

Market Operator User Group

Dublin, 8 October 2020

Agenda

Item	Presenter
Welcome	Anne Fitzgerald
Release Program	Mark Needham
Market Development Roadmap	Mark Needham
Ex-Ante Markets	Liam McAllister, Michael Atcheson
Repricing	Michael Atcheson
Settlements	Sean O'Rourke
System Alerts and Winter Outlook	Diarmaid Gillespie
Brexit Update	Michael Kelly
Market Interface Update	Anne Fitzgerald, Claire Breslin
Q&A	

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Release F Update (November 2020)

Scope

Central Market System Release F			
#	CR Ref	Mod Ref	Description
1	CR120	Mod_10_19	Exclusion of Dispatchable Priority Dispatch Unit Prices from Pricing
2	CR091	Mod_19_19	Setting System Operator Flags to zero for the purposes of Settlement
3	CR092	Mod_21_19	Application of Loss Factors for Interconnectors in Settlement
4	CR128	Mod_17_19	Mod_17_19 DSU State Aid Compliance Interim Approach

- Testing is coming to an end and deployment planning is underway
- Scheduled deployment date has been set for Tuesday, November 3rd 2020.
- Revised deployment date to manage risks:
 - Transition to “Winter-Time” on Sunday October 25th
 - Public holiday in ROI Monday October 26th

Release G Update (April 2020)

Scope

Central Market Systems Release G			
#	CR Ref	Mod Ref	Description
1	CR-158	N/A	Repricing and relationship with Instruction Profiling
2	CR-129	22_19	Correction of QUNDELLOTOL calculations to convert TOLUG and TOLOG to MWh
3	CR-072	08_19	Clarification to Intraday Quantity and Payment
4	CR-119	20_19	Changing Day Ahead Difference Quantity to Day Ahead Trade Quantity Within Day Charge Calculation
5	CR-081	03_19	Amendment of conditions in which the Market Backup Price is used
6	CR-126	N/A	Configuration of Variable Market Operator Price to apply on a Tariff Year basis, not Calendar Year
7	CR-088	N/A	Changes to configuration of FX Rates
8	CR-079	N/A	Registered Capacity Report Amendments

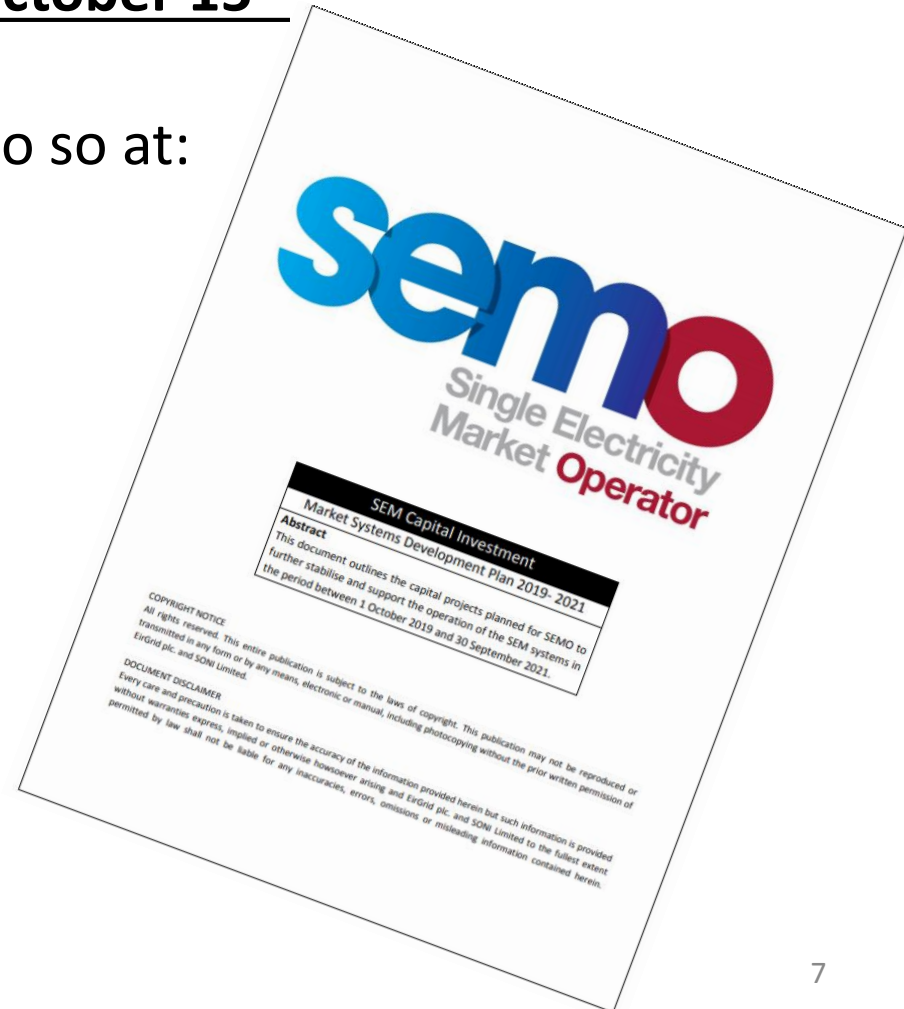
- Vendor Capacity is the main consideration as to when this release can be delivered, tested and deployed to Production.
- CR-158 Repricing is on the “Critical Path” for development and is driving the overall schedule for Release G.
- Proposed deployment will be June 2021, subject to successful completion of all testing.

