

Market Monitoring Report

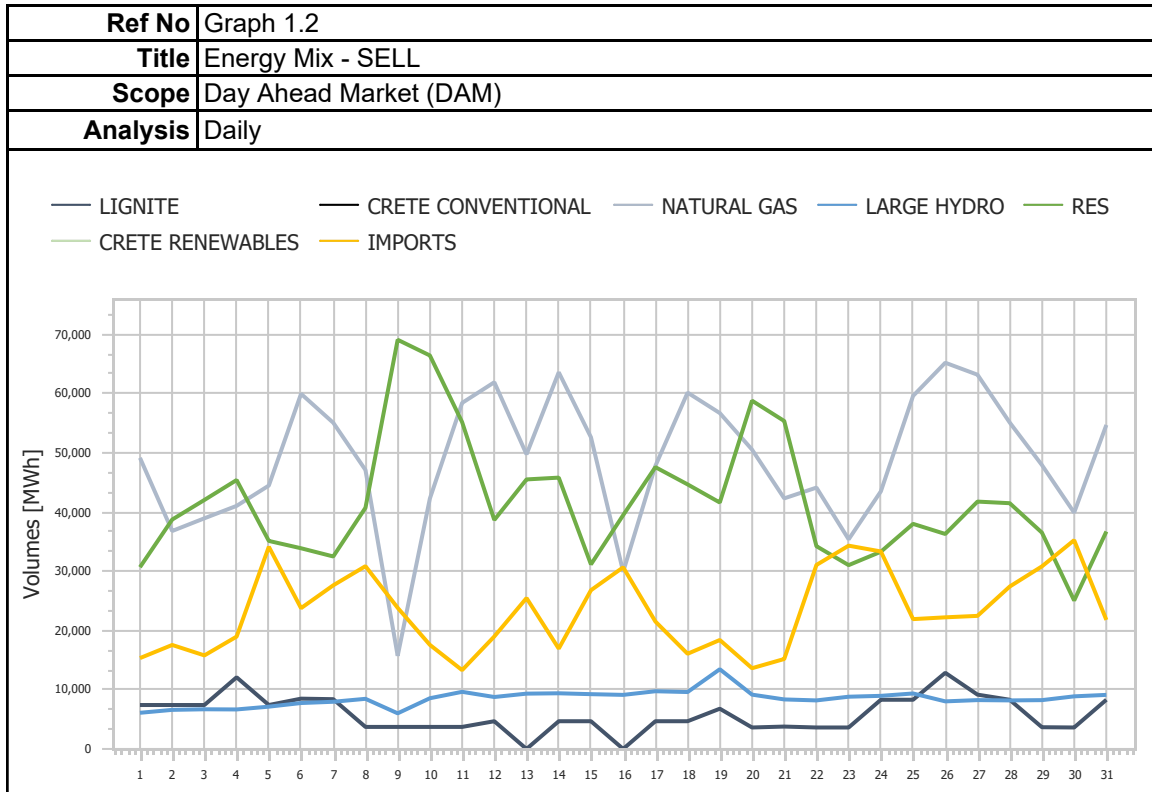
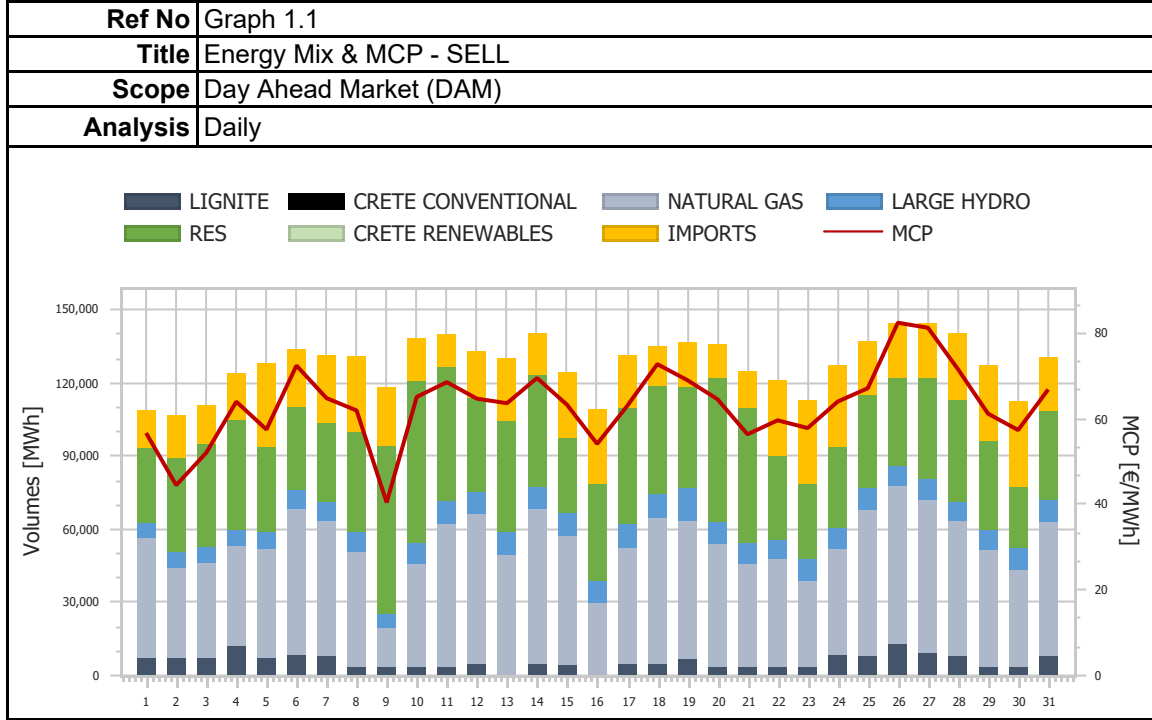
Monthly - Public - 2

05-2021

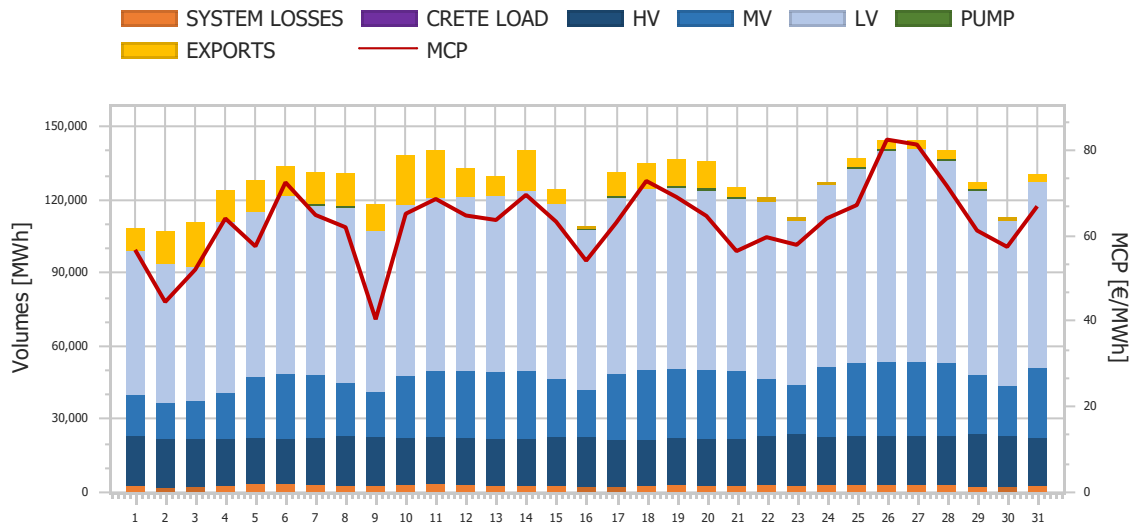


ΡΥΘΜΙΣΤΙΚΗ ΑΡΧΗ ΕΝΕΡΓΕΙΑΣ
REGULATORY AUTHORITY FOR ENERGY

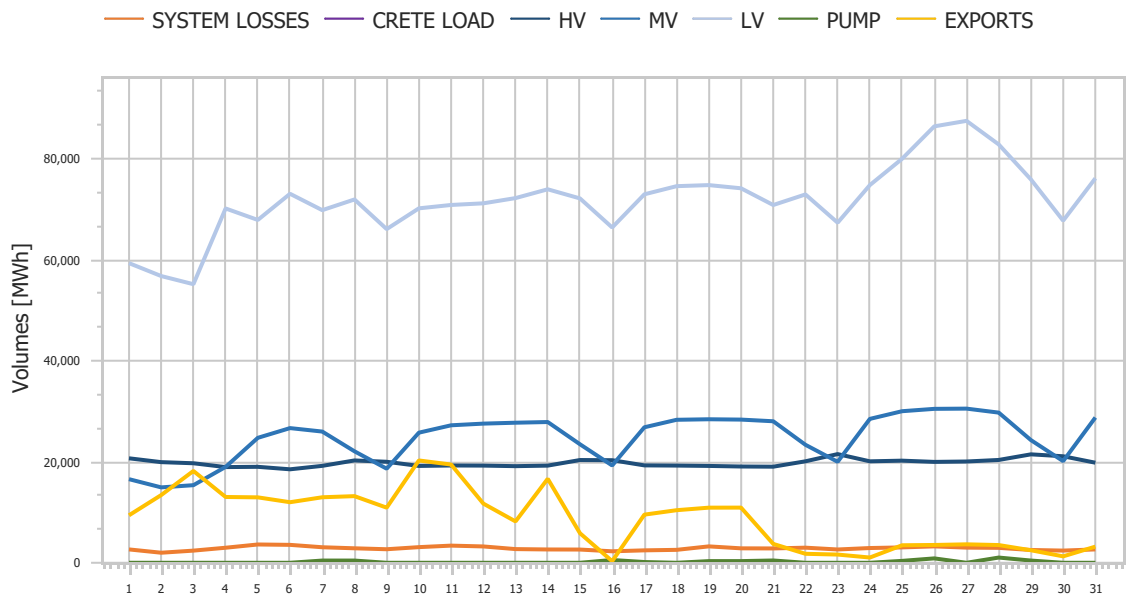
1. Day Ahead Market (DAM)



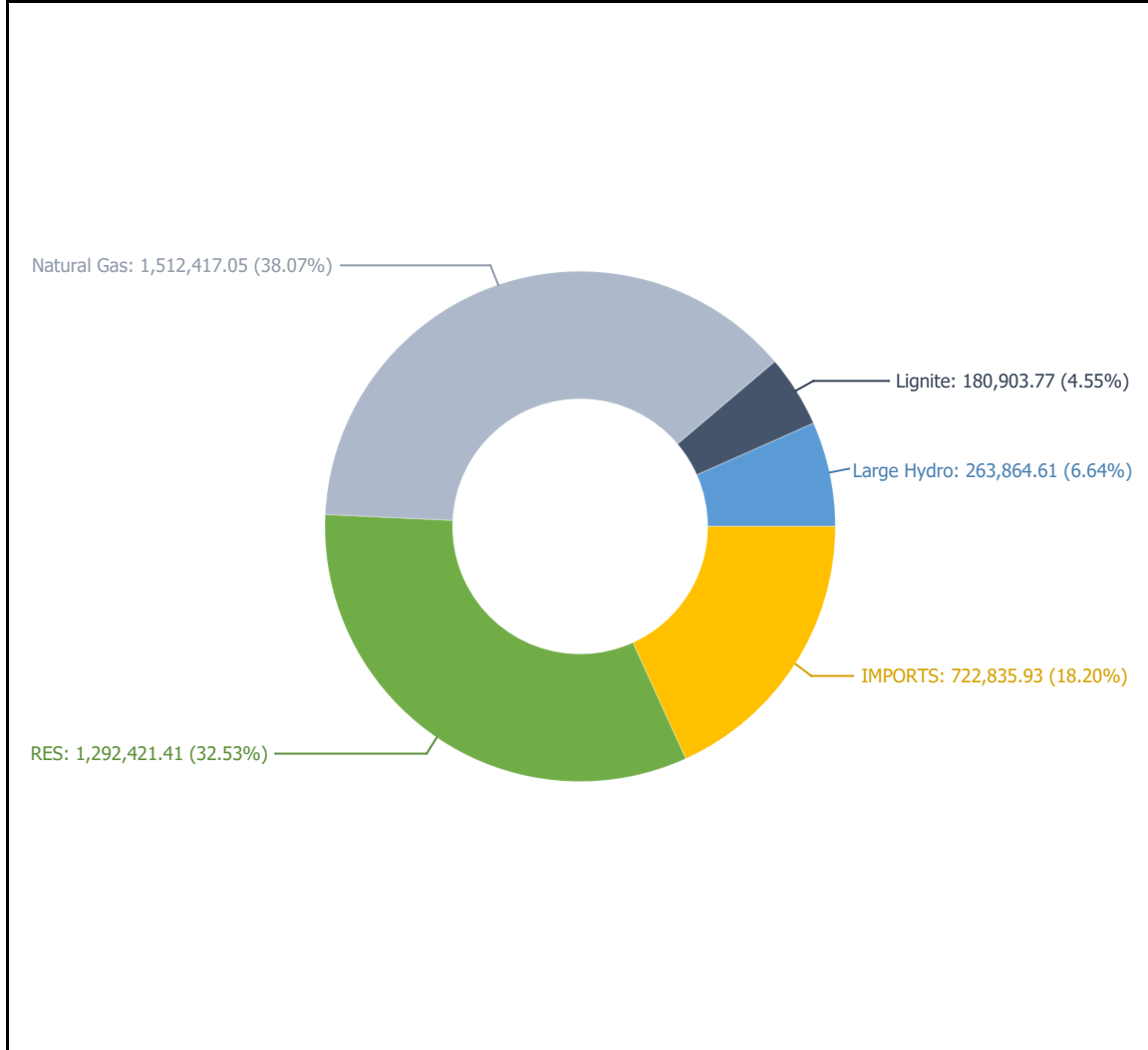
Ref No	Graph 1.3
Title	Energy Mix & MCP - BUY
Scope	Day Ahead Market (DAM)
Analysis	Daily



