

Market Monitoring Report

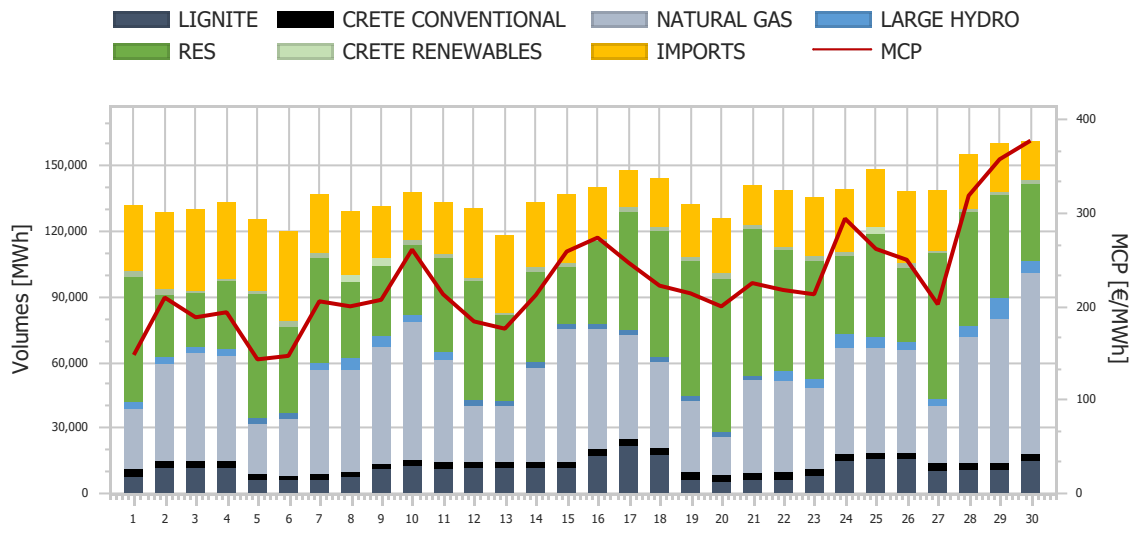
Monthly - Public - 2

11-2022

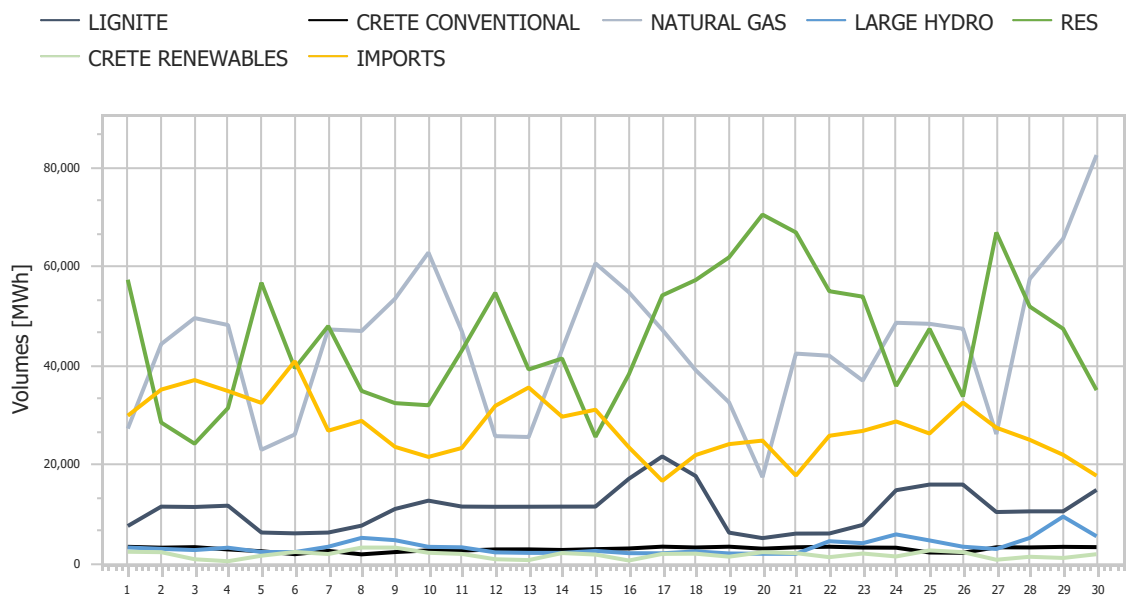


1. Day Ahead Market (DAM)

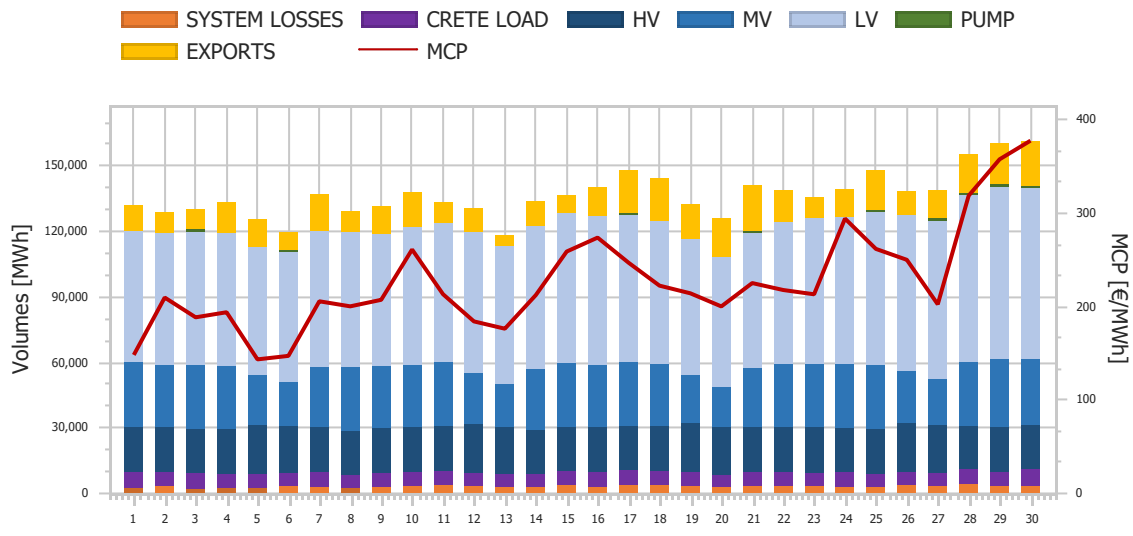
Ref No	Graph 1.1
Title	Energy Mix & MCP - SELL
Scope	Day Ahead Market (DAM)
Analysis	Daily



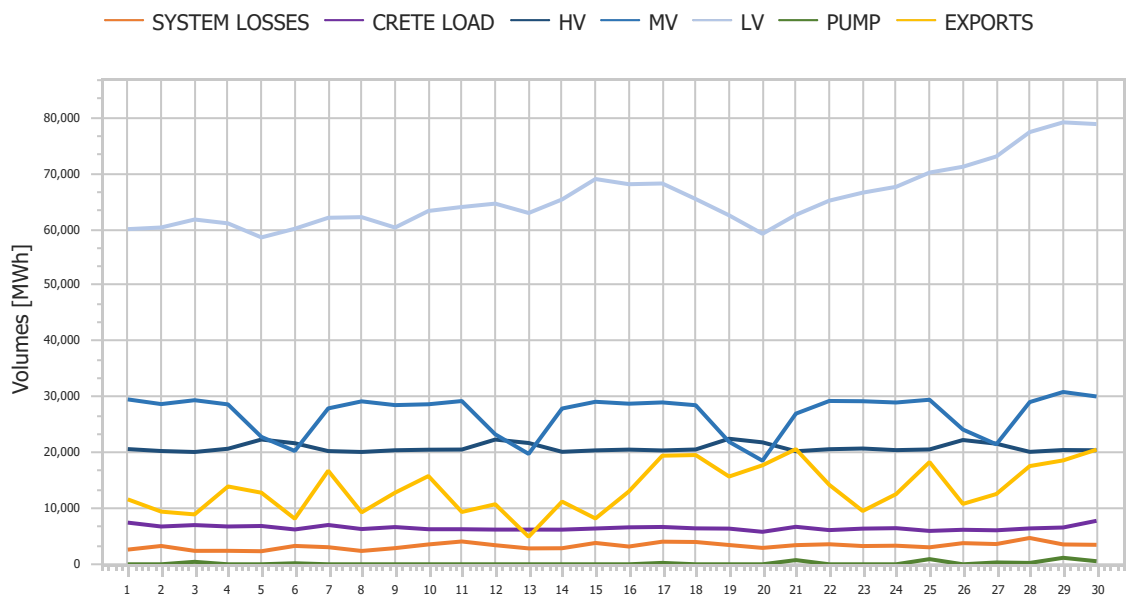
Ref No	Graph 1.2
Title	Energy Mix - SELL
Scope	Day Ahead Market (DAM)
Analysis	Daily



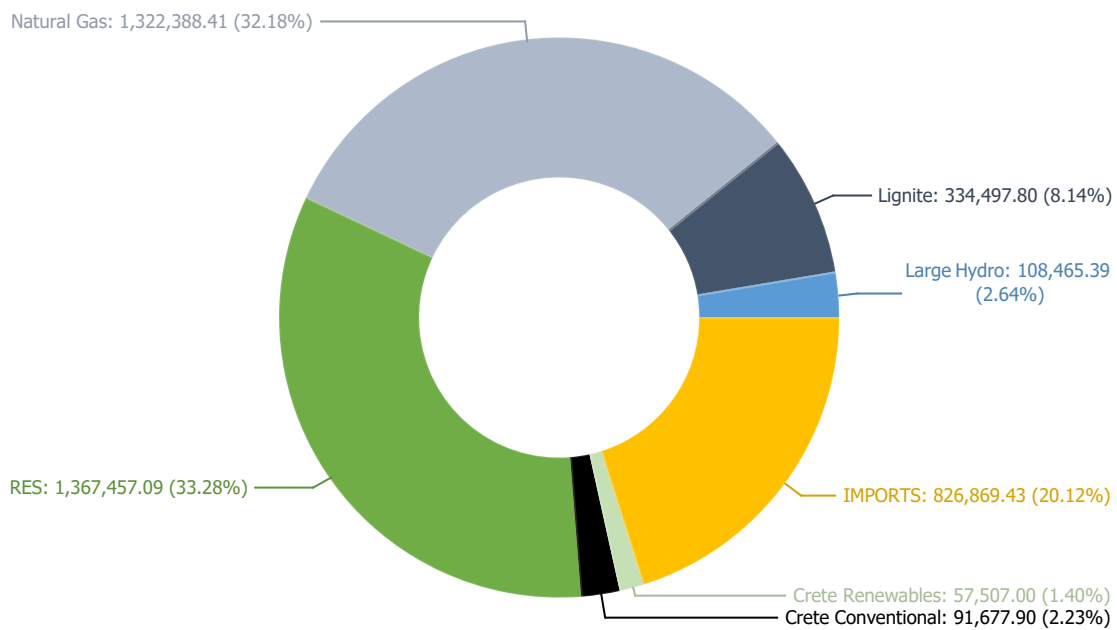
Ref No	Graph 1.3
Title	Energy Mix & MCP - BUY
Scope	Day Ahead Market (DAM)
Analysis	Daily



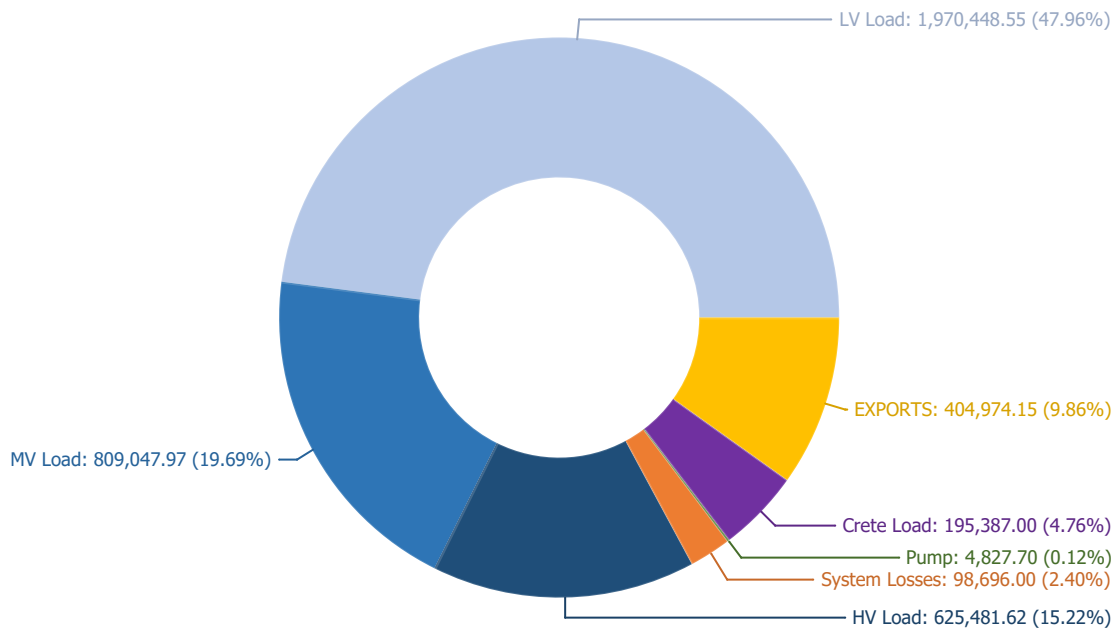
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Title	Energy Mix - BUY
Scope	Day Ahead Market (DAM)
Analysis	Daily



