIMITRIOS5 MEGALOPOLI4 MELITI ALIVERI5 LAVRIO4 LAVRIO4 LAVRIO5 KOMOTINI MEGALOPOLLV HERON1 HERON2 HERON3 HERON CC EDEDROA DUPOL	0,0 131,7 00:00 0 0 0 0 0 0 0 0 0 0 0 0 157 0 0 0 157 0 0 0 0 0 0 0 0 0 0 0 0 0 250 0 0 0 0 250 0 0 0	36,3 275,5 00:30 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	228,8 228,8 01:00 0 0 0 0 0 0 0 0 0 0 0 0	228.8 01:30 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	212,8 02:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	212,8 02:30 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	198,9 03:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	198,9 03:30 0 0 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0	215.2 04:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	215,2 04:30 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	221,4 05:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	221,4 05:30 0 0 0 0 0 0 0 0 0 0 0 0 0	152,5 06:00 0 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0 0	152,5 06:30 0 0 0 0 0 0 0 0 0 0 0 0 0	85,0 07:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	87,2 07:30 0 0 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0	57,2 08:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	56,6 08:30 0 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0 0	55,6 09:00 0 0 0 160 0 0 280 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	55,6 09:30 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	55,6 10:00 0 0 0 0 0 0 0 0 0 0 0 0	1,2 10:30 0 0 0 160 0 0 248 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	56,2 1:00 0 0 160 0 0 276 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	56,2 11:30 0 0 0 0 0 0 0 0 0 0 0 0 0	55,6 12:00 0 0 160 0 0 280 0 0 0 0 0 0 0 0 0 0 0 0 0	55,6 12:30 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0	55,0 13:00 0 0 160 0 0 280 0 0 0 0 0 0 0 0 0 0 0 0 0	55,0 13:30 0 0 0 0 0 0 0 0 0 0 0 0 0	55,0 14:00 0 0 0 0 0 0 0 0 0 0 0 0	55,0 14:30 0 0 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0	55,0 15:00 0 0 0 0 0 0 0 0 0 0 0 0	55,0 15:30 0 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0	22,5 16:00 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0	7,5 16:30 0 0 160 0 0 0 280 0 0 0 0 0 0 0 0 0 0 0 0 0	60,0 17:00 0 0 160 0 0 2113 0 0 0 0 0 0 0 0 0 0 0 0 0
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Greece Cleared Energy Up Greece Cleared Energy Down Thermal Units AG_DIMITRIOS1 AG_DIMITRIOS2 AG_DIMITRIOS2 AG_DIMITRIOS5 MEGALOPOLI4 MELITI ALIVERI5 LAVRIO4 LAVRIO5 KOMOTINI MEGALOPOLI_V HERON1 HERON2 HERON2 HERON3 HERON2 HERON2 HERON2 HERON2 HERON2 HERON3 HERON2 HERON2 HERON2 HERON2 HERON3 HERON2 HERON2 HERON2 HERON3 HERON2 HERON2 HERON2 HERON2 HERON2 HERON2 HERON2 HERON2 HERON2 HERON2 HERON3 HERON2 HERON2 HERON2 HERON2 HERON3 HERON2 HERO	0,0 131,7 00:00 0 0 0 0 0 0 0 0 0 0 0 0	36,3 275,5 00:30 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	228,8 01:00 0 0 0 0 0 0 0 0 0 0 0 0	228,8 01:30 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	212,8 02:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	212,8 02:30 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	198,9 03:00 0 0 0 160 0 0 274 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	198,9 03:30 0 0 0 160 0 0 274 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	215,2 04:00 0 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0 0	215,2 04:30 0 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0 0	221,4 05:00 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	221,4 05:30 0 0 160 0 273 0 0 0 0 0 0 0 0 0 0 0 0 0	152,5 06:00 0 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0 0	152,5 06:30 0 0 0 160 0 0 280 0 0 0 0 0 0 0 0 0 0 0 0 0	85,0 07:00 0 0 0 160 0 0 0 116 0 0 0 0 0 0 0 0 0	87,2 07:30 0 0 0 160 0 0 116 0 0 0 116 0 0 0 0 0	57,2 08:00 0 0 160 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0	56,6 0 0 0 0 0 0 0 0 0 0 0 0 0	55,6 09:00 0 0 0 160 0 0 280 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	55,6 09:30 0 0 0 160 0 0 280 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	55.6 10:00 0 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0	1,2 10:30 0 0 0 160 0 0 248 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	56,2 1:00 0 0 160 0 0 0 276 0 0 0 0 0 0 0 0 0 0 0 0 0	56,2 11:30 0 0 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0	55,6 12:00 0 0 160 0 280 0 280 0 0 0 0 0 0 0 0 0 0 0 0 0	55,6 12:30 0 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0	55,0 13:00 0 0 160 0 0 280 0 0 0 0 0 0 0 0 0 0 0 0 0	55,0 13:30 0 0 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0	55,0 14:00 0 0 0 0 0 0 0 0 0 0 0 0	55,0 14:30 0 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0	55,0 15:00 0 0 0 0 0 0 0 0 0 0 0 0	55,0 15:30 0 0 0 0 0 0 0 0 0 0 0 0 0	22,5 16:00 0 0 160 0 0 0 0 0 0 0 0 0 0 0 0 0	7,5 16:30 0 0 0 0 0 0 0 0 0 0 0 0 0	60,0 17:00 0 0 160 0 213 0 213 0 0 0 30 0 0 0 175 330 0 128
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7.2 GW RES curtailments

54.7 GWh RES curtailments during this day



Simulation of year 2030 based on NECP provisions



April 2030 – day with low wind

- Average system load = 6.500 MWh / h
- all interconnections with islands in place
- the interconnection with Cyprus in commercial operation
- no interconnection with Egypt yet
- no Green Aegean Interconnection yet



Simulation of year 2030 based on NECP provisions

- Ways to minimize curtailments:
 - ✤ BESS capacity at least 5 GW / 15 GWh in year 2030
 - interconnection with nearly all Aegean islands
 - * interconnection with Cyprus and Israel (?)
 - increase of economic activity (industry, services, new datacenters, etc.) especially at noon hours
- * Ways to minimize end-users electricity supply cost:
 - increase penetration levels in the next 10 years, to reach > 90% coverage of electricity demand by RES units
 - include significant amount of storage GWh
 - * orange tariffs
 - increase competition in Balancing Market through storage entities belonging to different stakeholders
 - capacity market for Demand Response, storage entities, gas units



Thank you for your attention!

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