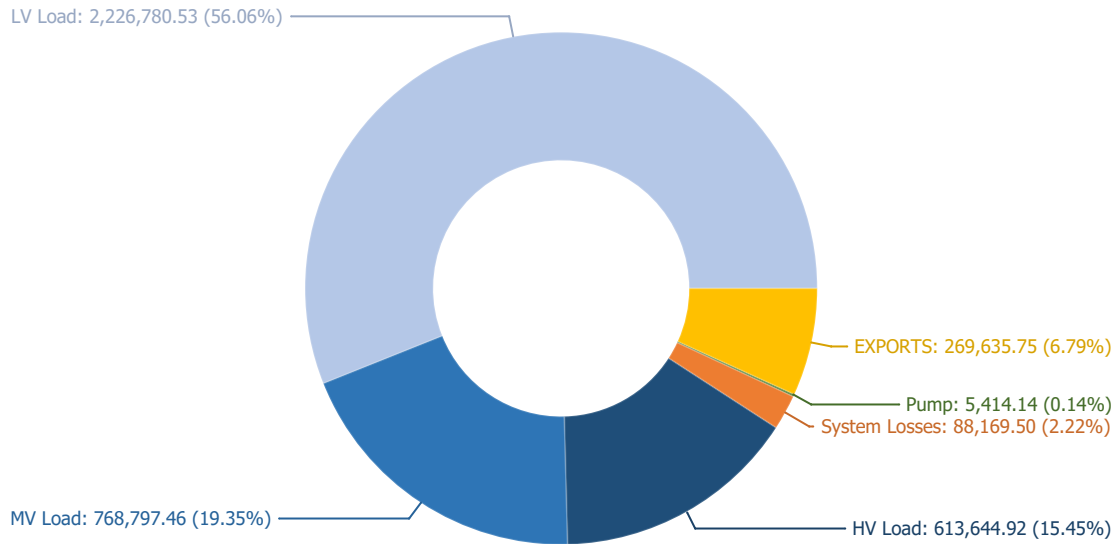
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Title	Energy Mix - BUY
Scope	Day Ahead Market (DAM)
Analysis	Daily



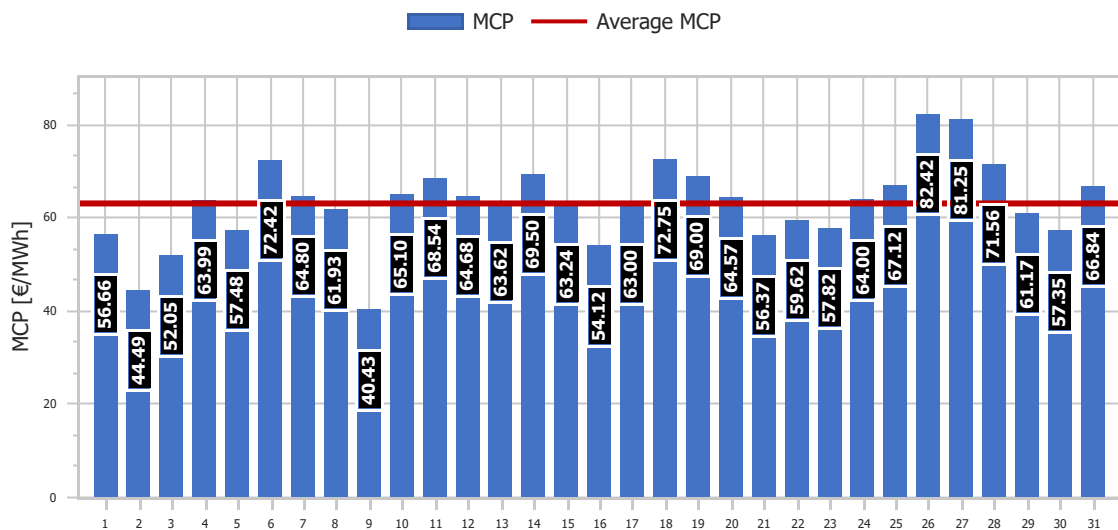
Ref No	Graph 1.5
Title	Energy Mix - SELL
Scope	Day Ahead Market (DAM)
Analysis	Daily



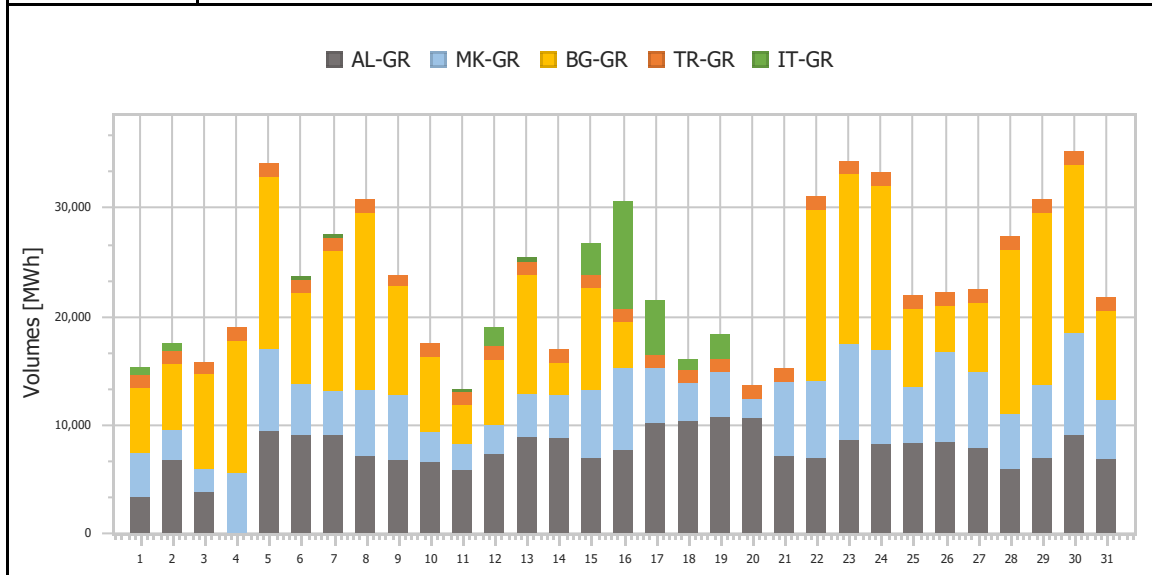
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Title	Energy Mix - BUY
Scope	Day Ahead Market (DAM)
Analysis	Daily



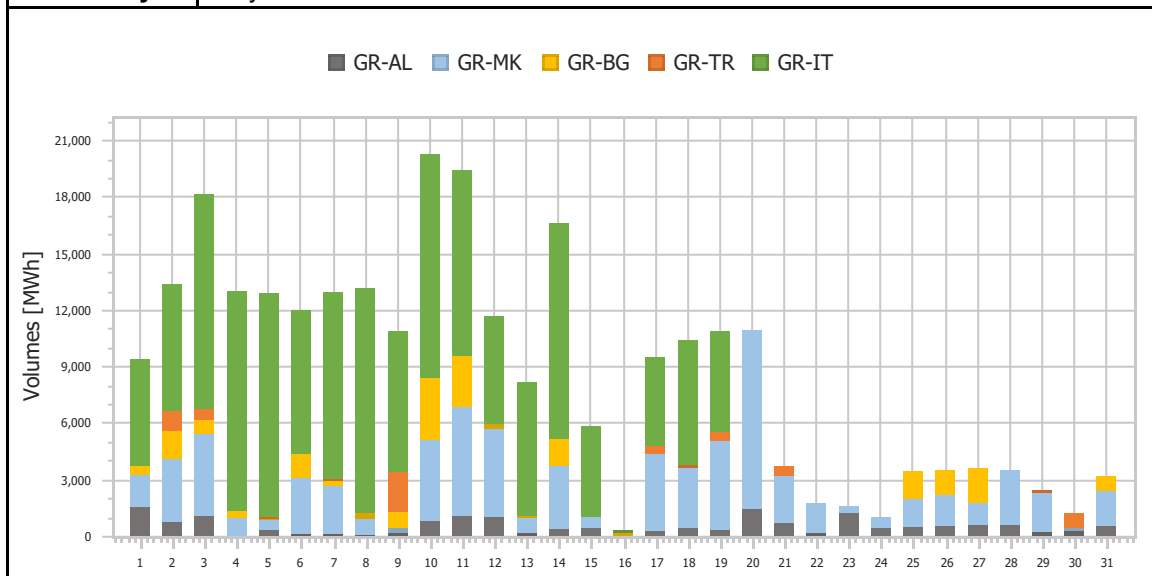
Ref No	Graph 1.7
Title	Market Clearing Price (MCP)
Scope	Day Ahead Market (DAM)
Analysis	Daily



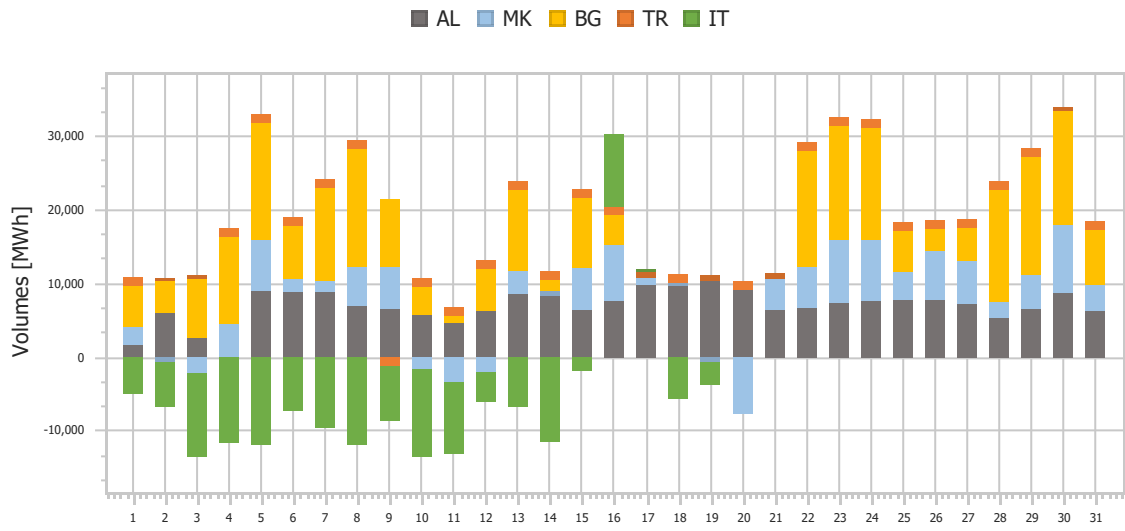
Ref No	Graph 1.8
Title	Imports per Border
Scope	Day Ahead Market (DAM)
Analysis	Daily



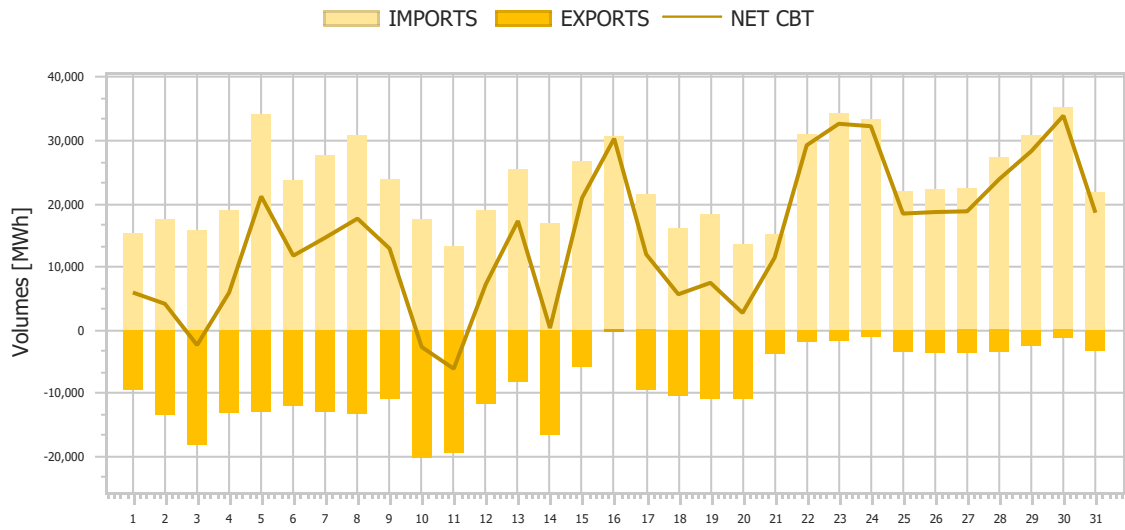
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Title	Exports per Border
Scope	Day Ahead Market (DAM)
Analysis	Daily



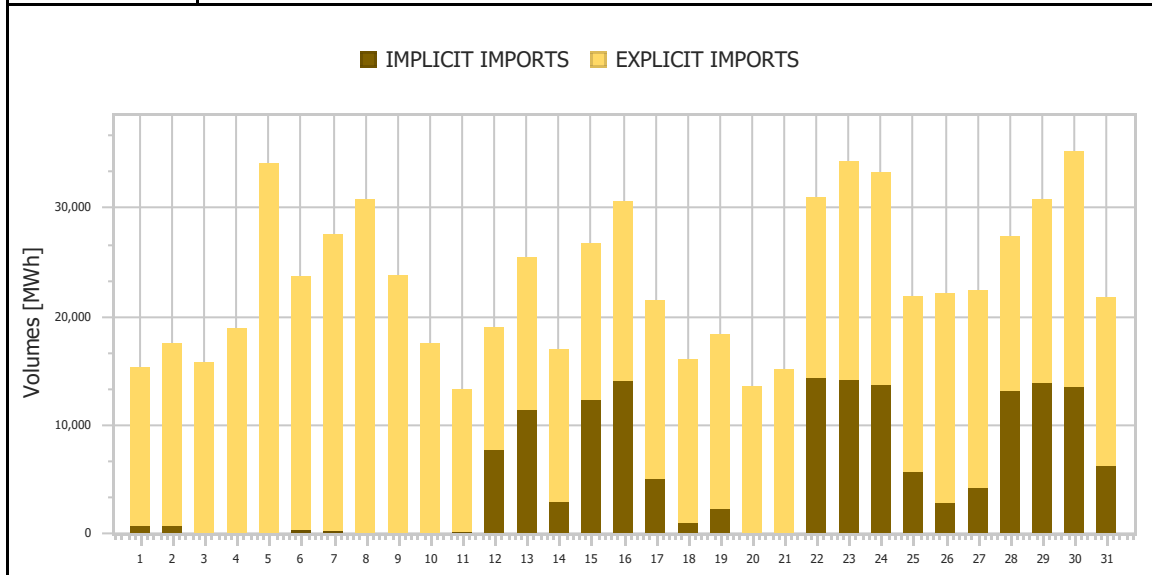
Ref No	Graph 1.10
Title	Net Imports per Border
Scope	Day Ahead Market (DAM)
Analysis	Daily