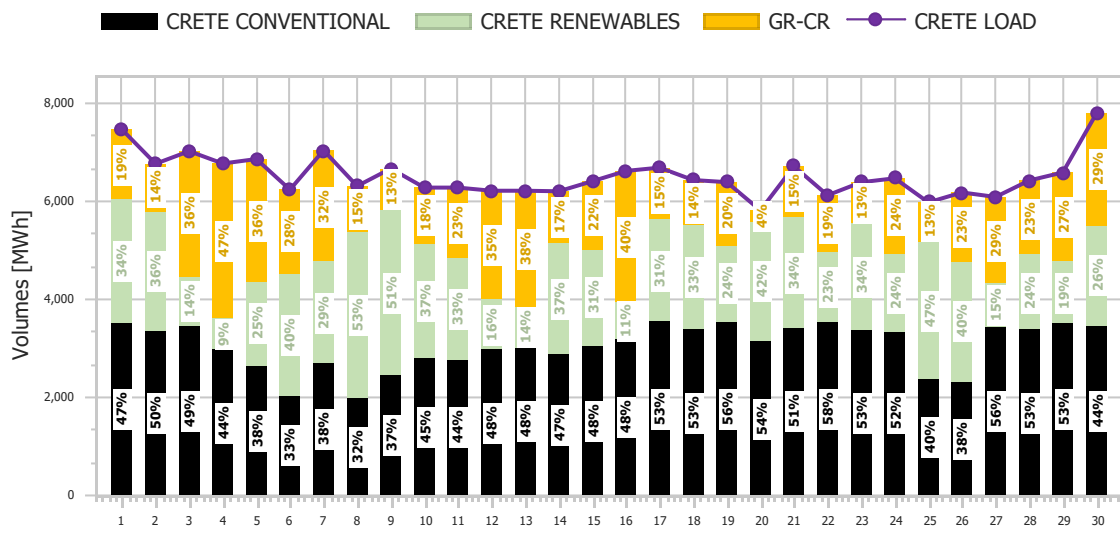
Ref No	Graph 1.5
Title	Energy Mix - SELL
Scope	Day Ahead Market (DAM)
Analysis	Daily



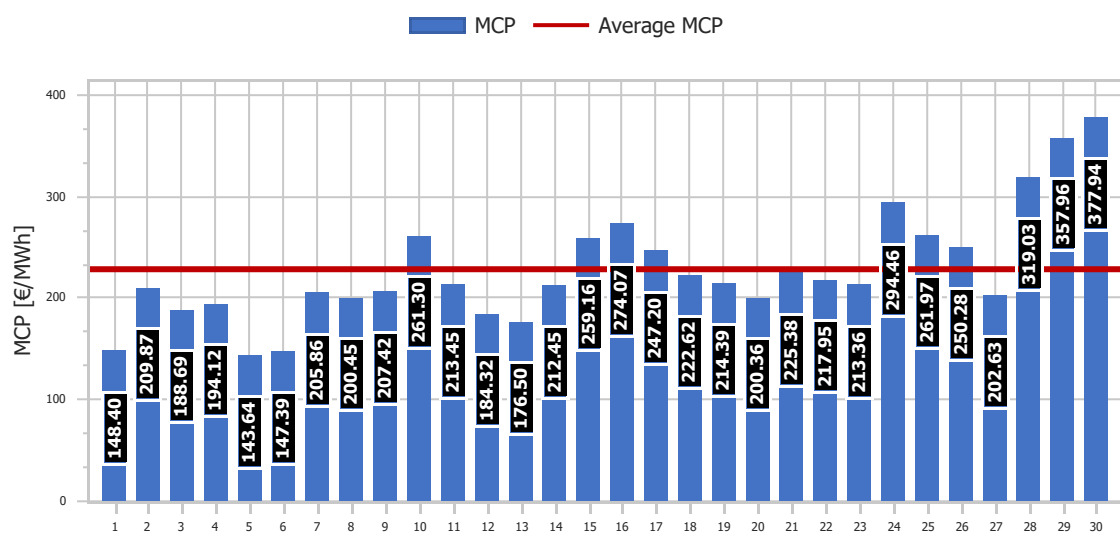
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Title	Energy Mix - BUY
Scope	Day Ahead Market (DAM)
Analysis	Daily



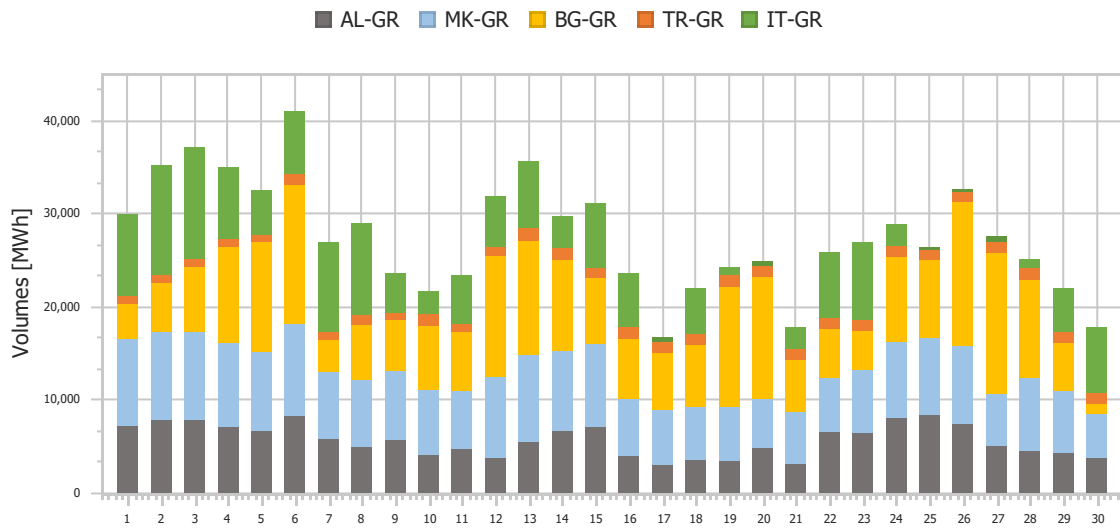
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Title	Crete Energy Mix
Scope	Day Ahead Market (DAM)
Analysis	Daily



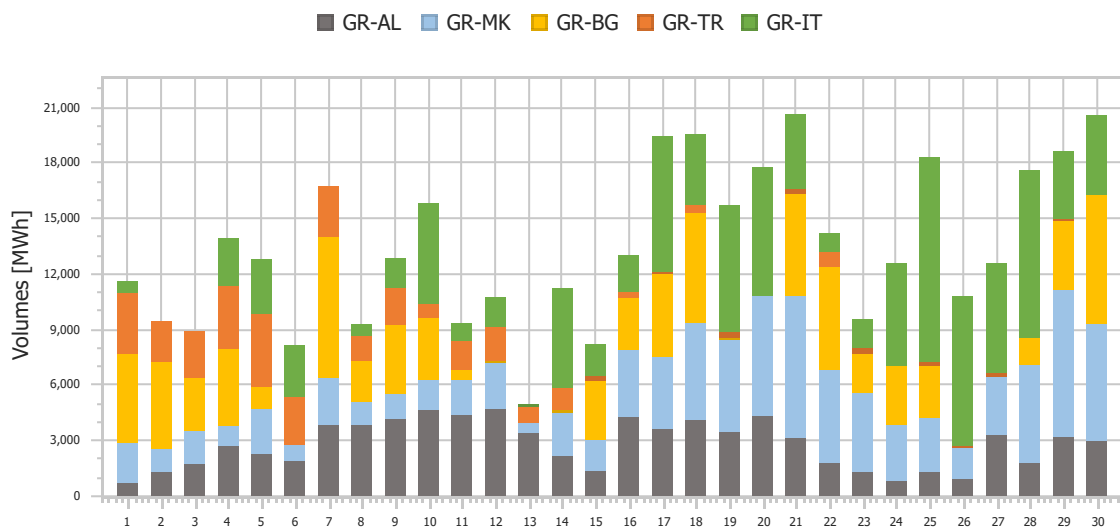
Ref No	Graph 1.8
Title	Market Clearing Price (MCP)
Scope	Day Ahead Market (DAM)
Analysis	Daily



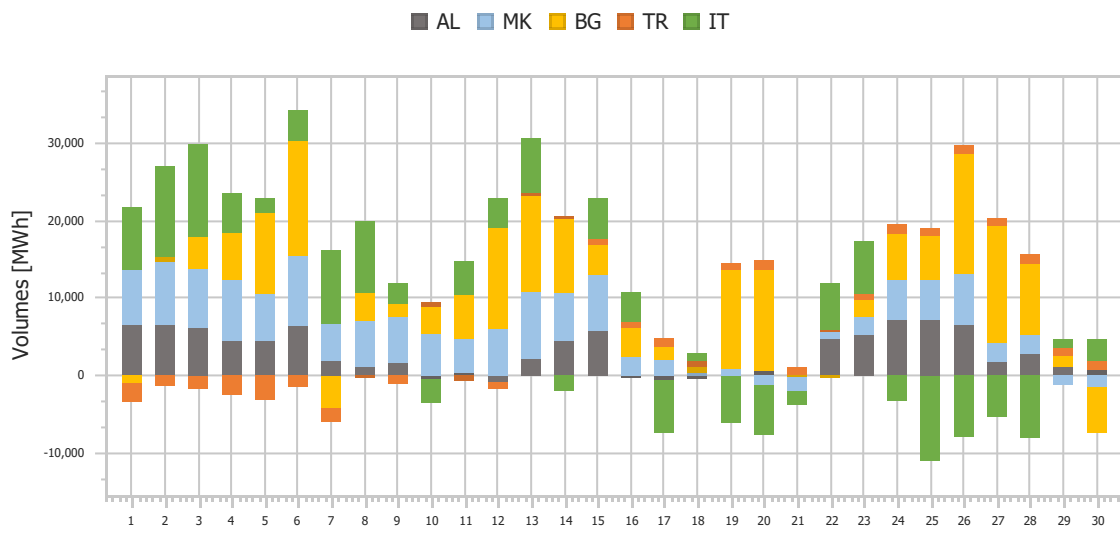
Ref No	Graph 1.9
Title	Imports per Border
Scope	Day Ahead Market (DAM)
Analysis	Daily



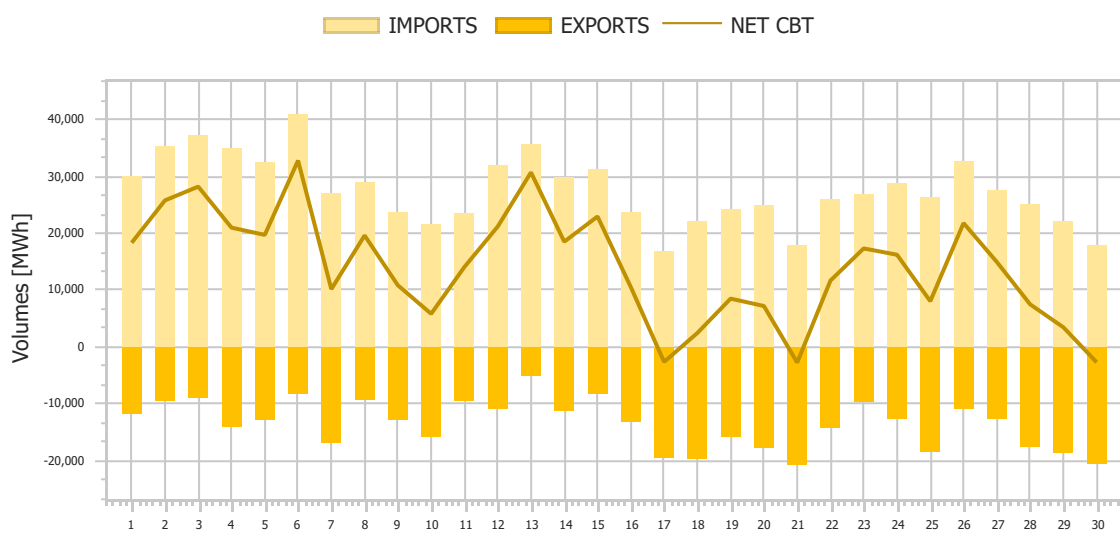
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Title	Exports per Border
Scope	Day Ahead Market (DAM)
Analysis	Daily



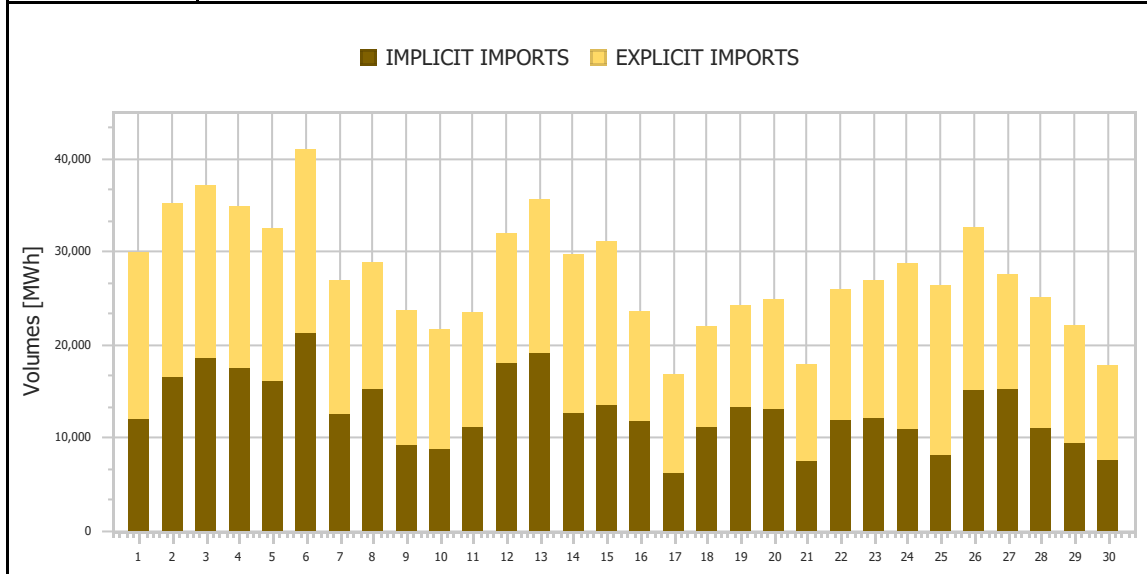
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Title	Net Imports per Border
Scope	Day Ahead Market (DAM)
Analysis	Daily



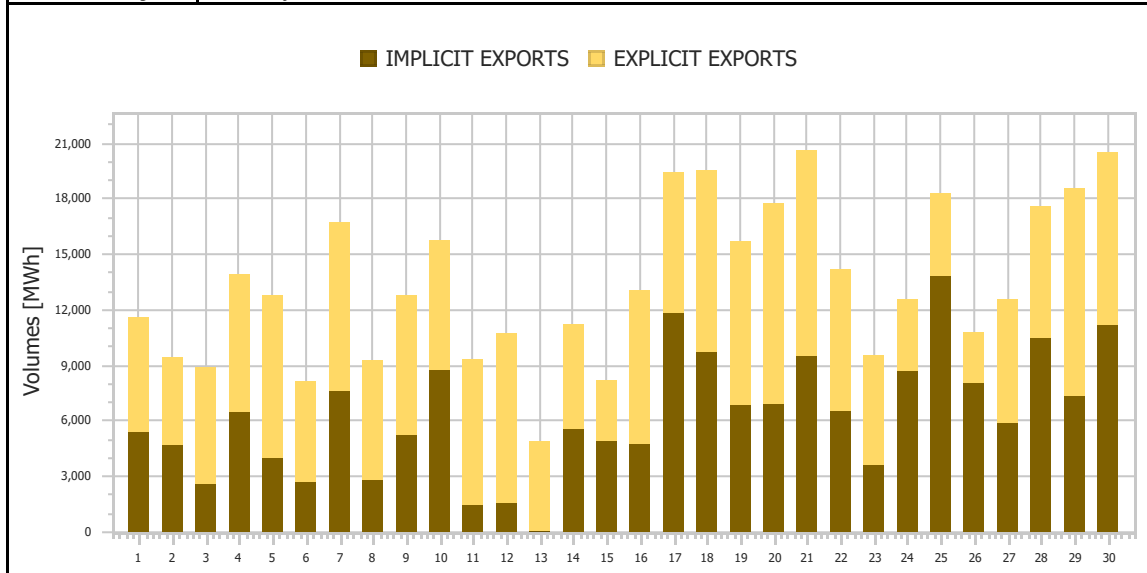
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Title	Total Imports & Exports
Scope	Day Ahead Market (DAM)
Analysis	Daily



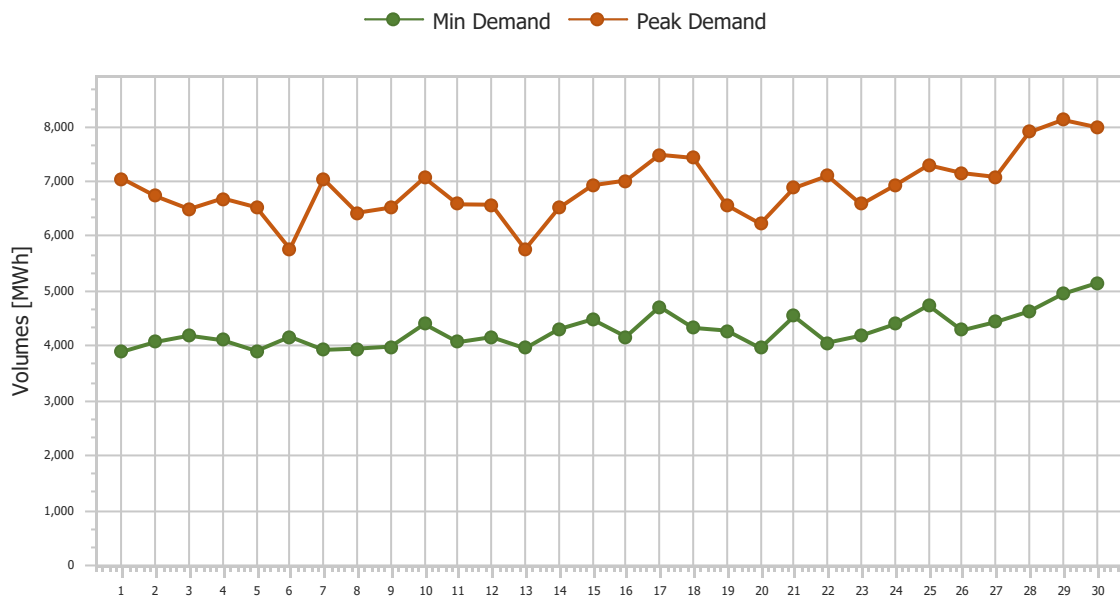
Ref No	Graph 1.13
Title	Imports (Implicit/Explicit)
Scope	Day Ahead Market (DAM)
Analysis	Daily



Ref No	Graph 1.14
Title	Exports (Implicit/Explicit)
Scope	Day Ahead Market (DAM)
Analysis	Monthly

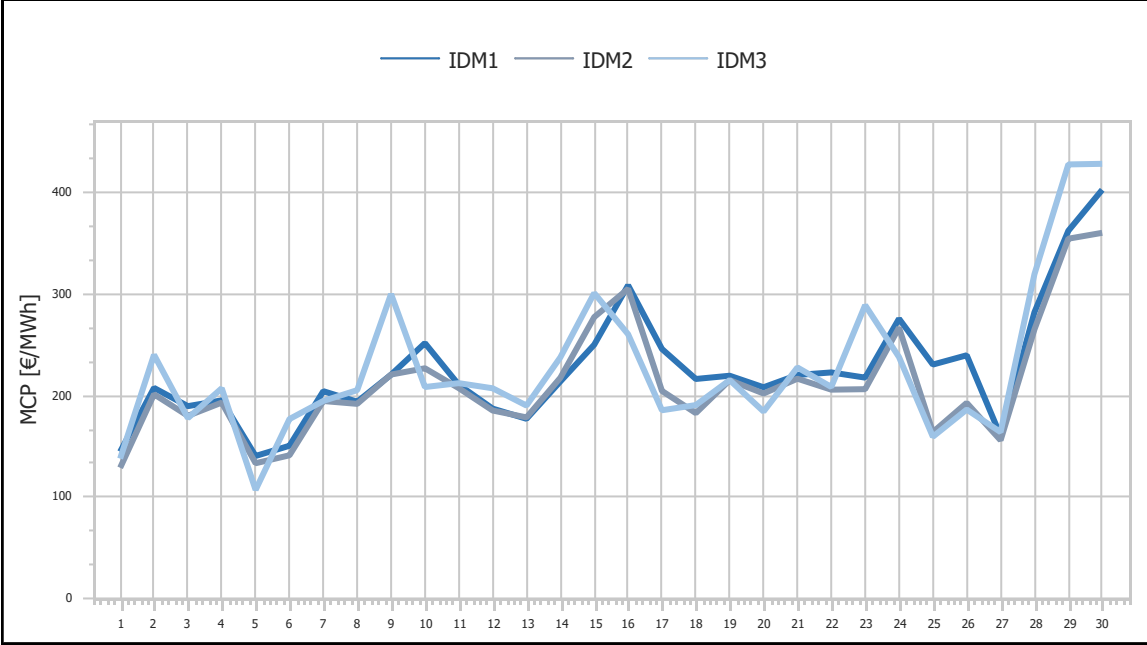


Ref No	Graph 1.15
Title	Min & Peak Demand
Scope	Day Ahead Market (DAM)
Analysis	Daily

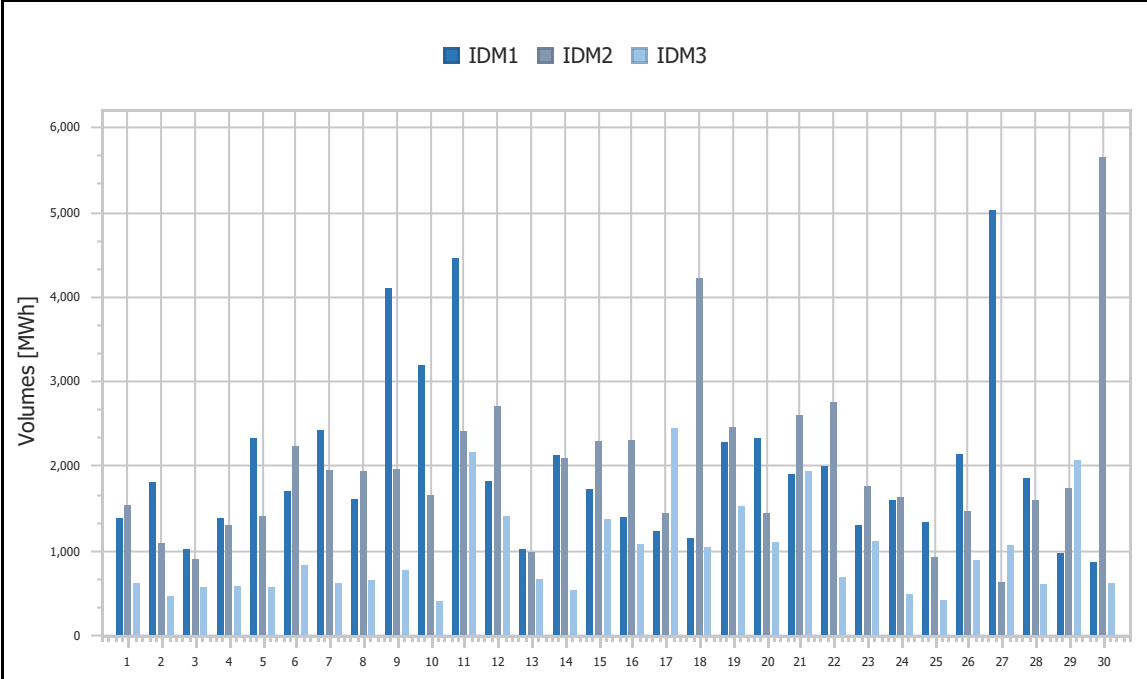


2. Intra-Day Market (IDM)

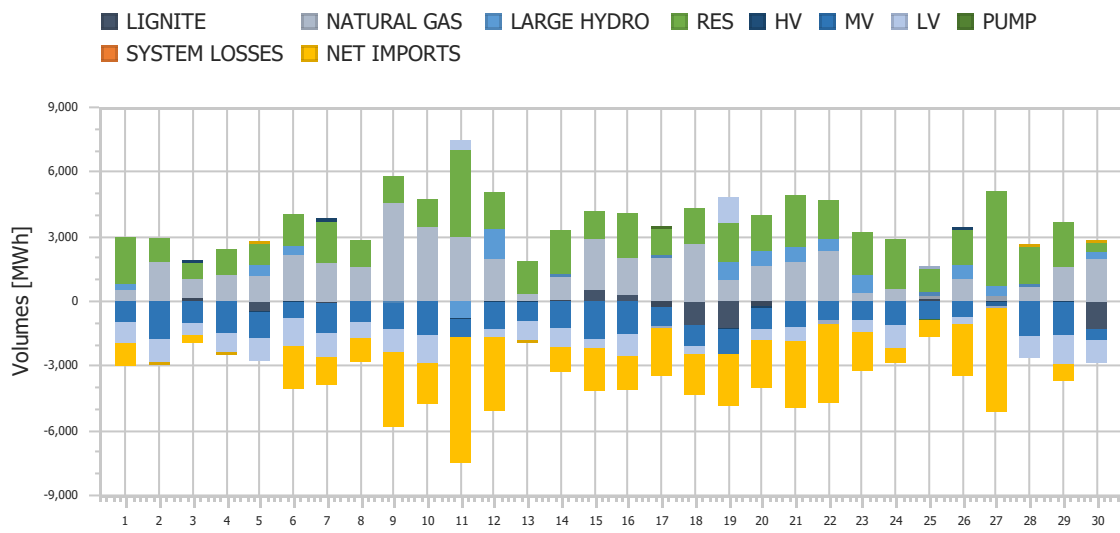
Ref No	Graph 2.1
Title	Market Clearing Price (MCP)
Scope	Intra-Day Market (IDM)
Analysis	Daily