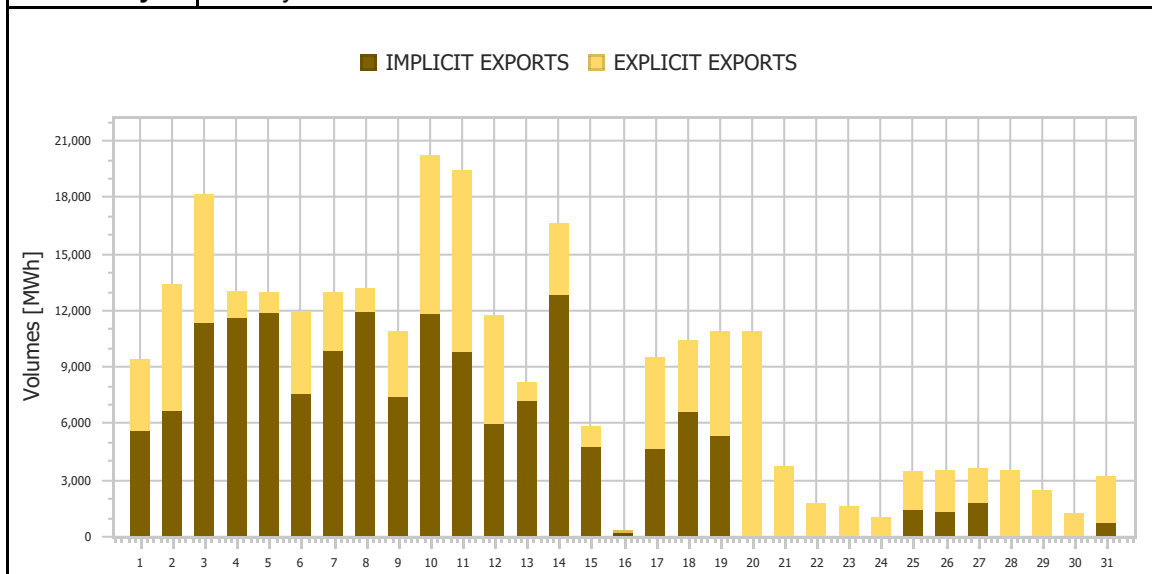
Ref No	Graph 1.11
Title	Total Imports & Exports
Scope	Day Ahead Market (DAM)
Analysis	Daily



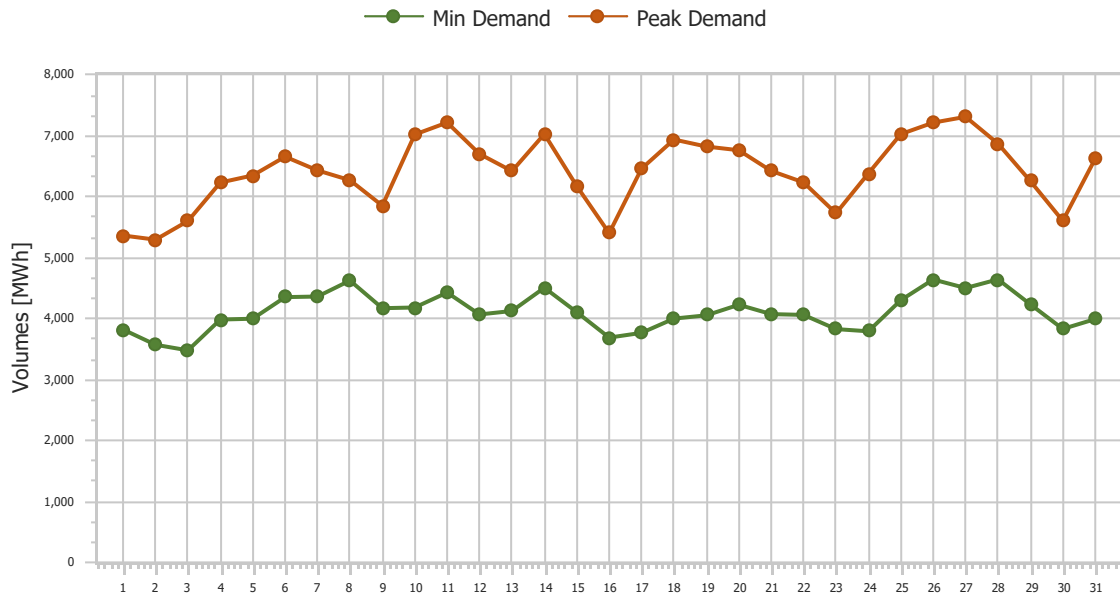
Ref No	Graph 1.12
Title	Imports (Implicit/Explicit)
Scope	Day Ahead Market (DAM)
Analysis	Daily



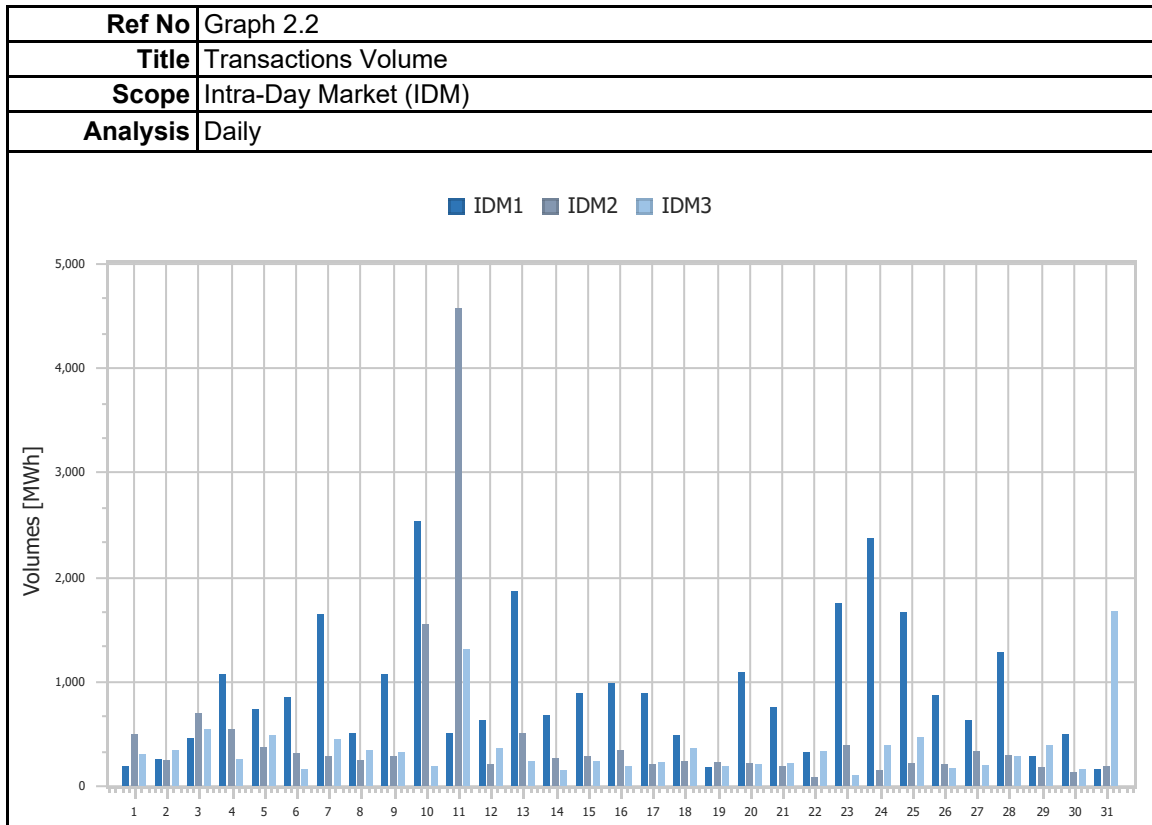
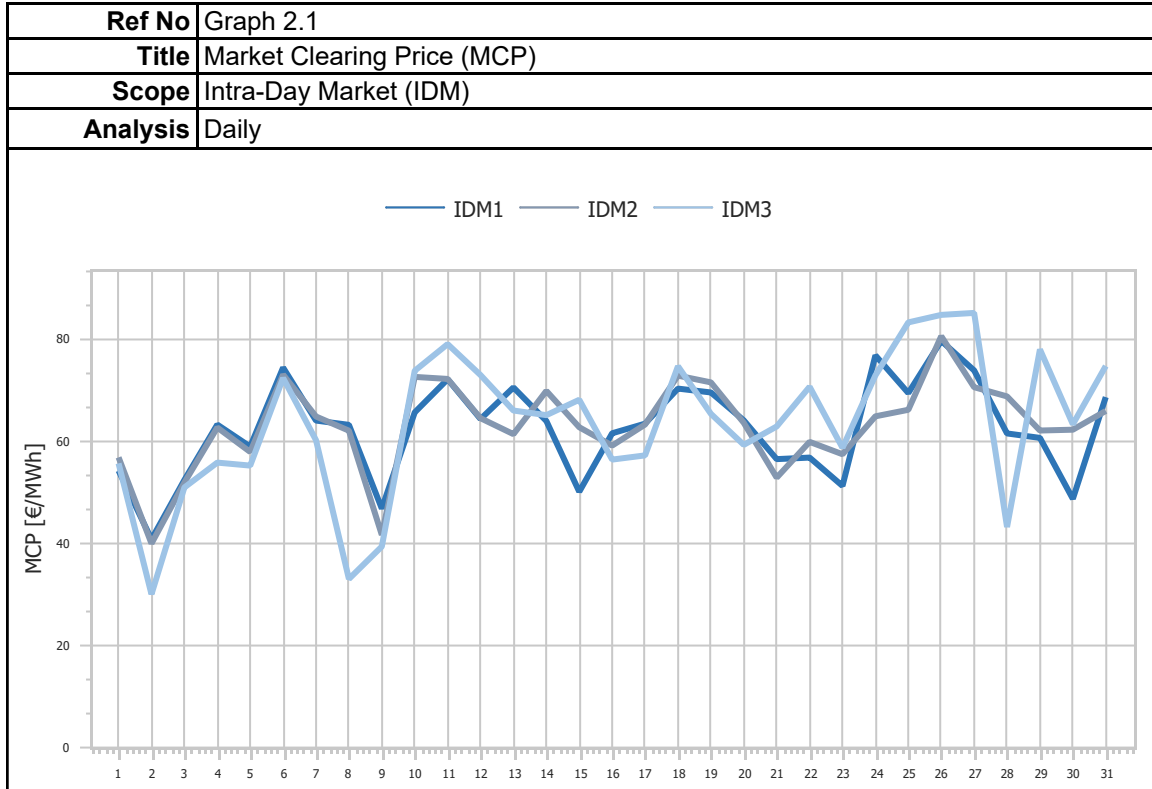
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Title	Exports (Implicit/Explicit)
Scope	Day Ahead Market (DAM)
Analysis	Monthly

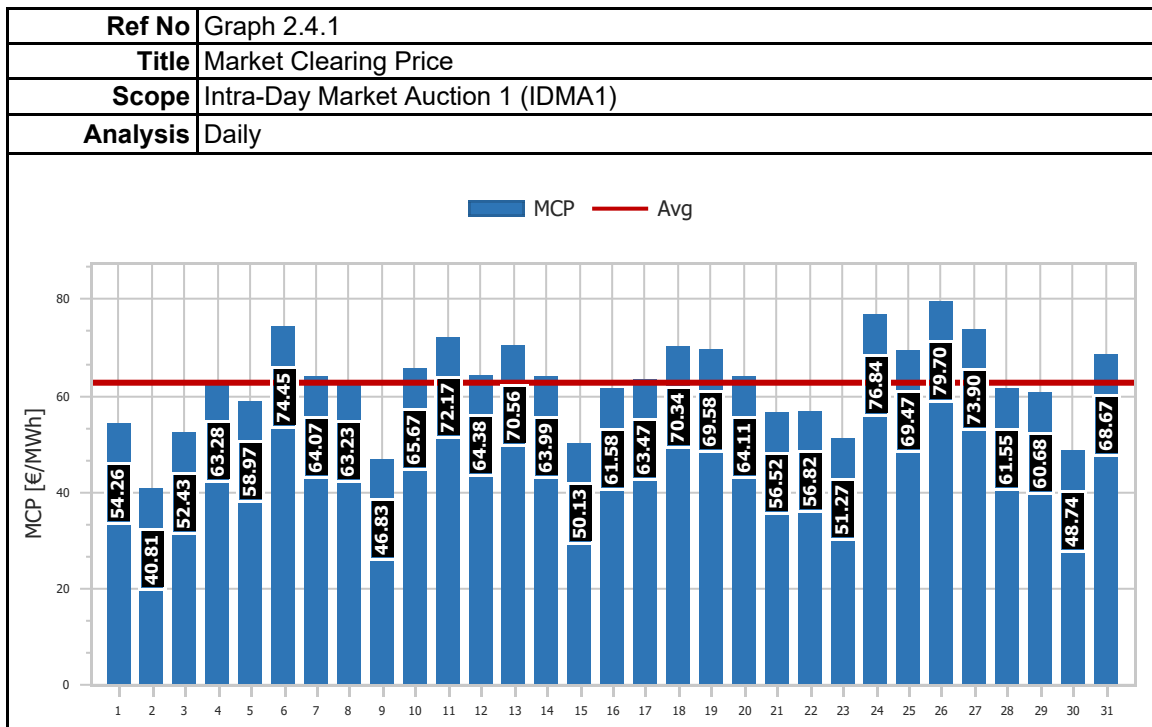
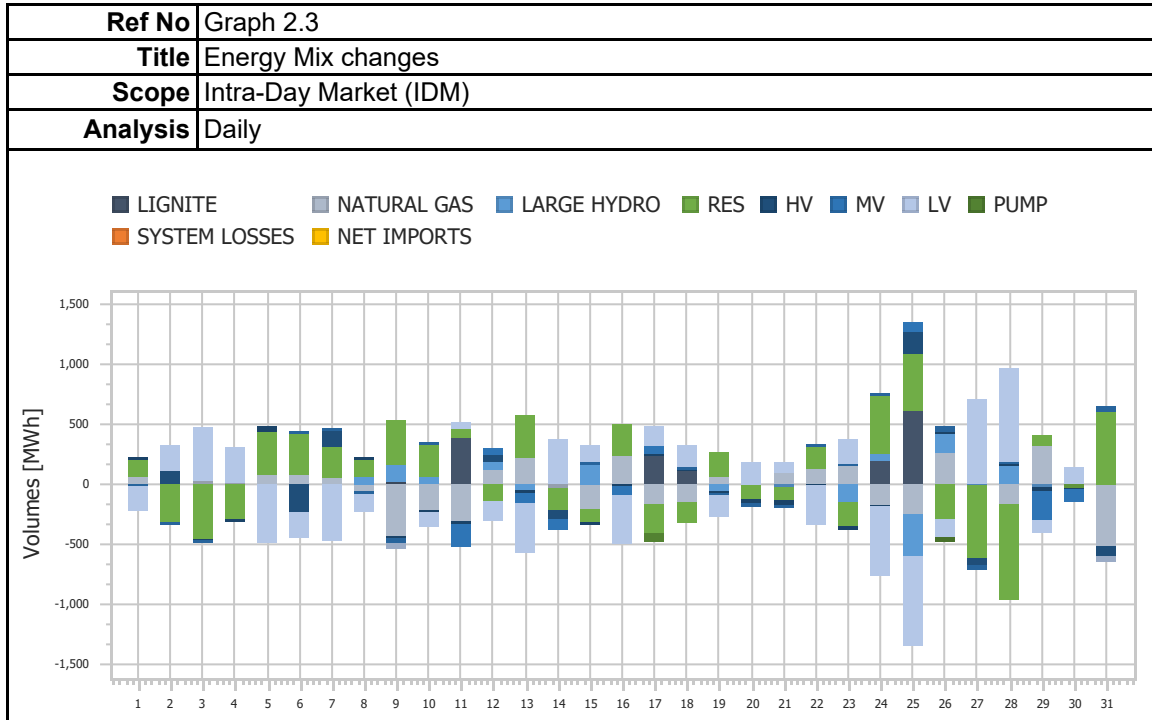