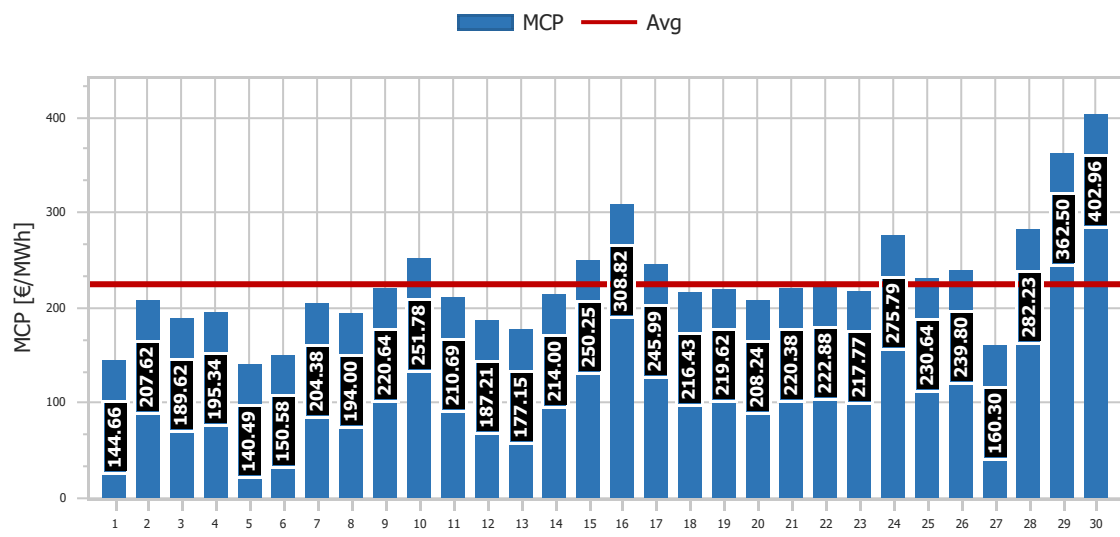
Ref No	Graph 2.2
Title	Transactions Volume
Scope	Intra-Day Market (IDM)
Analysis	Daily



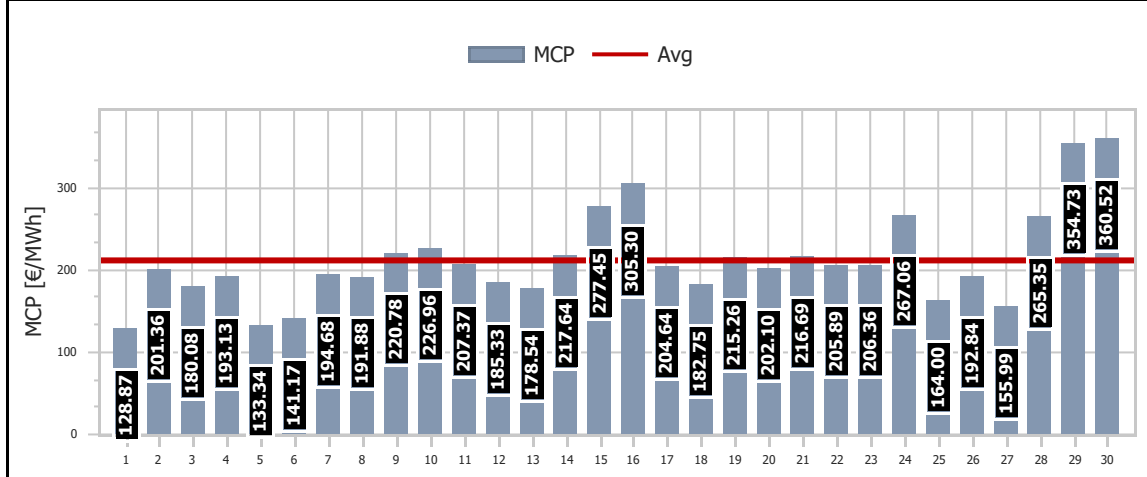
Ref No	Graph 2.3
Title	Energy Mix changes
Scope	Intra-Day Market (IDM)
Analysis	Daily



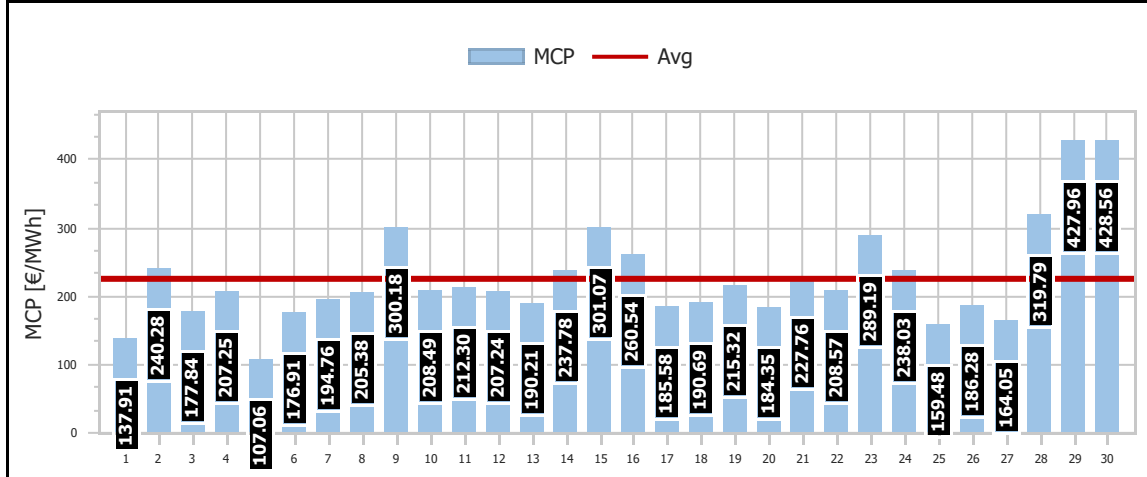
Ref No	Graph 2.4.1
Title	Market Clearing Price
Scope	Intra-Day Market Auction 1 (IDMA1)
Analysis	Daily



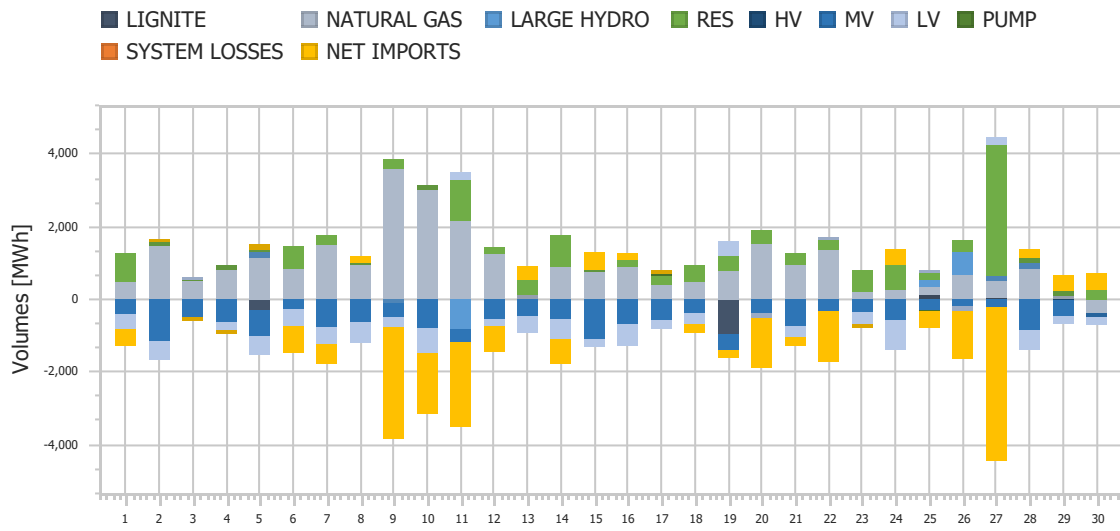
Ref No	Graph 2.4.2
Title	Market Clearing Price
Scope	Intra-Day Market Auction 2 (IDMA2)
Analysis	Daily



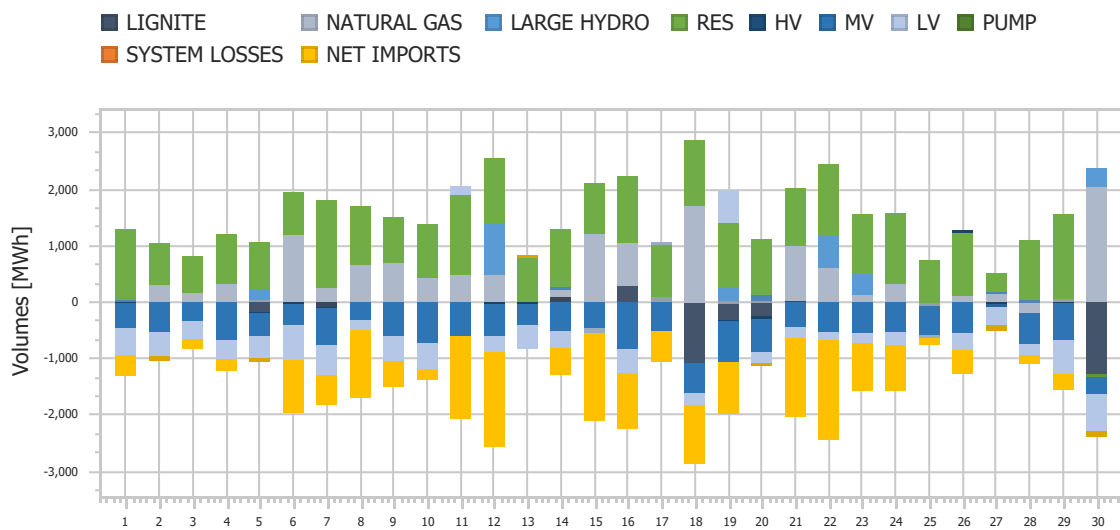
Ref No	Graph 2.4.3
Title	Market Clearing Price
Scope	Intra-Day Market Auction 3 (IDMA3)
Analysis	Daily



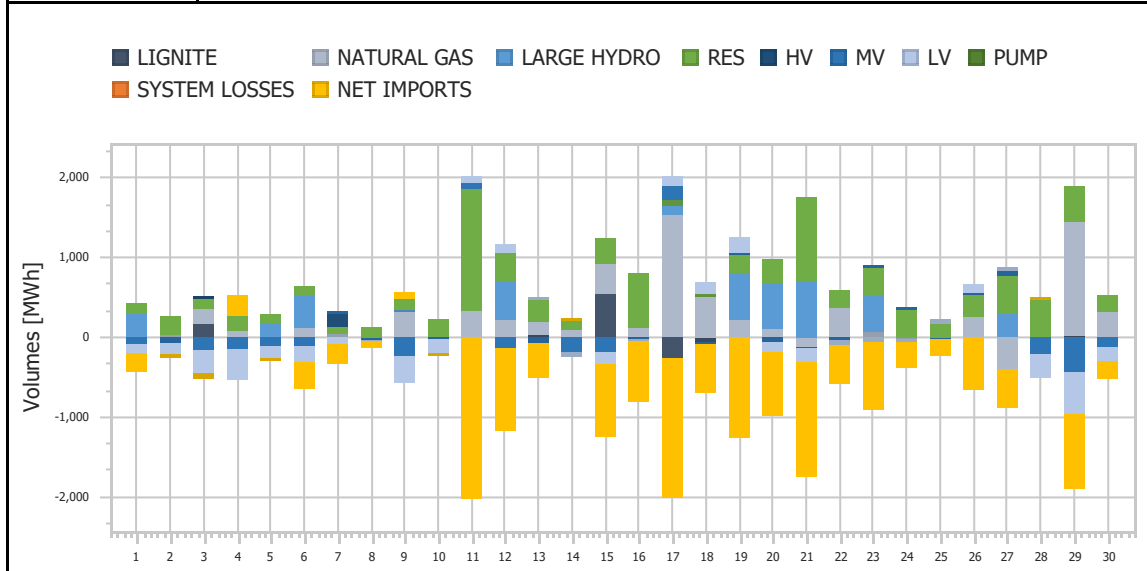
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Title	IDM Energy Mix Changes
Scope	Intra-Day Market Auction 1 (IDMA1)
Analysis	Daily