Ref No	Graph 1.14
Title	Min & Peak Demand
Scope	Day Ahead Market (DAM)
Analysis	Daily

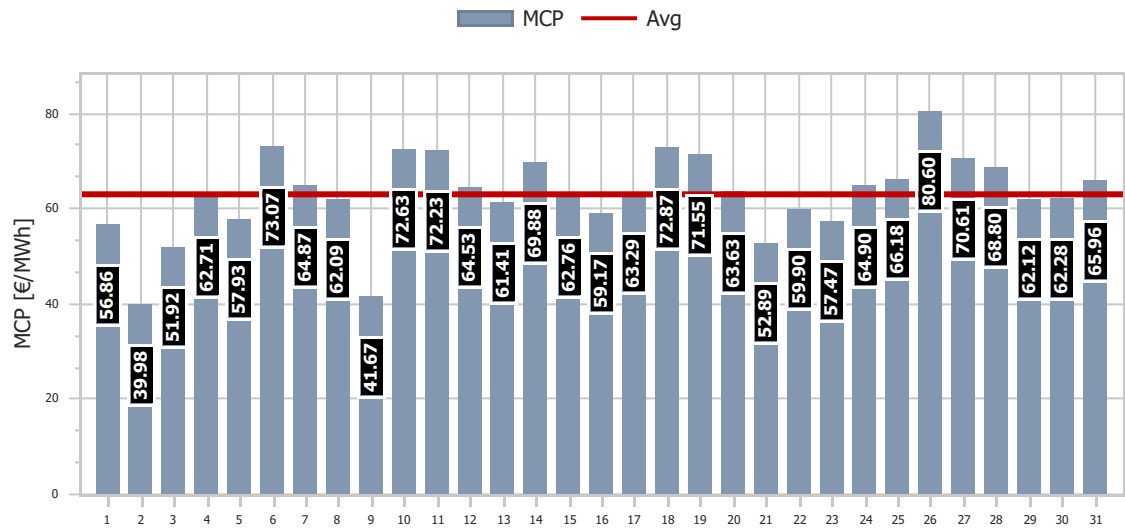


2. Intra-Day Market (IDM)

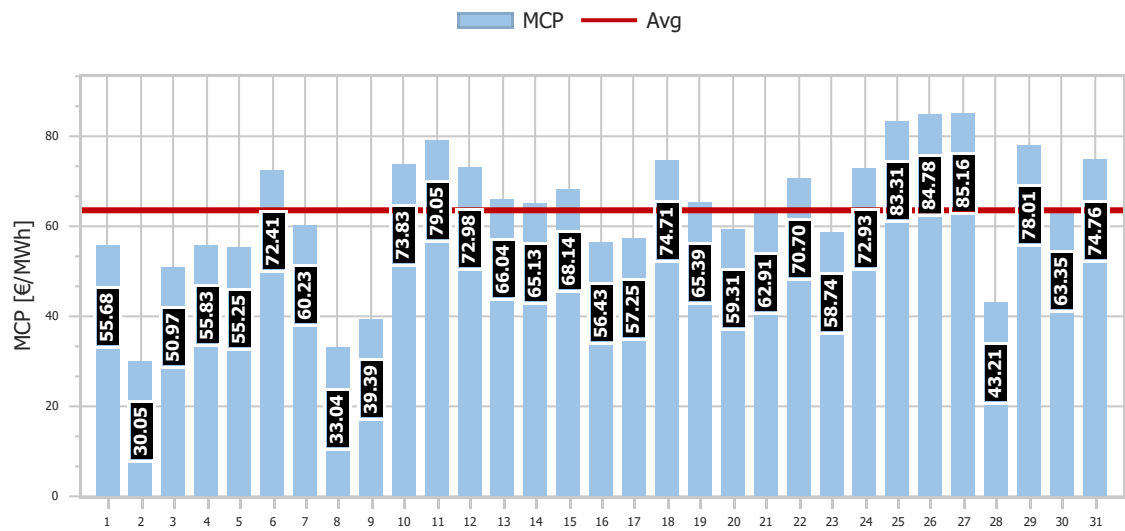


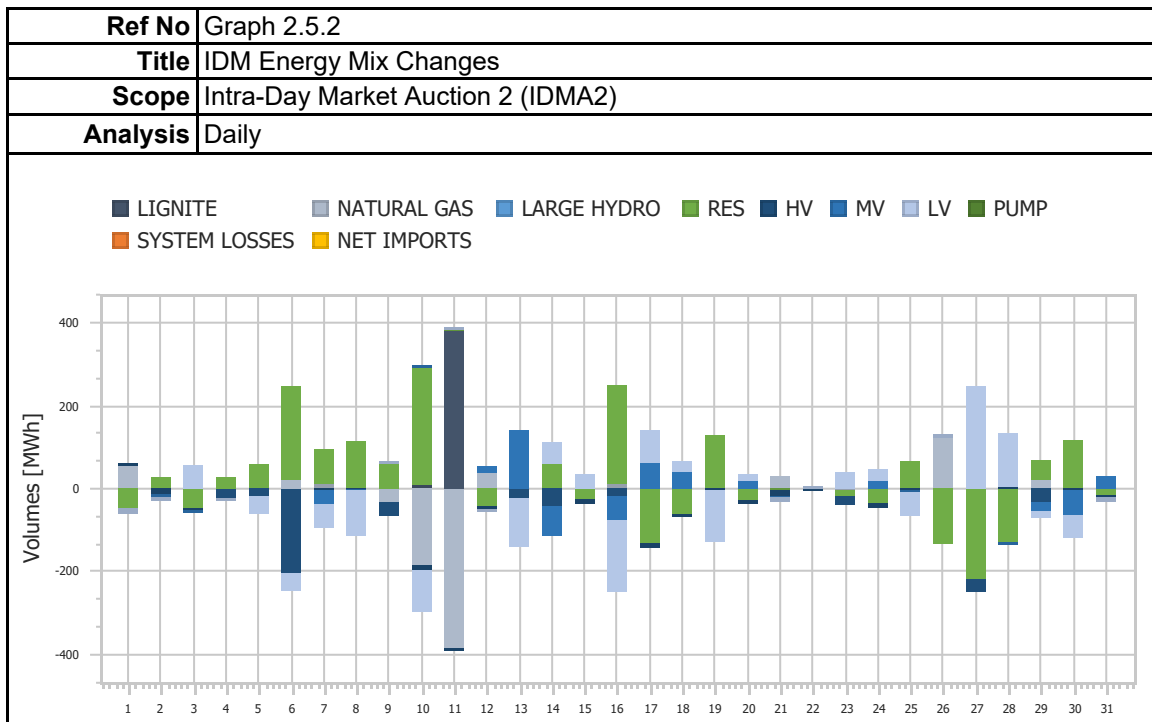
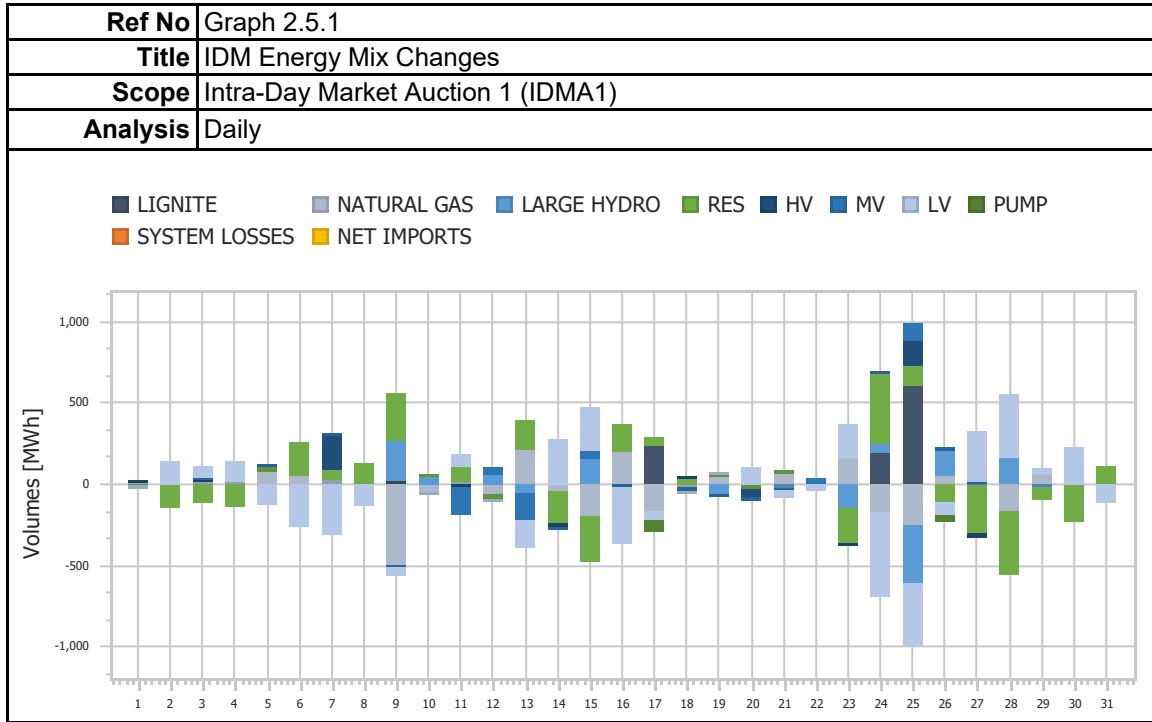


Ref No	Graph 2.4.2
Title	Market Clearing Price
Scope	Intra-Day Market Auction 2 (IDMA2)
Analysis	Daily

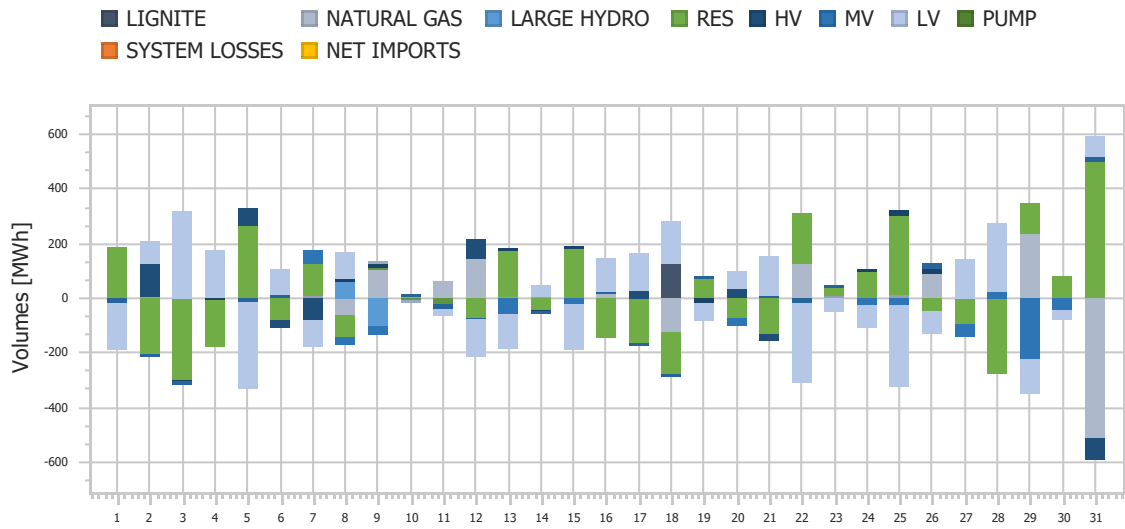


Ref No	Graph 2.4.3
Title	Market Clearing Price
Scope	Intra-Day Market Auction 3 (IDMA3)
Analysis	Daily

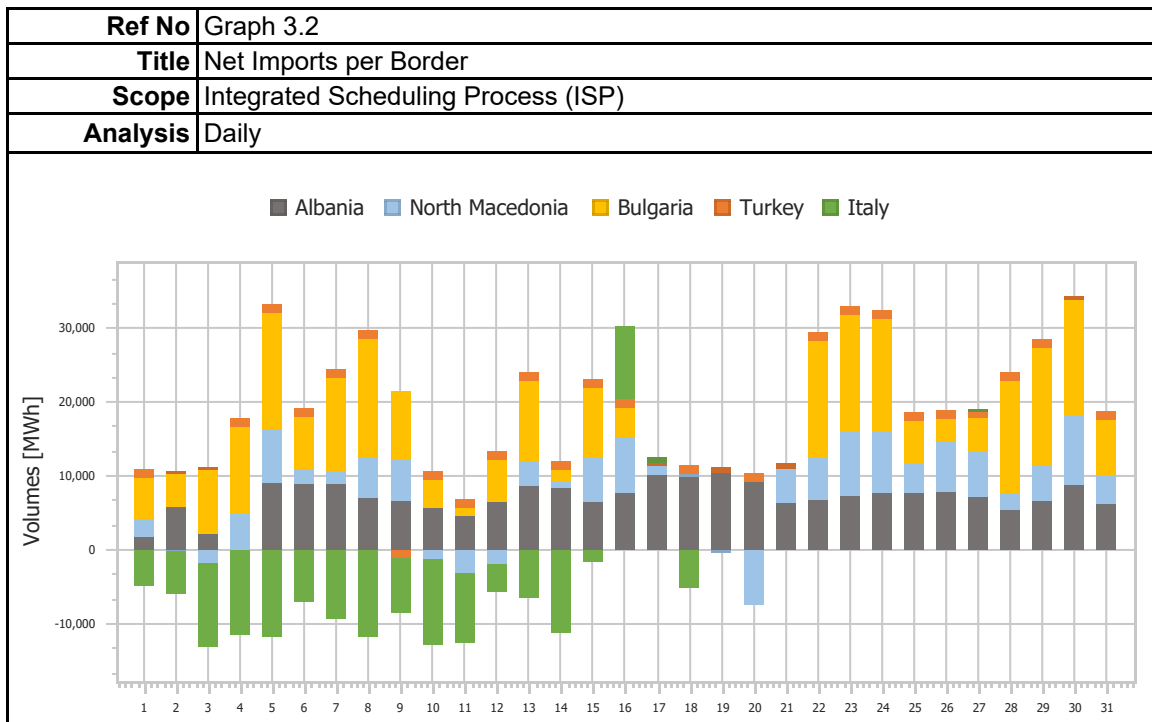
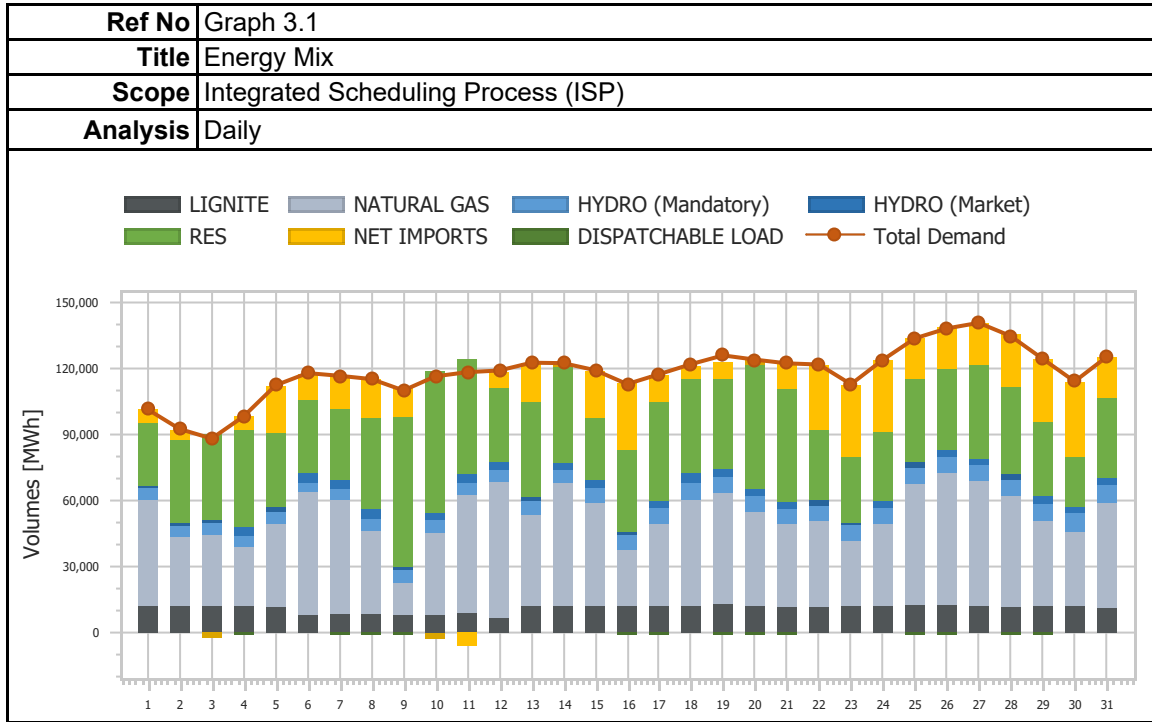




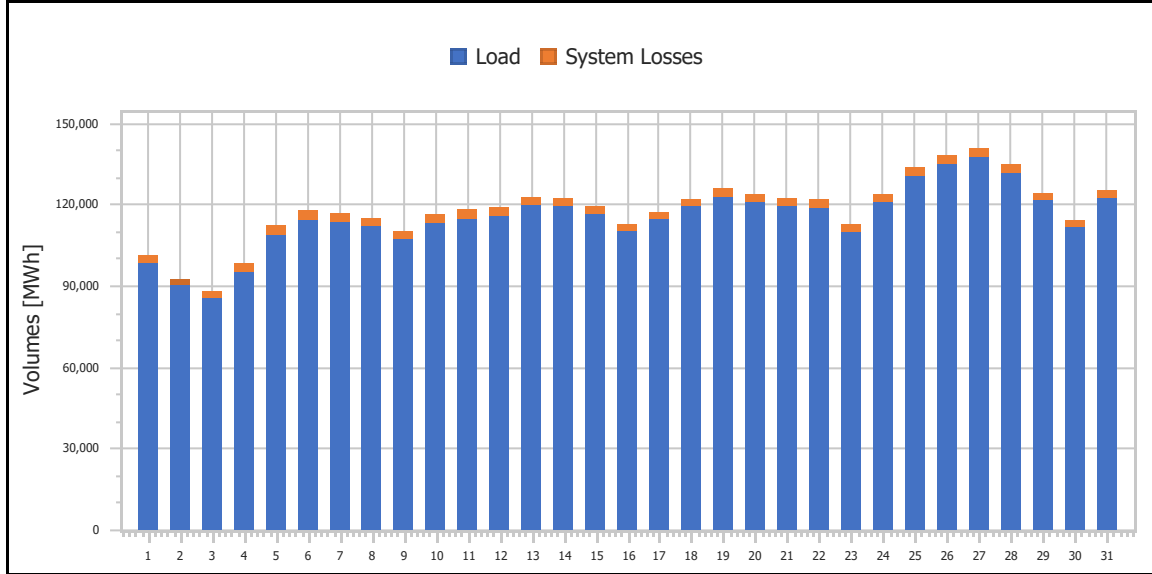
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Title	IDM Energy Mix Changes
Scope	Intra-Day Market Auction 3 (IDMA3)
Analysis	Daily



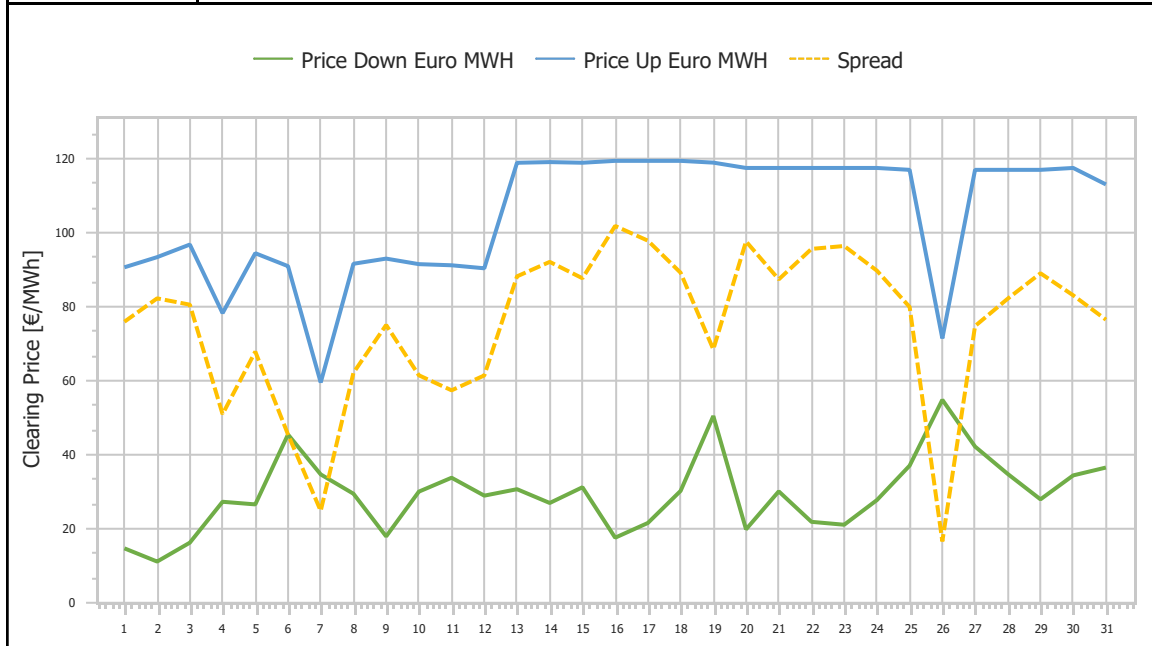
3. Integrated Scheduling Process (ISP)



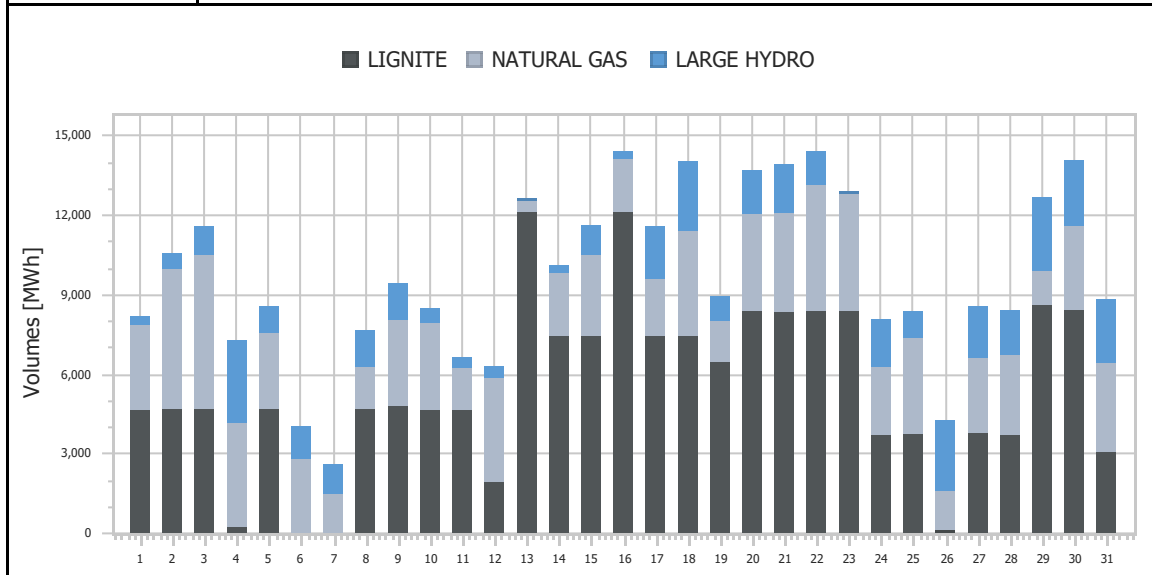
Ref No	Graph 3.3
Title	Demand & System Losses
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



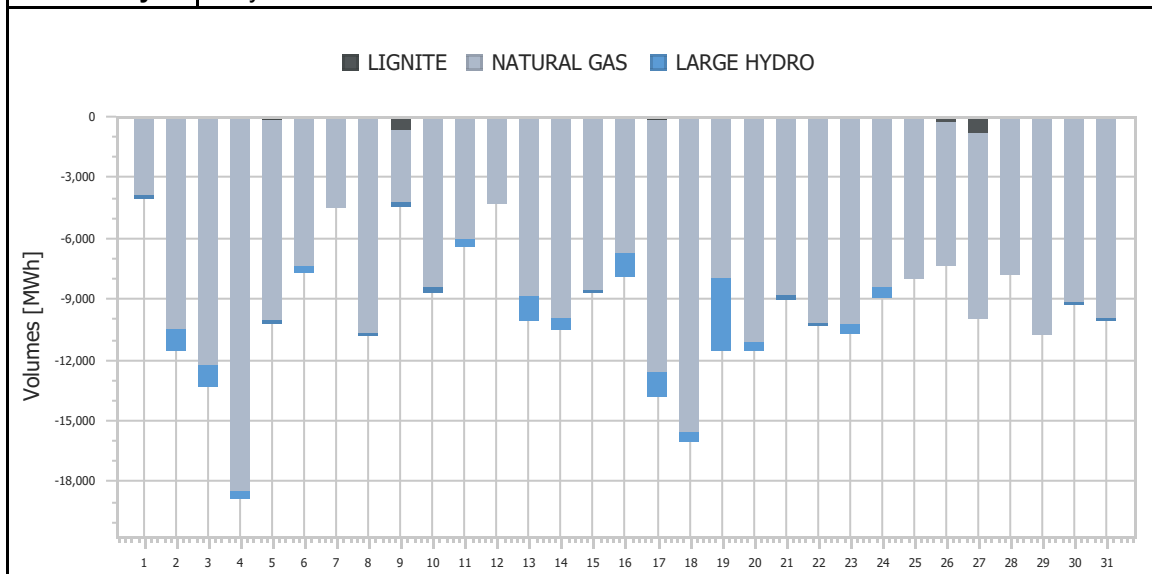
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Title	Clearing Prices
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