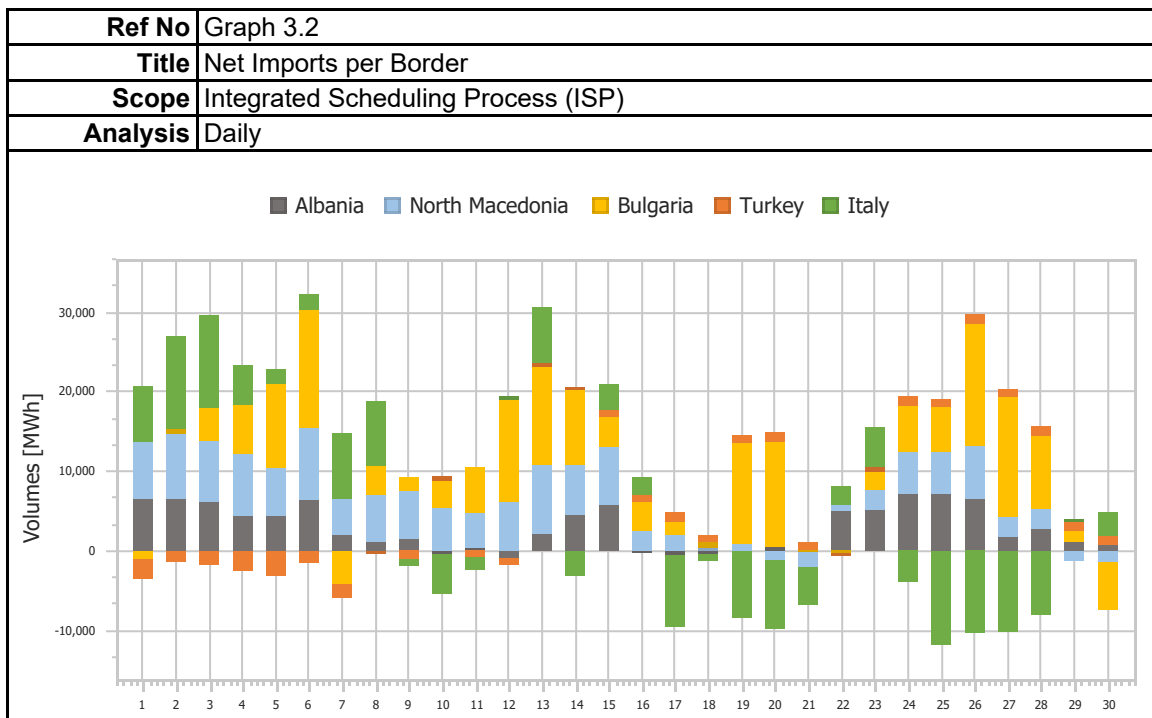
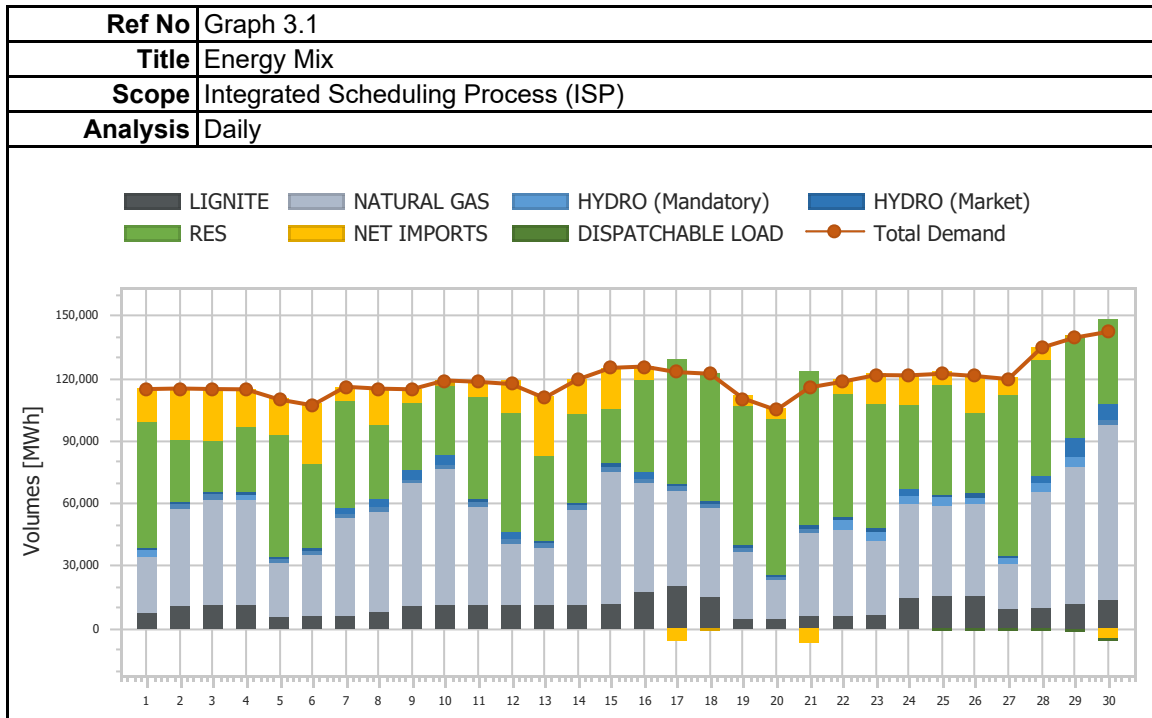
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Title	IDM Energy Mix Changes
Scope	Intra-Day Market Auction 2 (IDMA2)
Analysis	Daily



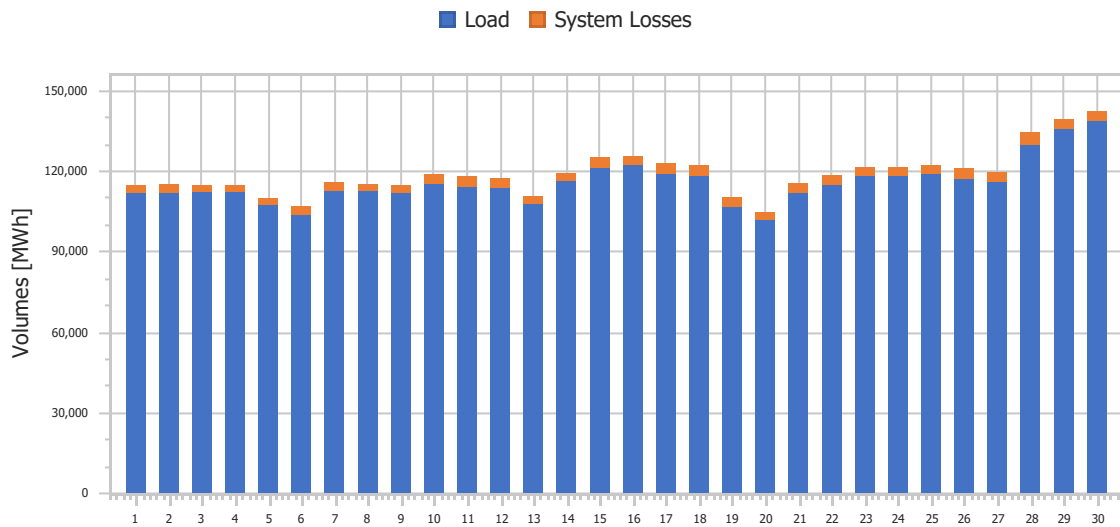
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Title	IDM Energy Mix Changes
Scope	Intra-Day Market Auction 3 (IDMA3)
Analysis	Daily



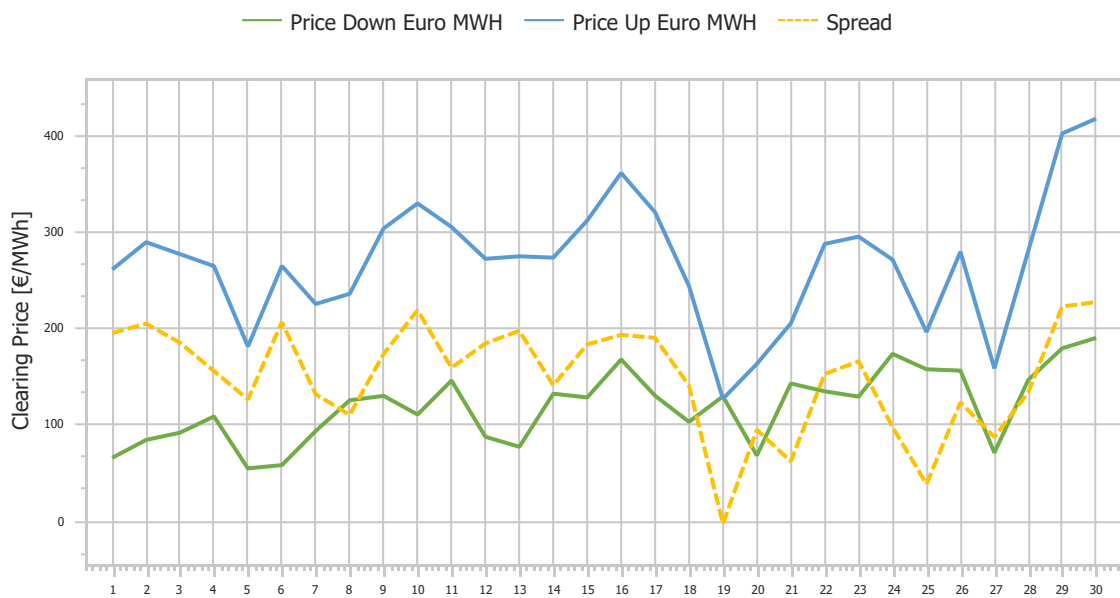
3. Integrated Scheduling Process (ISP)



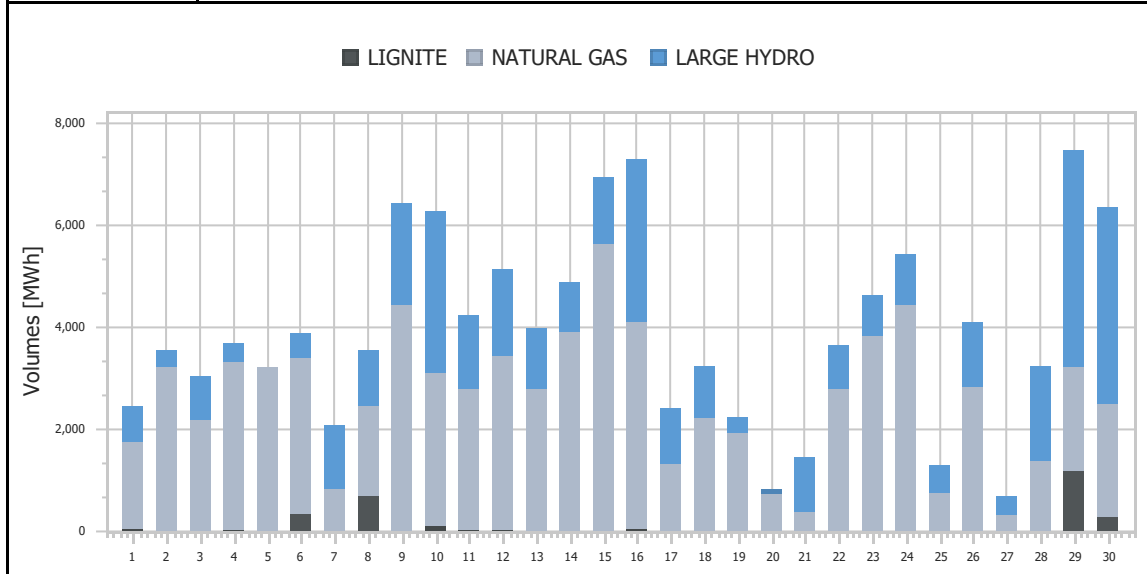
Ref No	Graph 3.3
Title	Demand & System Losses
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



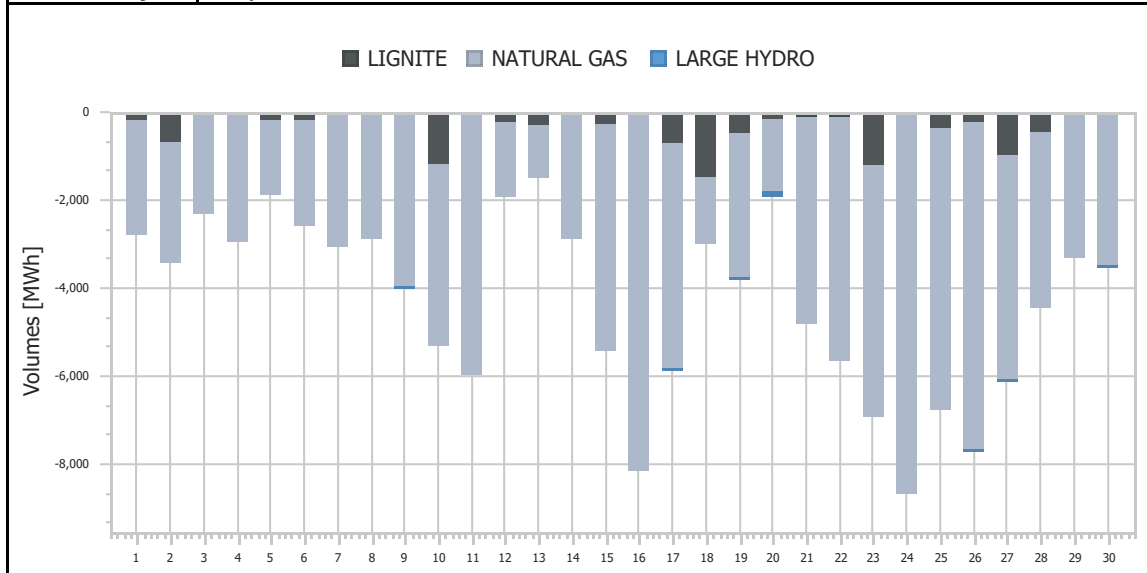
Ref No	Graph 3.4
Title	Clearing Prices
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



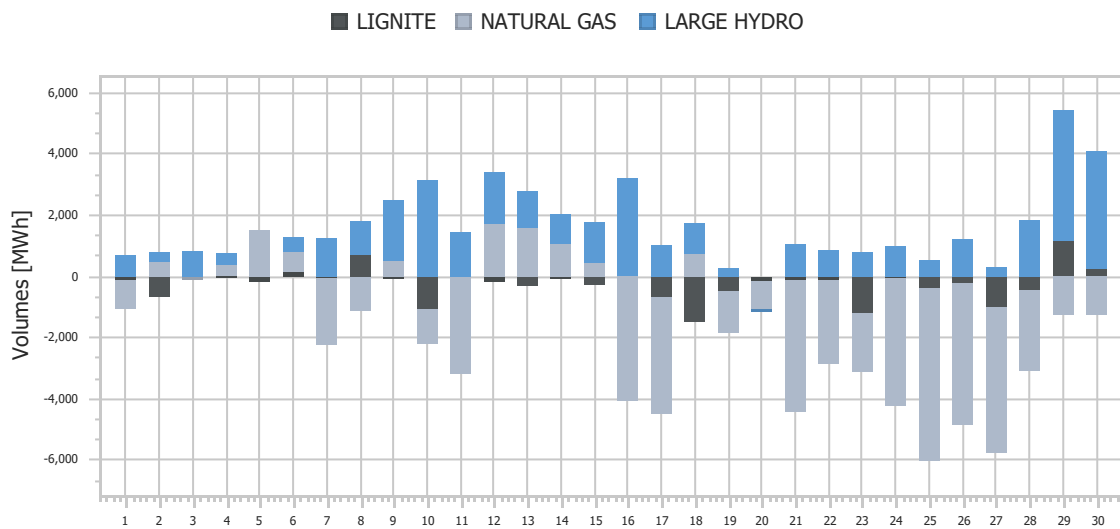
Ref No	Graph 3.5
Title	Upward Activated Balancing energy
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