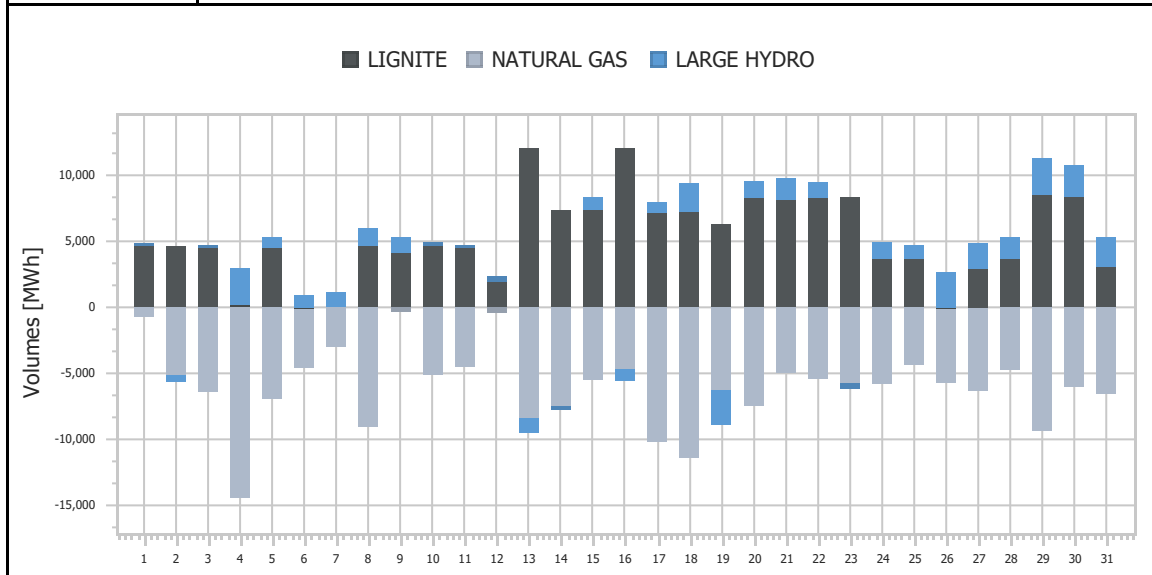
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Title	Upward Activated Balancing energy
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



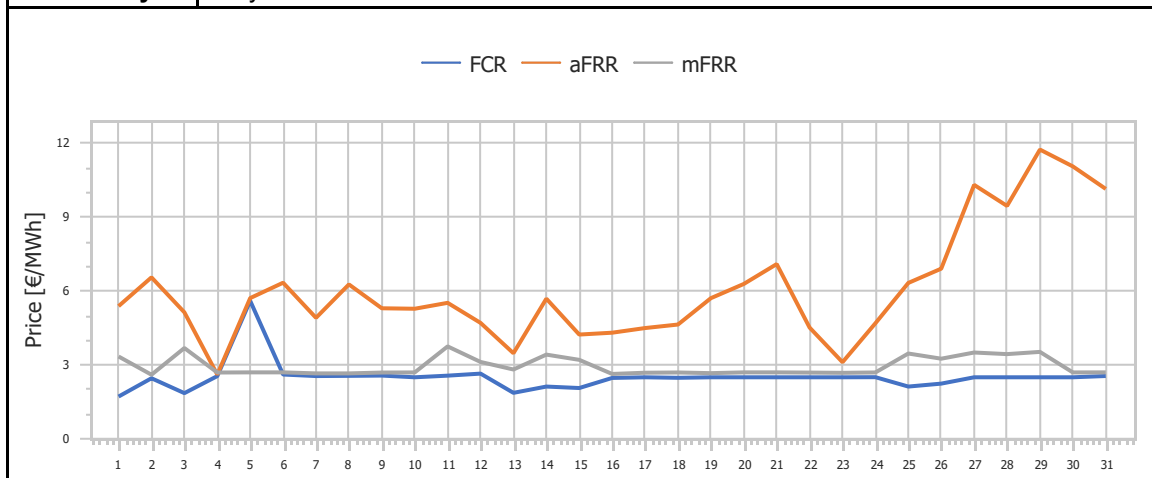
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Title	Downward Activated Balancing energy
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



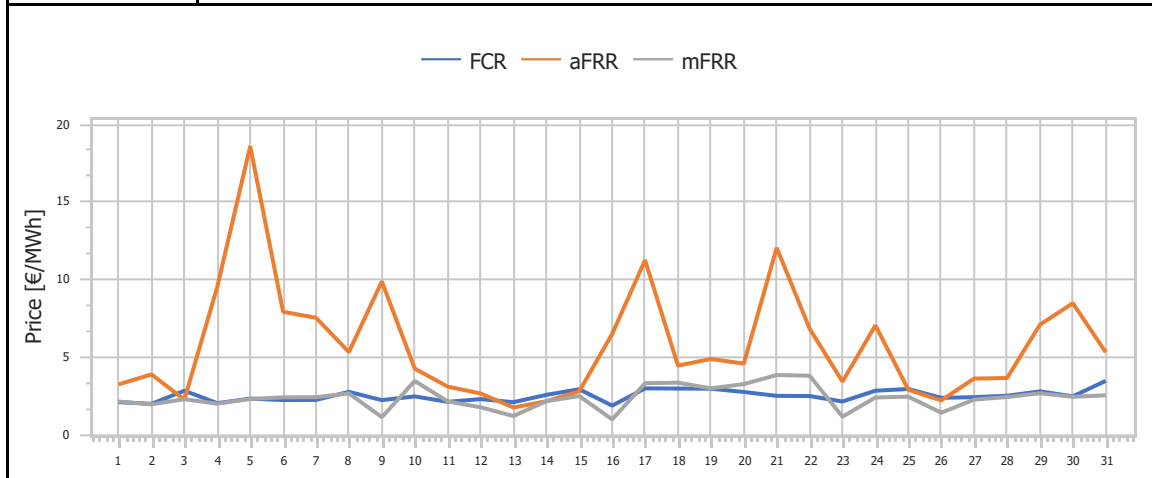
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Title	Net Activated Balancing energy
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



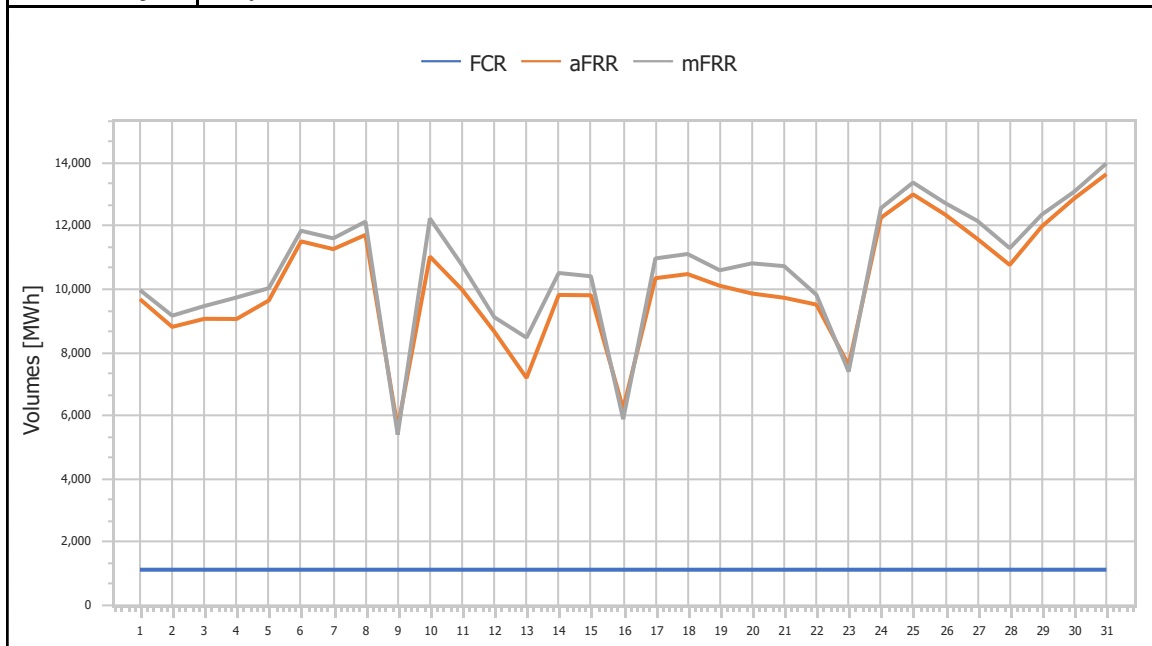
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Title	Upward Capacity Reserves Prices
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



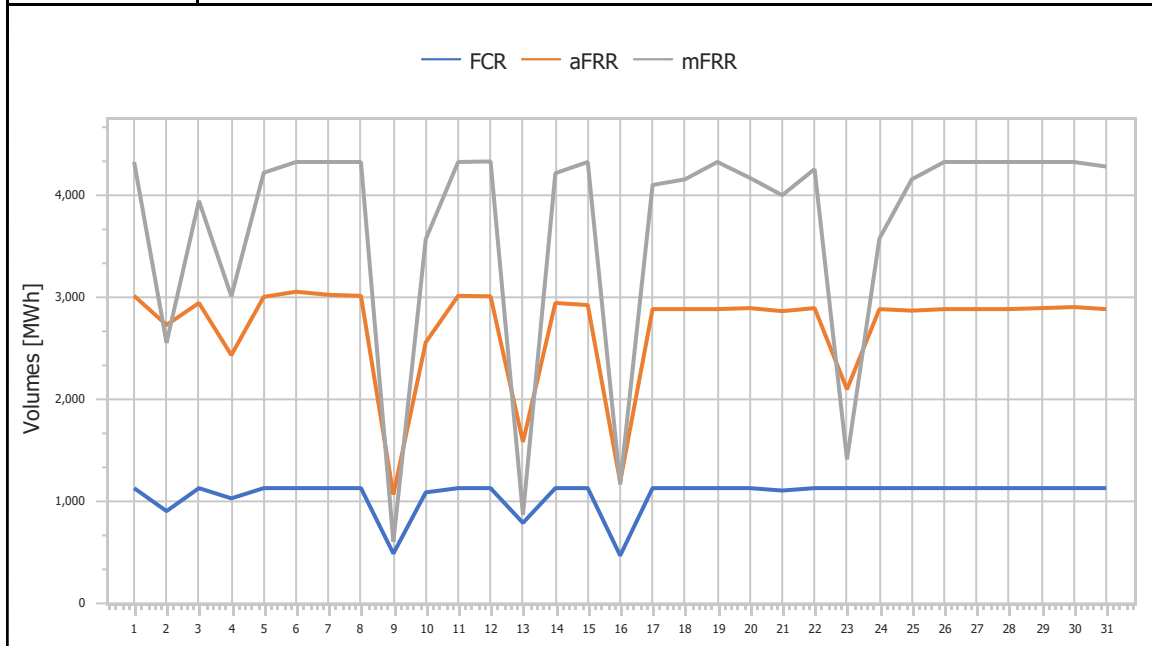
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Title	Downward Capacity Reserves Prices
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily



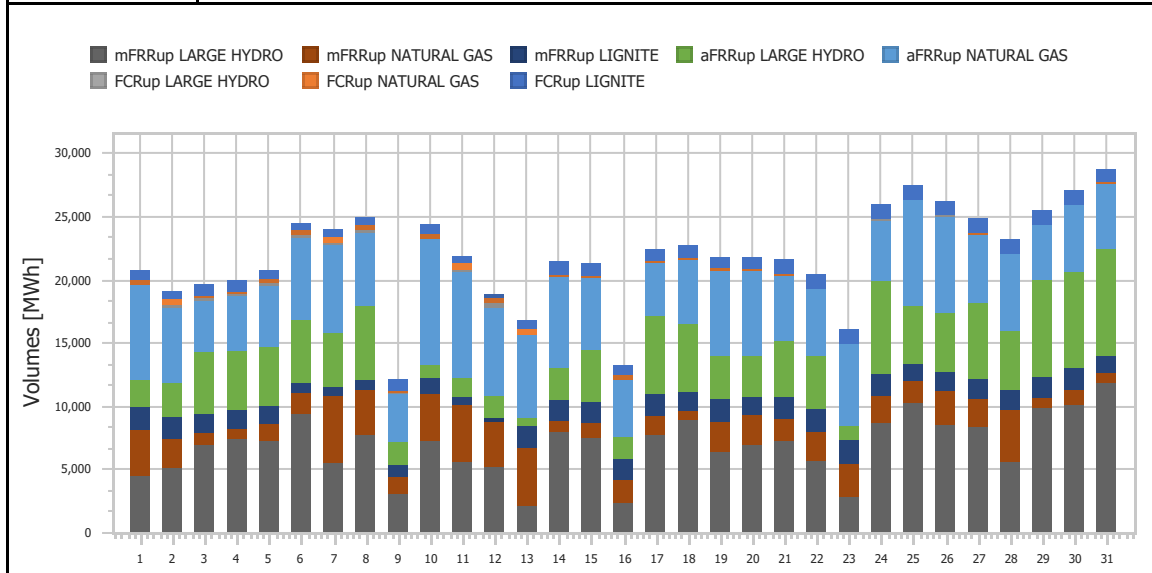
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Title	Upward Capacity Reserves Volumes
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily

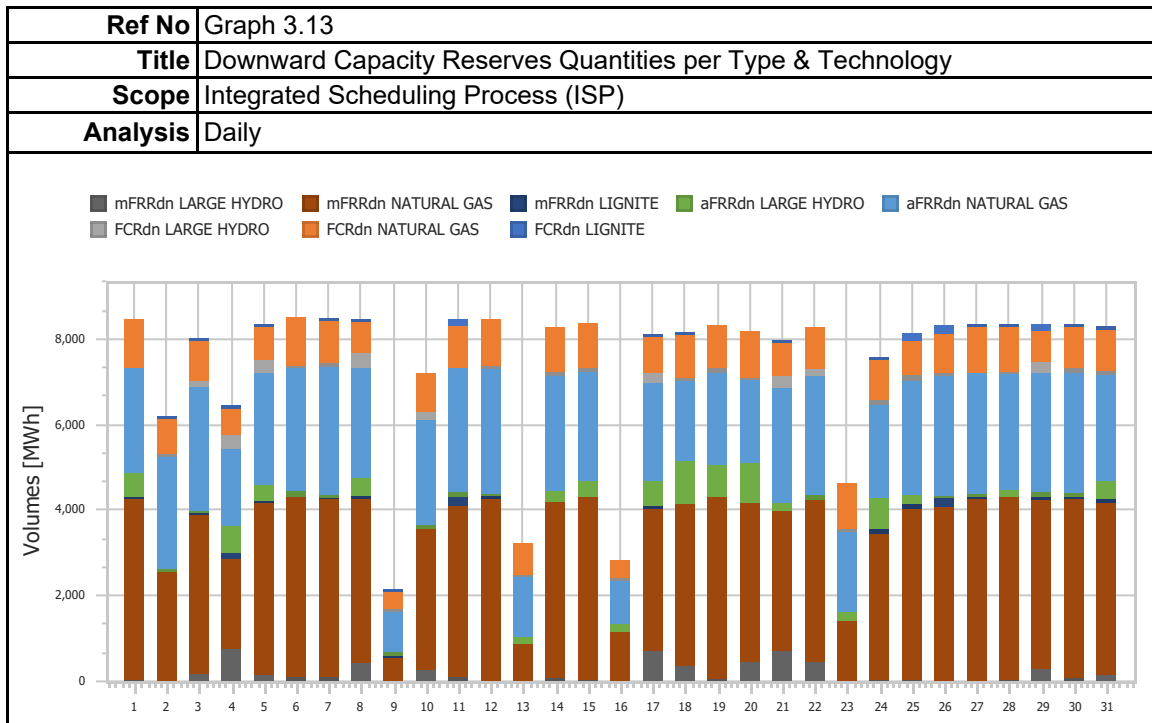


Ref No	Graph 3.11
Title	Downward Capacity Reserves Volumes
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily