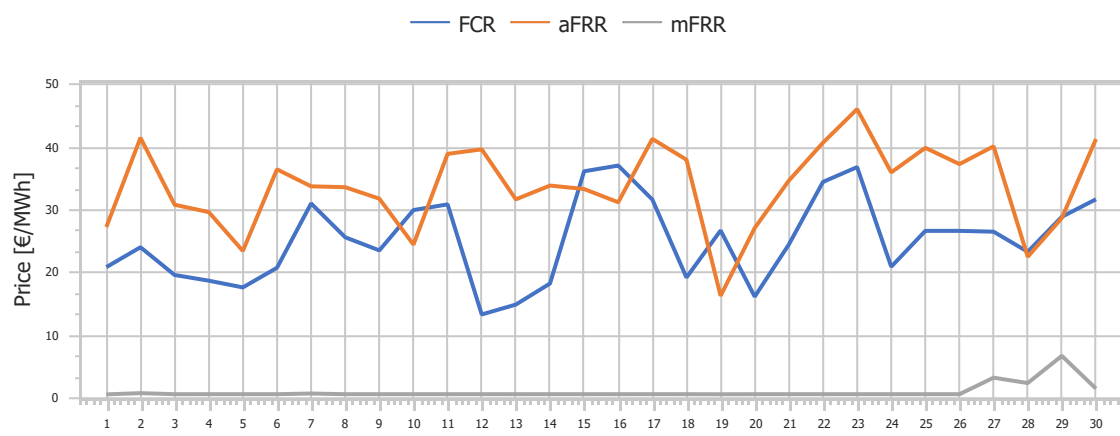
Ref No	Graph 3.6
Title	Downward Activated Balancing energy
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



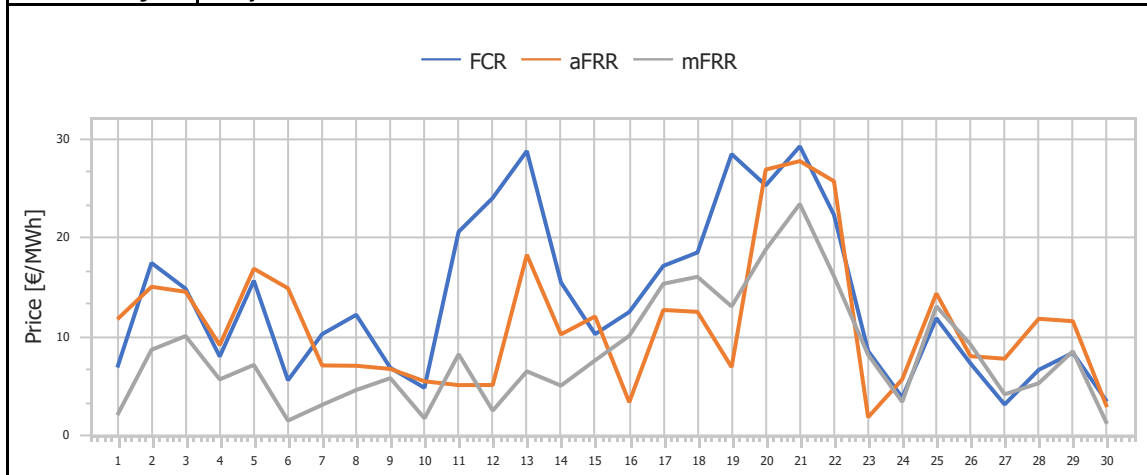
Ref No	Graph 3.7
Title	Net Activated Balancing energy
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



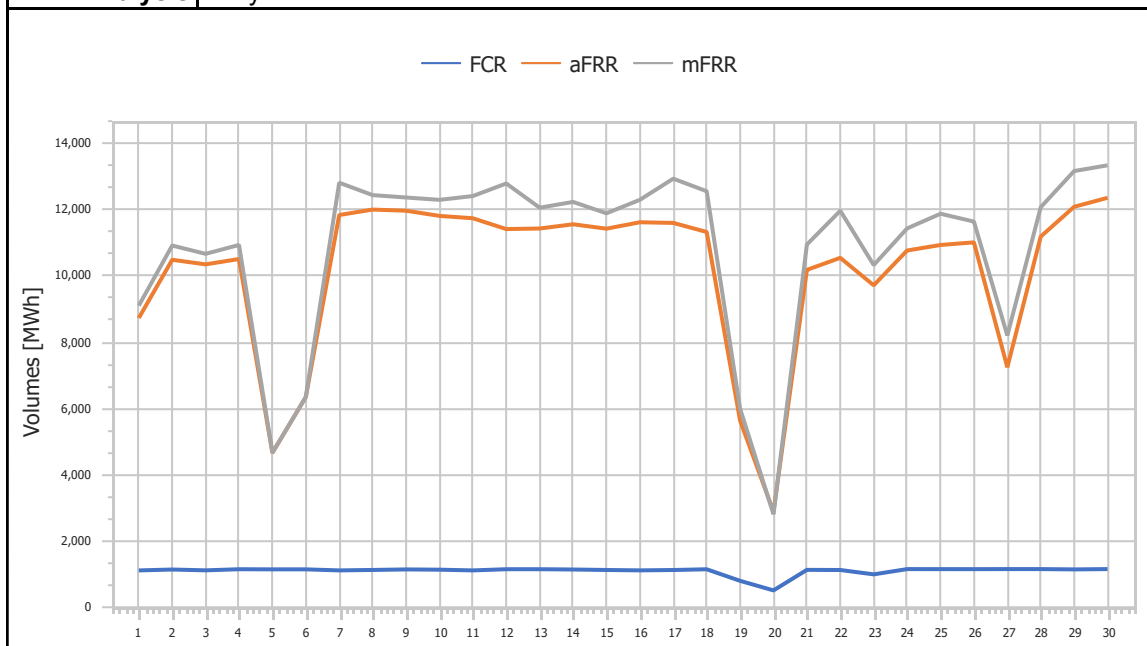
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Title	Upward Capacity Reserves Prices
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



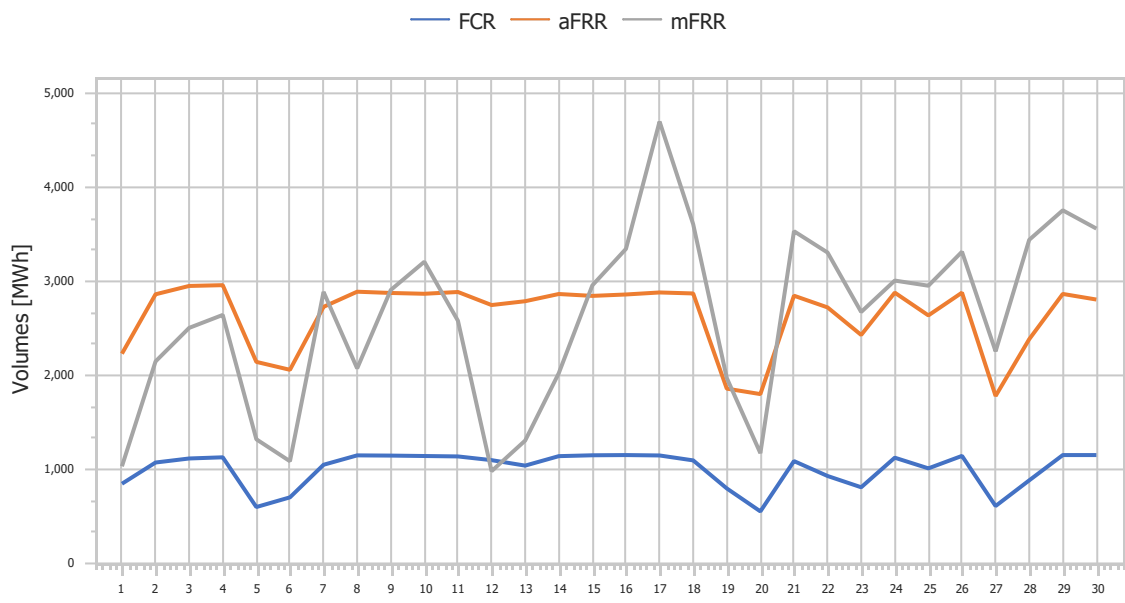
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Title	Downward Capacity Reserves Prices
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



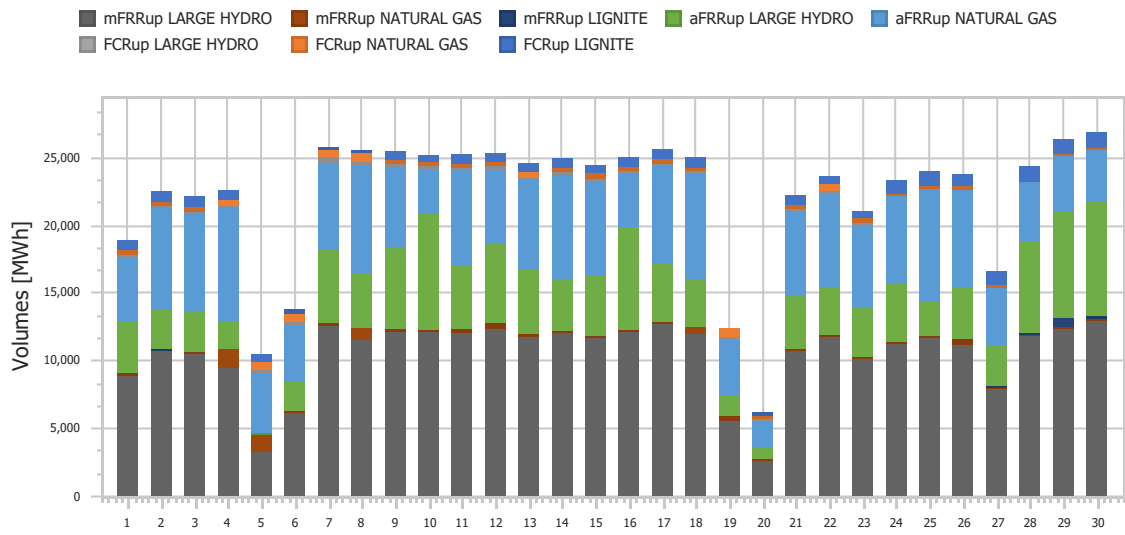
Ref No	Graph 3.10
Title	Upward Capacity Reserves Volumes
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



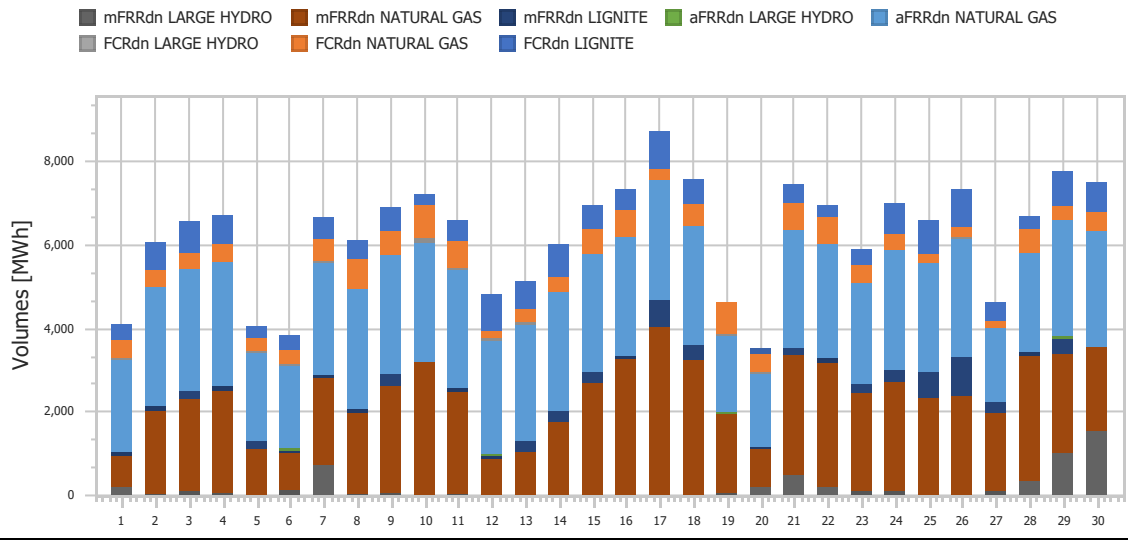
Ref No	Graph 3.11
Title	Downward Capacity Reserves Volumes
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



Ref No	Graph 3.12
Title	Upward Capacity Reserves Volumes per Technology
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily

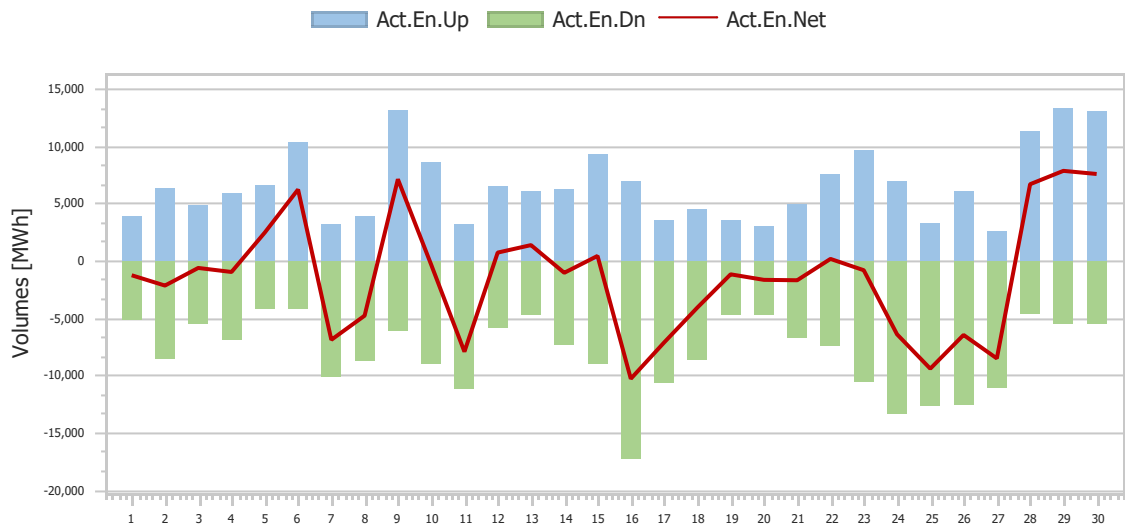


Ref No	Graph 3.13
Title	Downward Capacity Reserves Quantities per Type & Technology
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily