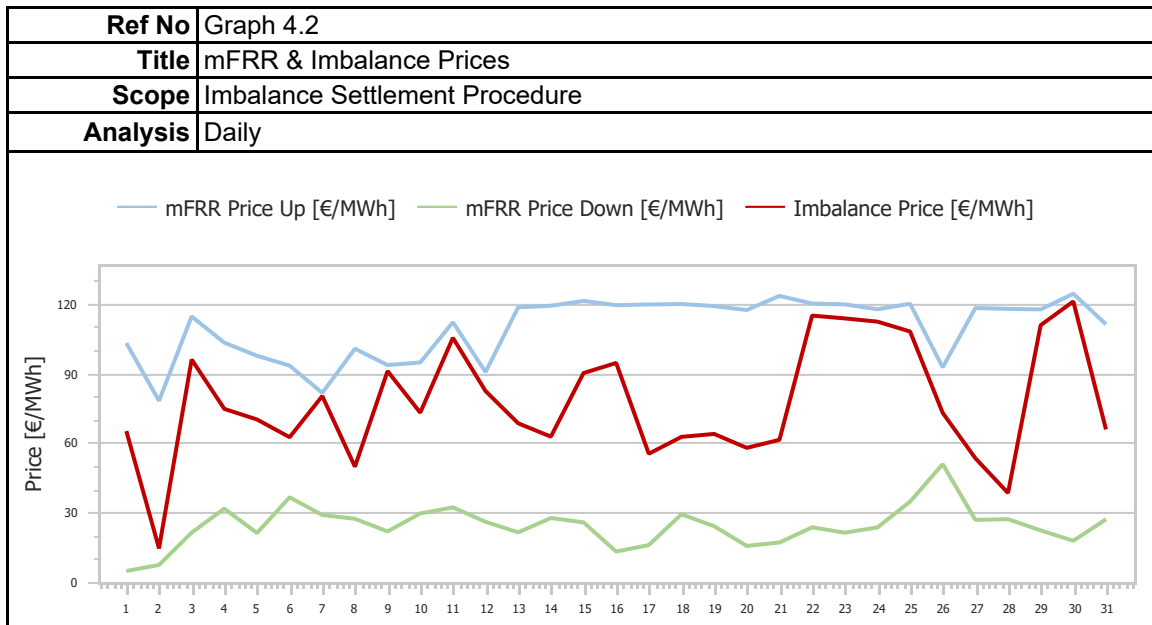
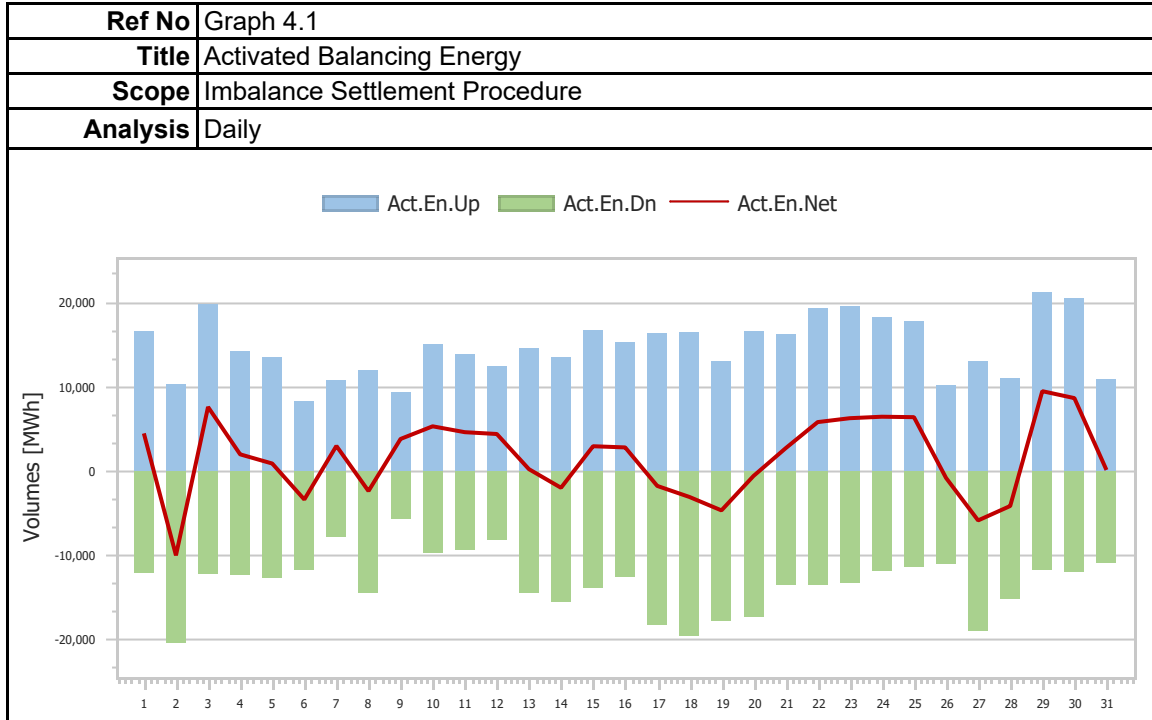


Ref No	Graph 3.12
Title	Upward Capacity Reserves Volumes per Technology
Scope	Integrated Scheduling Process (ISP)
Analysis	Daily

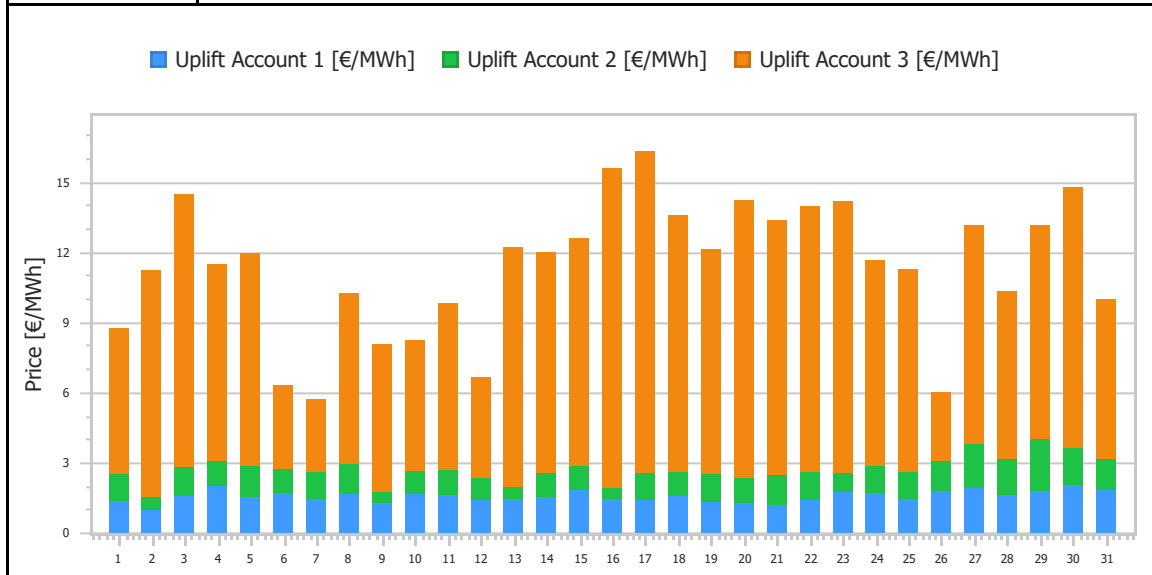




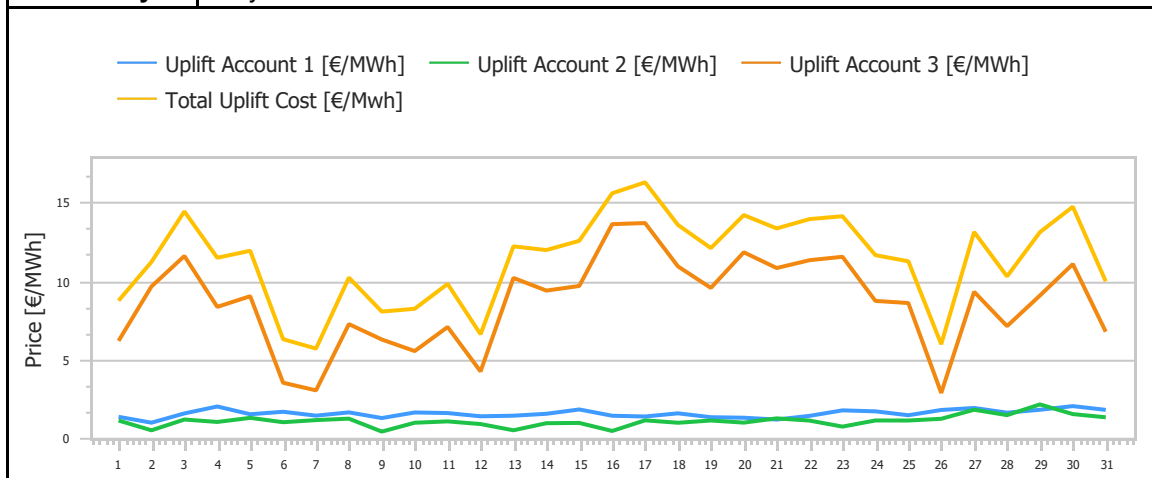
4. Imbalance Settlement Procedure



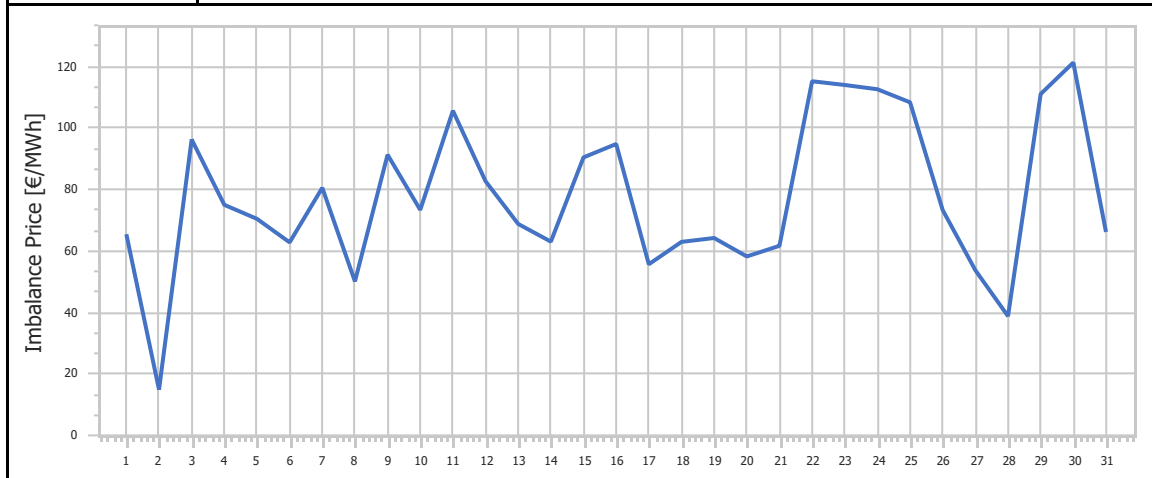
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Title	Uplift Accounts Cost
Scope	Imbalance Settlement Procedure
Analysis	Daily



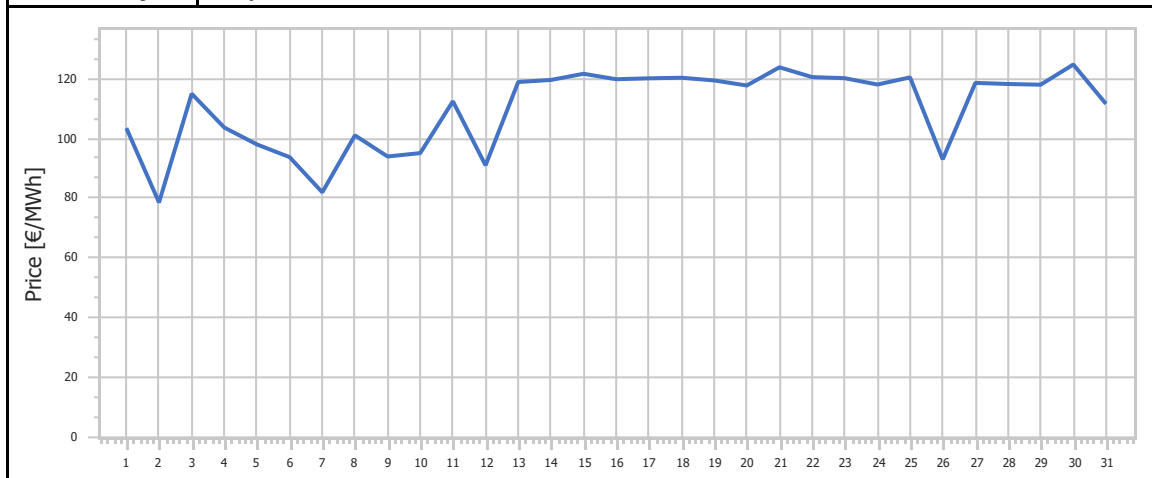
Ref No	Graph 4.4
Title	Uplift Accounts Cost
Scope	Imbalance Settlement Procedure
Analysis	Daily