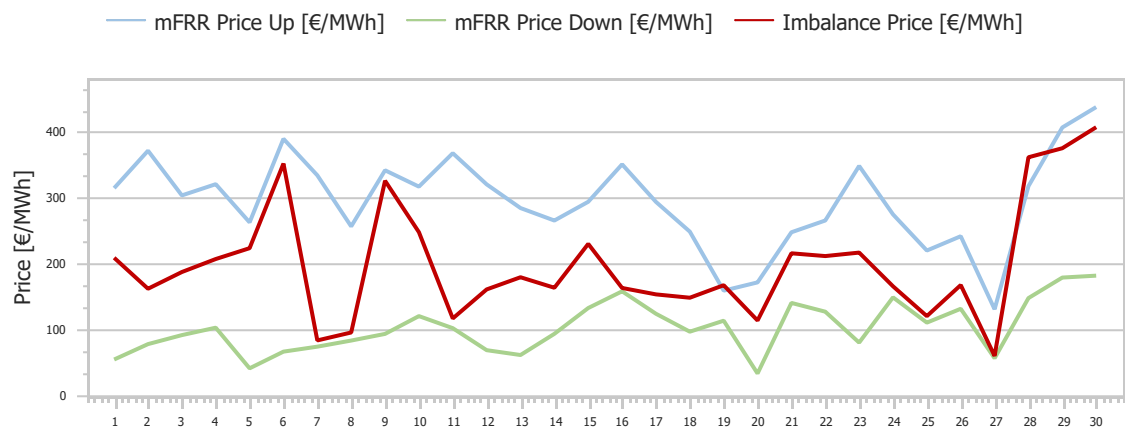


4. Imbalance Settlement Procedure

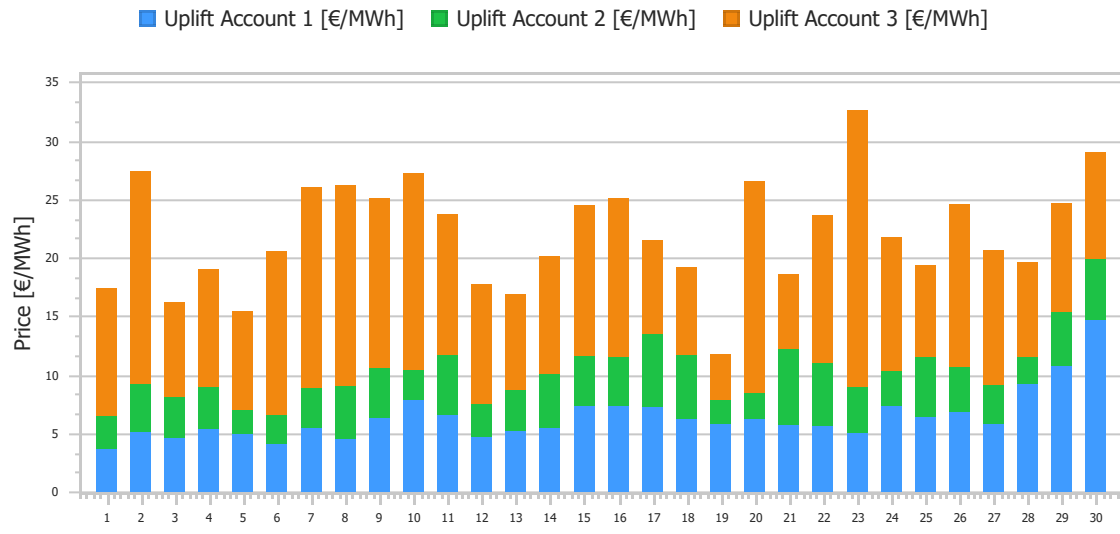
Ref No	Graph 4.1
Title	Activated Balancing Energy
Scope	Imbalance Settlement Procedure
Analysis	Daily



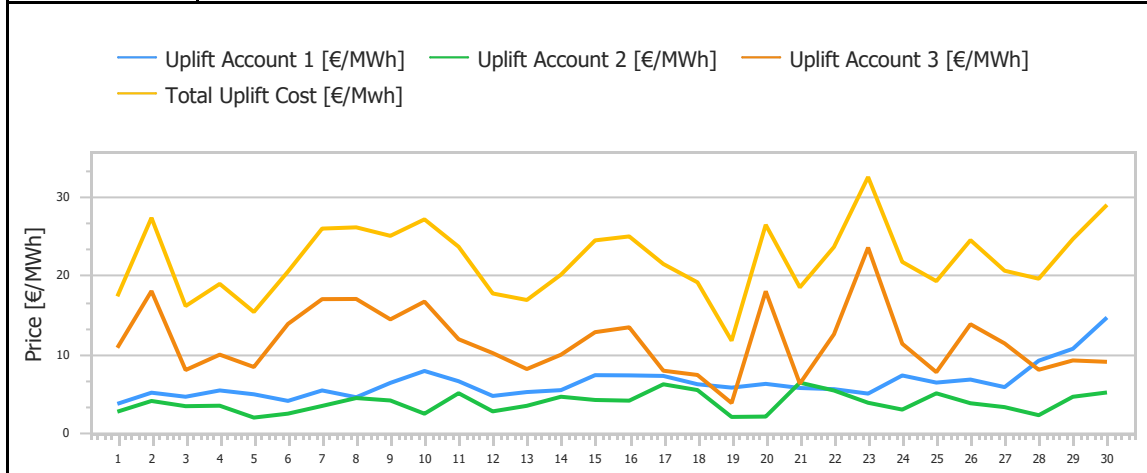
Ref No	Graph 4.2
Title	mFRR & Imbalance Prices
Scope	Imbalance Settlement Procedure
Analysis	Daily



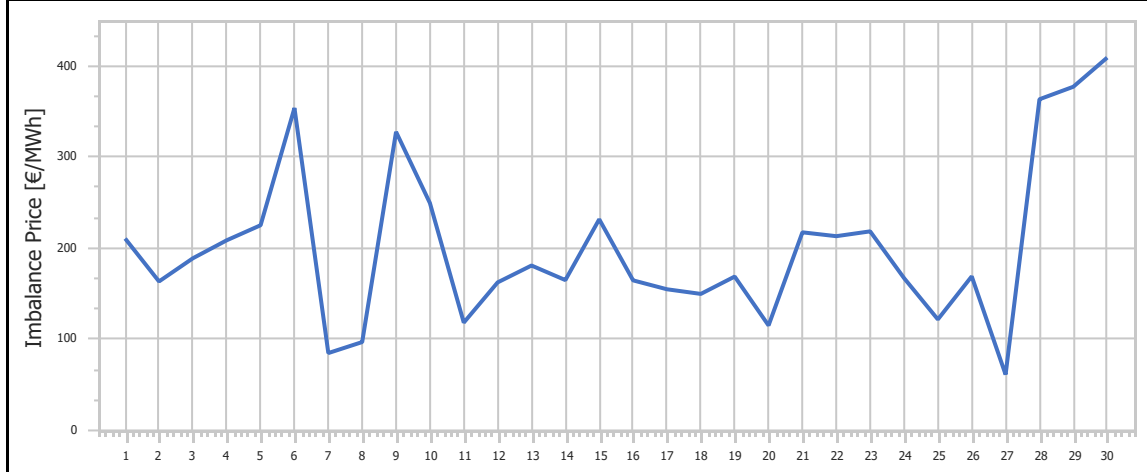
Ref No	Graph 4.3
Title	Uplift Accounts Cost
Scope	Imbalance Settlement Procedure
Analysis	Daily



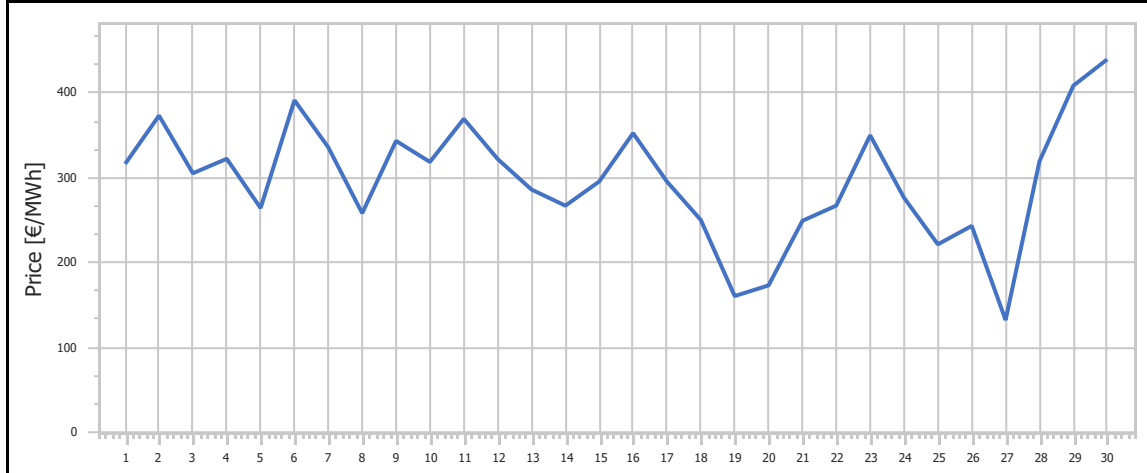
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Title	Uplift Accounts Cost
Scope	Imbalance Settlement Procedure
Analysis	Daily



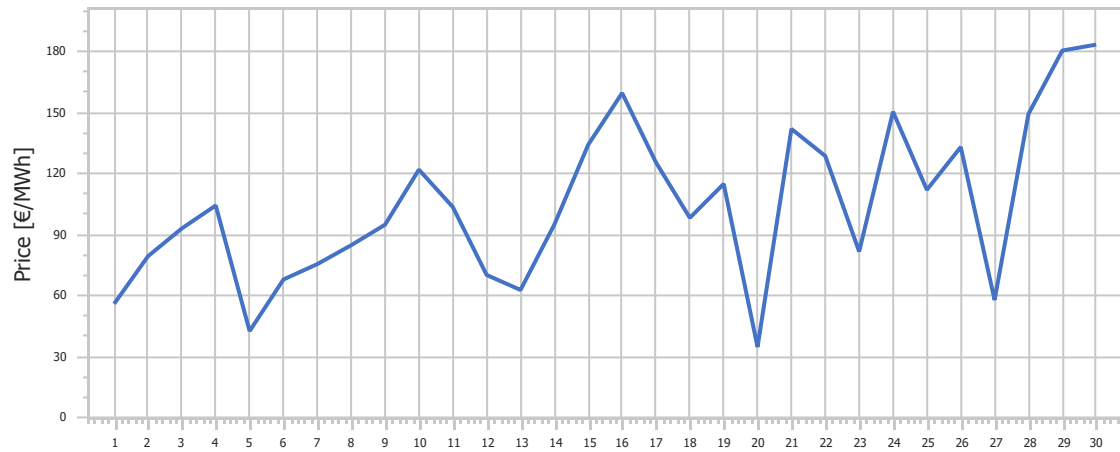
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Title	Imbalance Price
Scope	Imbalance Settlement Procedure
Analysis	Daily



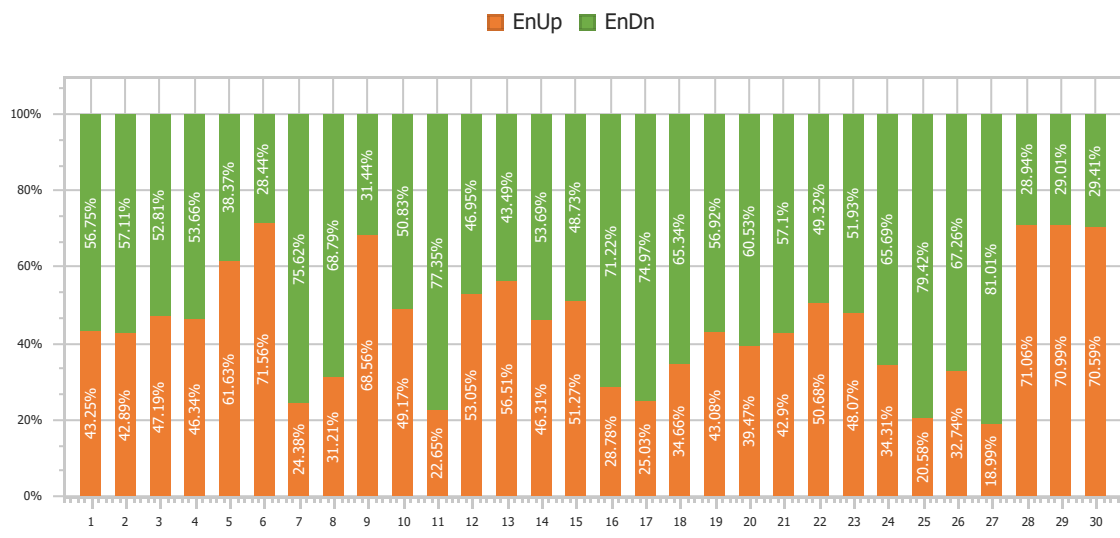
Ref No	Graph 4.6
Title	mFRR Up Price
Scope	Imbalance Settlement Procedure
Analysis	Daily