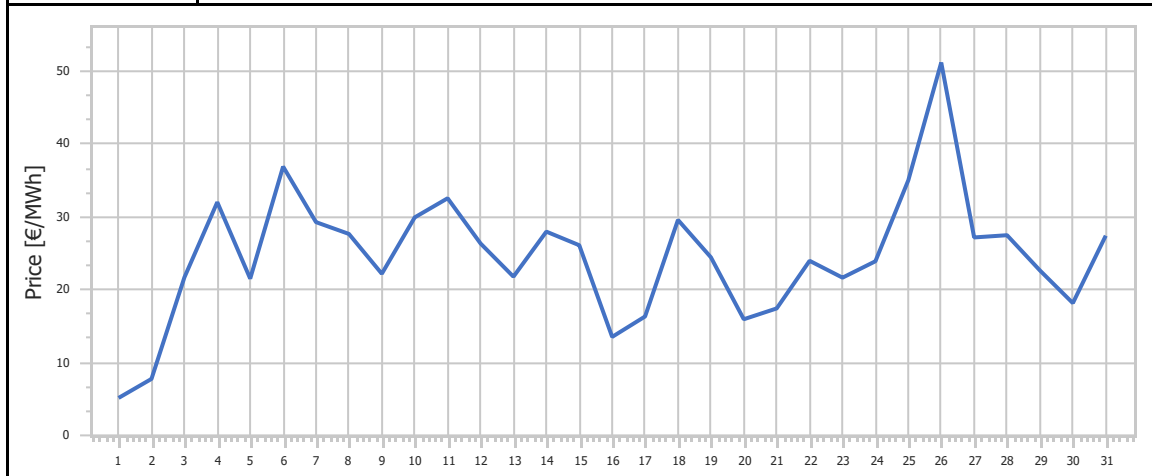
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Title	Imbalance Price
Scope	Imbalance Settlement Procedure
Analysis	Daily



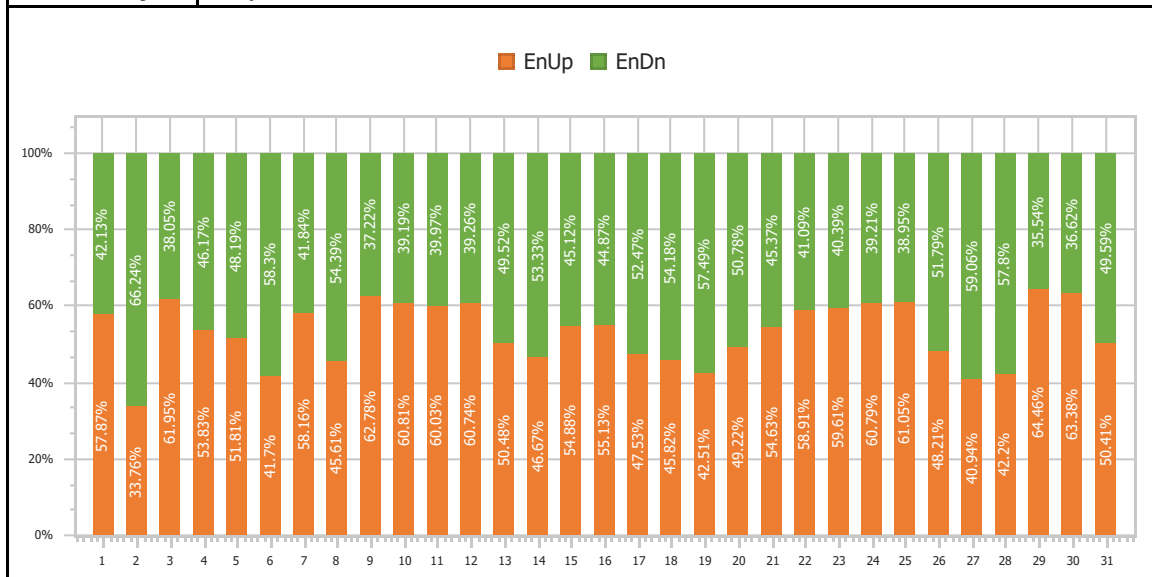
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Title	mFRR Up Price
Scope	Imbalance Settlement Procedure
Analysis	Daily



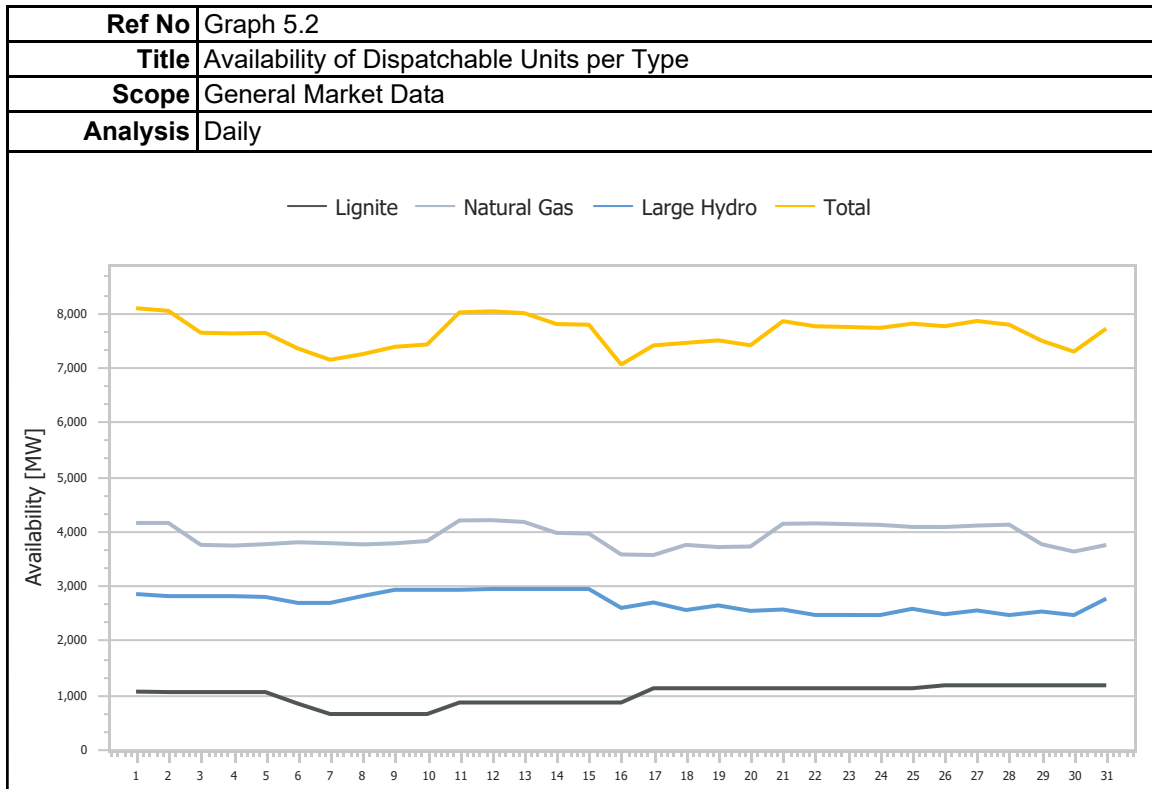
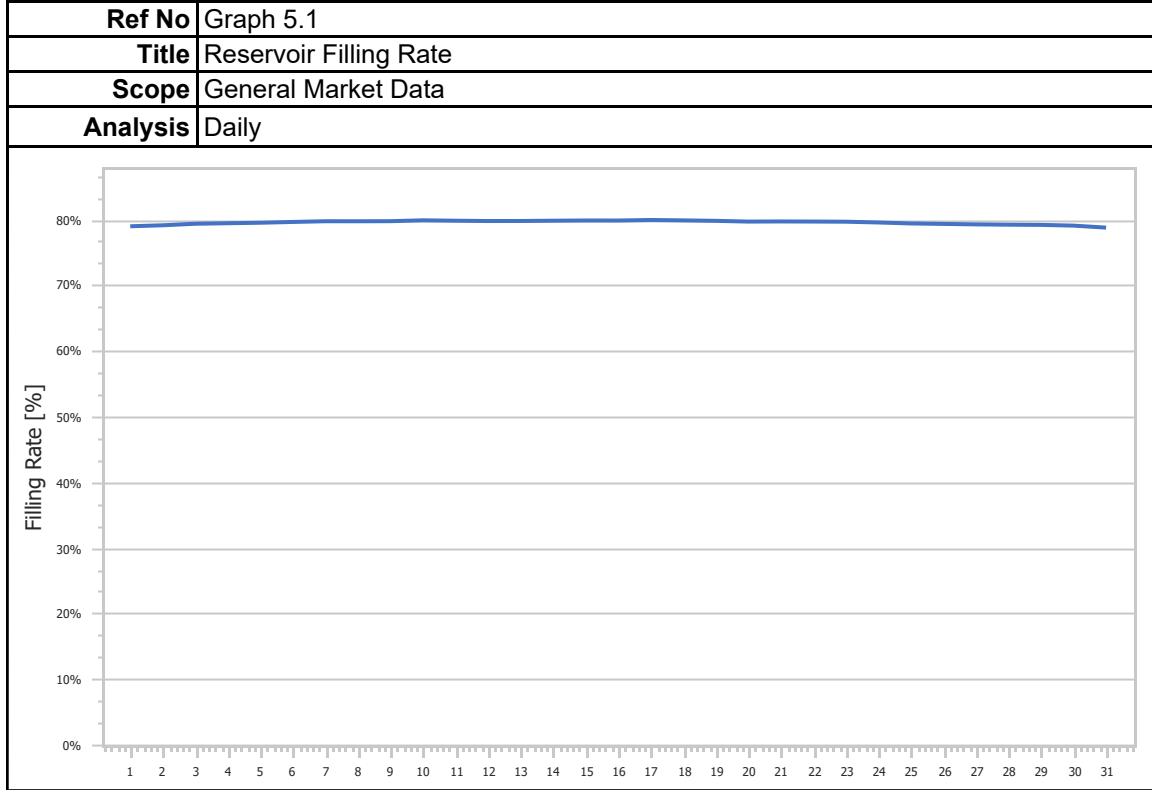
Ref No	Graph 4.7
Title	mFRR Down Price
Scope	Imbalance Settlement Procedure
Analysis	Daily



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



5. General Market Data



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	180,903.773	4.55%	11,775,146.76€	4.62%
Crete Conventional	-	0.00%	- €	0.00%
Natural Gas	1,512,417.048	38.07%	100,804,371.00€	39.58%
Large Hydro	263,864.612	6.64%	18,602,898.30€	7.30%
RES	1,292,421.412	32.53%	78,186,406.17€	30.70%
Crete Renewables	-	0.00%	- €	0.00%
Imports	722,835.930	18.20%	45,333,339.56€	17.80%
Total	3,972,442.779	100.00%	254,702,161.79€	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]	Natural Gas [MWh]	Hydro [MWh]	RES [MWh]	Imports [MWh]
Total	-	3,972,442.78	180,903.77	1,512,417.05	263,864.61	1,292,421.41	722,835.93
Average	63.16	128,143.32	6,238.06	48,787.65	8,511.76	41,691.01	23,317.29
Min	40.43	107,068.30	3,624.00	15,720.61	6,015.00	25,053.46	13,304.19
Min day	9	2	22	9	9	30	11
Max	82.42	144,789.38	12,852.77	65,184.70	13,454.85	69,062.84	35,236.13
Max day	26	27	26	26	19	9	30
Spread	41.99	37,721.08	9,228.77	49,464.09	7,439.85	44,009.37	21,931.94
Standard Deviation	8.73	10,766.52	2,605.14	10,912.69	1,374.84	10,105.87	6,650.37

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	88,169.500	2.22%	5,682,294.84€	2.23%
Crete Load	-	0.00%	- €	0.00%
HV Load	613,644.922	15.45%	38,656,063.38€	15.18%
MV Load	768,797.464	19.35%	49,737,509.87€	19.53%
LV Load	2,226,780.531	56.06%	143,476,700.66€	56.33%
PUMP	5,414.142	0.14%	270,791.39€	0.11%
Exports	269,635.750	6.79%	16,878,768.43€	6.63%
Total	3,972,442.310	100.00%	254,702,128.56€	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]	HV [MWh]	MV [MWh]	LV [MWh]	PUMP [MWh]	Exports [MWh]
Total	-	3,972,442.31	88,169.50	613,644.92	768,797.46	2,226,780.53	5,414.14	269,635.75
Average	63.16	128,143.30	2,844.18	19,795.00	24,799.92	71,831.63	492.19	8,697.93
Min	40.43	107,068.24	1,991.50	18,514.92	14,935.54	55,181.03	148.82	318.20
Min day	9	2	2	6	2	3	17	16
Max	82.42	144,789.35	3,624.50	21,529.11	30,534.69	87,535.50	1,035.00	20,267.38
Max day	26	27	5	23	27	27	28	10
Spread	41.99	37,721.11	1,633.00	3,014.19	15,599.15	32,354.46	886.18	19,949.18
Standard Deviation	8.73	10,766.54	365.83	741.90	4,577.15	6,977.24	240.23	5,763.06

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	1,219,903.810	56.78%	1,836,622.54€	59.63%
FCR	117,249.830	5.46%	128,277.34€	4.16%
mFRR	811,237.970	37.76%	1,115,223.75€	36.21%
Total	2,148,391.620	100.00%	3,080,123.63€	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	322,901.270	36.57%	630,863.08€	53.58%
FCR	123,740.640	14.01%	118,083.52€	10.03%
mFRR	436,316.090	49.42%	428,505.91€	36.39%
Total	882,958.000	100.00%	1,177,452.51€	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	104,067.460	22.72%	11,881,181.35€	22.60%
mFRR	353,877.870	77.28%	40,680,816.06€	77.40%
Total	457,945.330	100.00%	52,561,997.41€	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	94,050.260	23.10%	2,297,387.48€	26.51%
mFRR	313,138.690	76.90%	6,369,552.83€	73.49%
Total	407,188.950	100.00%	8,666,940.32€	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	3,972,442.78	97.43%
IDMA1	28,191.88	0.69%
IDMA2	14,572.25	0.36%
IDMA3	11,312.24	0.28%
IDM (Total)	54,076.37	1.33%
Balancing Energy (Up)	457,945.33	11.23%
Balancing Energy (Dn)	407,188.95	9.99%
Balancing Energy (Total)	50,756.38	1.24%
Total	4,077,275.52	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	254,702,161.79€	83.10%
IDMA1	1,910,113.28€	0.62%
IDMA2	978,159.38€	0.32%
IDMA3	741,971.19€	0.24%
IDM (Total)	3,630,243.85€	1.18%
Balancing Capacity (Up)	3,080,123.63€	1.00%
Balancing Capacity (Dn)	1,177,452.51€	0.38%
Balancing Capacity (Total)	4,257,576.13€	1.39%
Balancing Energy (Up)	52,561,997.41€	17.15%
Balancing Energy (Dn)	8,666,940.32€	2.83%
Balancing Energy (Total)	43,895,057.09€	14.32%
Balancing Market (Total)	48,152,633.22€	15.71%
Total	306,485,038.86€	100.00%