Ref No	Graph 4.7
Title	mFRR Down Price
Scope	Imbalance Settlement Procedure
Analysis	Daily

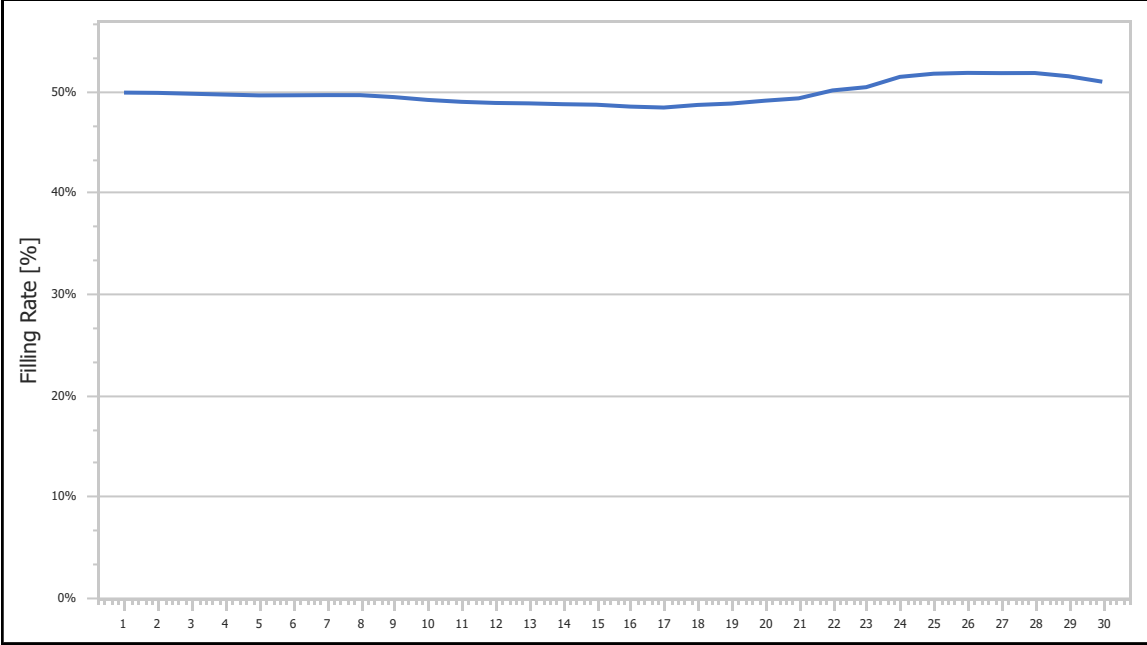


Ref No	Graph 4.8
Title	Balancing Energy Activation Direction
Scope	Imbalance Settlement Procedure
Analysis	Daily

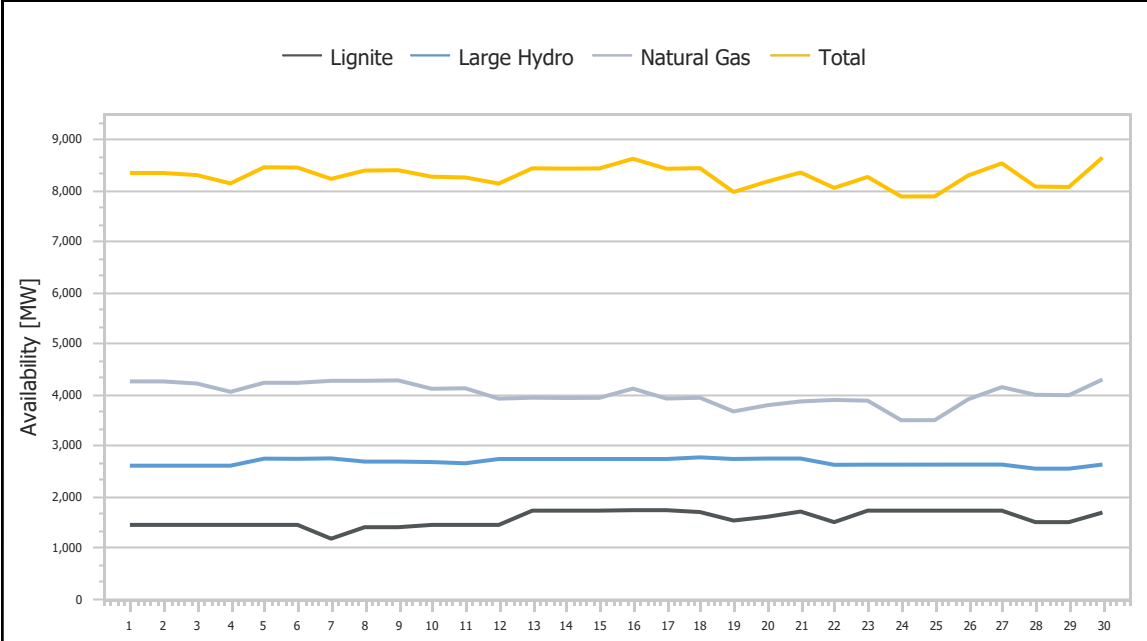


5. General Market Data

Ref No	Graph 5.1
Title	Reservoir Filling Rate
Scope	General Market Data
Analysis	Daily



Ref No	Graph 5.2
Title	Availability of Dispatchable Units per Type
Scope	General Market Data
Analysis	Daily



1. Statistics

Ref No	Table 1.1			
Title	Market Shares per Aggregated Classification - SELL			
Scope	Day Ahead Market (DAM)			
Analysis	Monthly			
Classification	Quantity [MWh]	Share [%]	Value [EUR]	Share [%]
Lignite	334,497.799	8.14%	79,761,525.13€	8.19%
Crete Conventional	91,677.900	2.23%	21,995,997.97€	2.26%
Natural Gas	1,322,388.408	32.18%	343,163,008.14€	35.24%
Large Hydro	108,465.393	2.64%	32,173,653.19€	3.30%
RES	1,367,457.086	33.28%	302,675,172.63€	31.09%
Crete Renewables	57,507.000	1.40%	13,030,029.33€	1.34%
Imports	826,869.430	20.12%	180,865,795.73€	18.58%
Total	4,108,863.017	100.00%	973,665,182.12€	100.00%

Ref No	Table 1.2								
Title	Statistics per Aggregated Classification - SELL								
Scope	Day Ahead Market (DAM)								
Analysis	Monthly								
	MCP [€/MWh]	Total [MWh]	Lignite [MWh]	CR Conv [MWh]	Natural Gas [MWh]	Hydro [MWh]	RES [MWh]	CR RES [MWh]	Imports [MWh]
Total	-	4,108,863.02	334,497.80	91,677.90	1,322,388.41	108,465.39	1,367,457.09	57,507.00	826,869.43
Average	227.75	136,962.10	11,149.93	3,055.93	44,079.61	3,615.51	45,581.90	1,916.90	27,562.31
Min	143.64	118,394.33	5,280.00	2,001.95	17,582.41	2,116.00	24,327.39	616.00	16,829.43
Min day	5	13	20	8	20	20	3	4	17
Max	377.94	161,675.95	21,757.00	3,556.00	82,541.15	9,623.10	70,532.90	3,372.00	40,972.70
Max day	30	30	17	17	30	29	20	8	6
Spread	234.30	43,281.62	16,477.00	1,554.05	64,958.74	7,507.10	46,205.51	2,756.00	24,143.27
Standard Deviation	54.74	10,103.63	4,024.98	457.69	14,195.09	1,606.63	12,742.11	708.23	5,837.83

Ref No	Table 1.3			
Title	Market Shares per Aggregated Classification - BUY			
Scope	Day Ahead Market (DAM)			
Analysis	Monthly			
Classification	Quantity [MWh]	Share [%]	Value [EUR]	Share [%]
System Losses	98,696.000	2.40%	23,470,814.66€	2.41%
Crete Load	195,387.000	4.76%	46,277,963.80€	4.75%
HV Load	625,481.616	15.22%	140,960,063.58€	14.48%
MV Load	809,047.975	19.69%	191,563,273.07€	19.67%
LV Load	1,970,448.555	47.96%	474,797,985.23€	48.76%
PUMP	4,827.704	0.12%	824,747.86€	0.08%
Exports	404,974.150	9.86%	95,770,306.31€	9.84%
Total	4,108,862.996	100.00%	973,665,154.49€	100.00%

Ref No	Table 1.4								
Title	Statistics per Aggregated Classification - BUY								
Scope	Day Ahead Market (DAM)								
Analysis	Monthly								
	MCP [€/MWh]	Total [MWh]	Sys Losses [MWh]	CR Load [MWh]	HV [MWh]	MV [MWh]	LV [MWh]	PUMP [MWh]	Exports [MWh]
Total	-	4,108,863.00	98,696.00	195,387.00	625,481.62	809,047.98	1,970,448.56	4,827.70	404,974.15
Average	227.75	136,962.10	3,289.87	6,512.90	20,849.39	26,968.27	65,681.62	536.41	13,499.14
Min	143.64	118,394.31	2,339.50	5,814.00	20,110.29	18,548.50	58,541.85	182.08	4,933.79
Min day	5	13	5	20	3	20	5	6	13
Max	377.94	161,675.91	4,710.50	7,788.00	22,480.99	30,854.29	79,146.71	1,160.00	20,621.00
Max day	30	30	28	30	19	29	29	29	21
Spread	234.30	43,281.60	2,371.00	1,974.00	2,370.69	12,305.79	20,604.86	977.92	15,687.21
Standard Deviation	54.74	10,103.64	553.18	416.45	749.98	3,465.83	5,591.61	321.53	4,169.68

2. Market Shares

Ref No	Table 2.1.1			
Title	Market Shares - Upward Capacity Reserves Volumes per Type			
Scope	Balancing Market (BM)			
Analysis	Monthly			
Type	Quantity [MW]	Share [%]	Value [EUR]	Share [%]
aFRR	1,175,302.060	73.90%	9,593,653.79€	86.62%
FCR	122,541.370	7.70%	1,254,168.79€	11.32%
mFRR	292,658.400	18.40%	228,375.13€	2.06%
Total	1,590,501.830	100.00%	11,076,197.72€	100.00%

Ref No	Table 2.1.2			
Title	Market Shares - Downward Capacity Reserves per Type			
Scope	Balancing Market(BM)			
Analysis	Monthly			
Type	Quantity [MW]	Share [%]	Value [EUR]	Share [%]
aFRR	310,362.740	42.58%	1,257,922.22€	44.09%
FCR	117,114.110	16.07%	646,273.75€	22.65%
mFRR	301,474.680	41.36%	949,157.41€	33.26%
Total	728,951.520	100.00%	2,853,353.38€	100.00%

Ref No	Table 2.1.3			
Title	Market Shares - Upward Activated Balancing Energy per Type			
Scope	Balancing Market (BM)			
Analysis	Monthly			
Type	Quantity [MWh]	Share [%]	Value [EUR]	Share [%]
aFRR	66,105.220	32.66%	25,065,438.90€	32.67%
mFRR	136,286.820	67.34%	51,663,293.88€	67.33%
Total	202,392.040	100.00%	76,728,732.78€	100.00%

Ref No	Table 2.1.4			
Title	Market Shares - Downward Activated Balancing Energy per Type			
Scope	Balancing Market (BM)			
Analysis	Monthly			
Type	Quantity [MWh]	Share [%]	Value [EUR]	Share [%]
aFRR	48,951.810	19.93%	3,606,210.94€	14.76%
mFRR	196,655.210	80.07%	20,833,837.08€	85.24%
Total	245,607.030	100.00%	24,440,048.02€	100.00%

3. Market Overview

Ref No	Table 3.1
Title	Total Transactions Quantity per Market
Scope	DAM, IDM, Balancing Energy Market
Analysis	Monthly

Market	Quantity [MWh]	Share [%]
DAM	4,108,863.02	97.51%
IDMA1	59,665.89	1.42%
IDMA2	59,259.89	1.41%
IDMA3	29,393.67	0.70%
IDM (Total)	148,319.45	3.52%
Balancing Energy (Up)	202,392.04	4.80%
Balancing Energy (Dn)	245,607.03	5.83%
Balancing Energy (Total)	-43,214.99	-1.03%
Total	4,213,967.48	100.00%

Ref No	Table 3.2
Title	Total Transactions Value per Market
Scope	DAM, IDM, Balancing Energy Market
Analysis	Monthly

Market	Value [EUR]	Share [%]
DAM	973,665,182.12€	90.63%
IDMA1	13,674,400.45€	1.27%
IDMA2	13,639,360.20€	1.27%
IDMA3	7,185,659.36€	0.67%
IDM (Total)	34,499,420.01€	3.21%
Balancing Capacity (Up)	11,076,197.72€	1.03%
Balancing Capacity (Dn)	2,853,353.38€	0.27%
Balancing Capacity (Total)	13,929,551.09€	1.30%
Balancing Energy (Up)	76,728,732.78€	7.14%
Balancing Energy (Dn)	24,440,048.02€	2.27%
Balancing Energy (Total)	52,288,684.76€	4.87%
Balancing Market (Total)	66,218,235.85€	6.16%
Total	1,074,382,837.98€	100.00%