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Market System Development Plan

- MSDP Consultation Closes on October 15th
- If you want to respond please do so at:
info@sem-o.com



Market Development Roadmap

- Thanks for your feedback in August
- Main themes being raised:
 - BREXIT
 - Vendor Management
 - X-border participation in Capacity Market
 - EBGL Review timing
 - Regulatory Approval
 - Repricing and Resettlement
 - Review of Bid offer acceptance Rules



NEXT VERSION DUE DECEMBER

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€4.2+ Bn

82.7+ TWh

2924+

54+
Exchange Members

Traded

Auctions Held

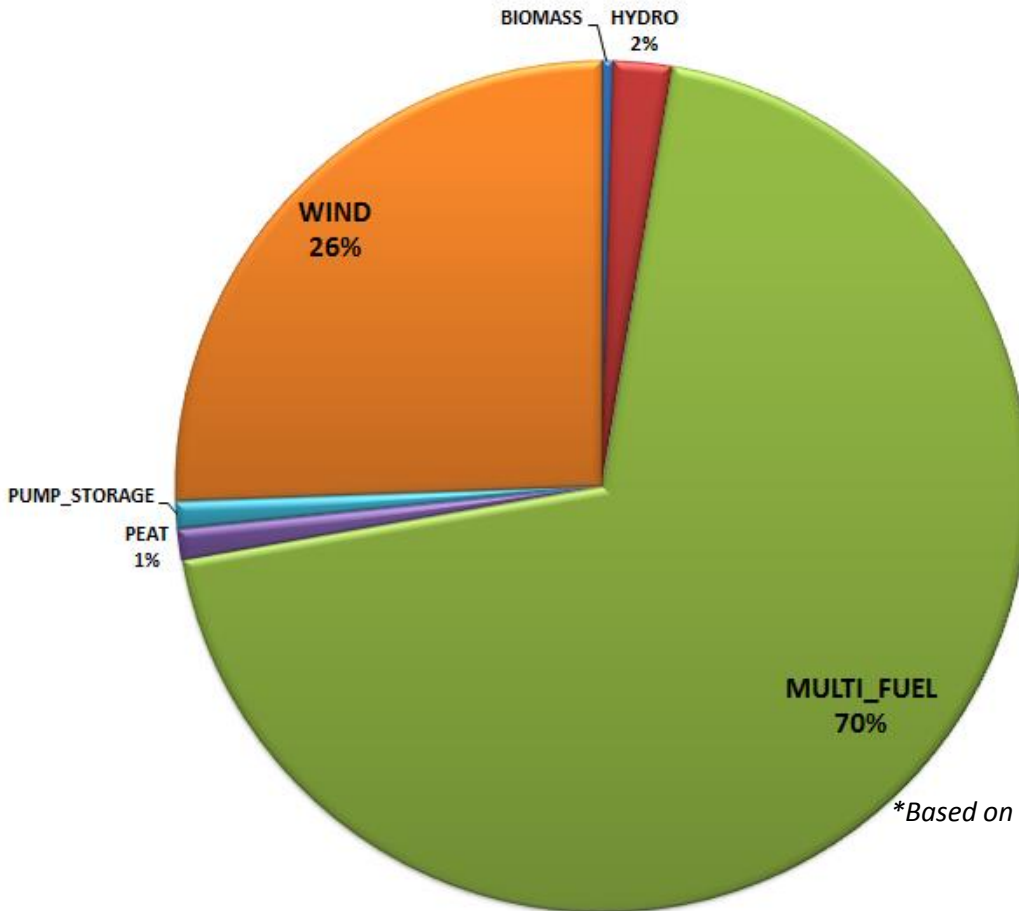
9.3+ million

Trades Completed

Ex-Ante Markets

- Volumes and Fuel Mix Aug-Sep 2020

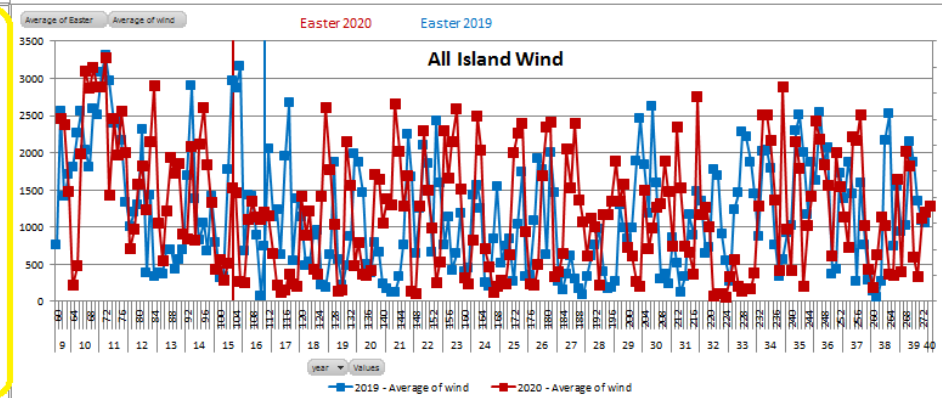
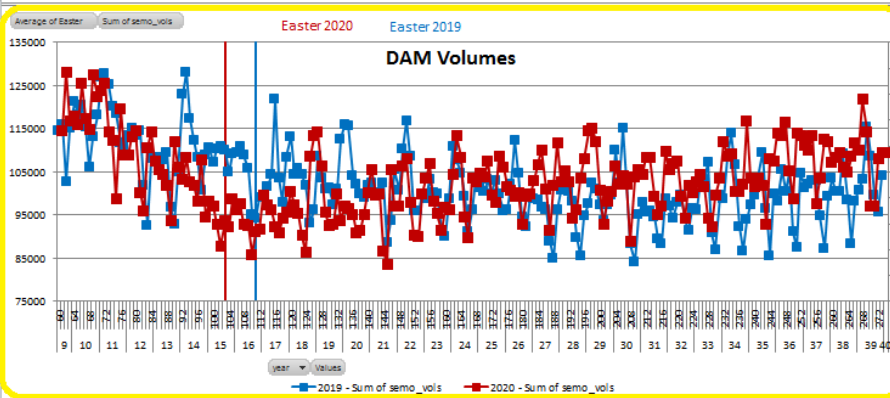
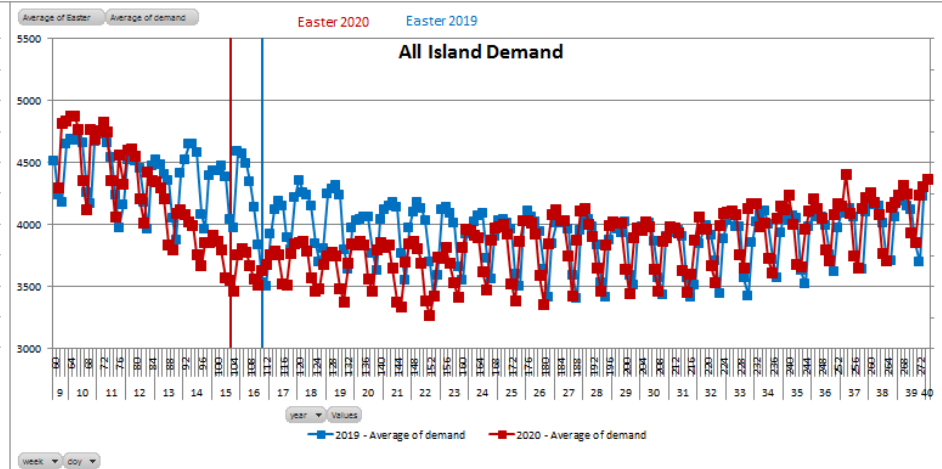
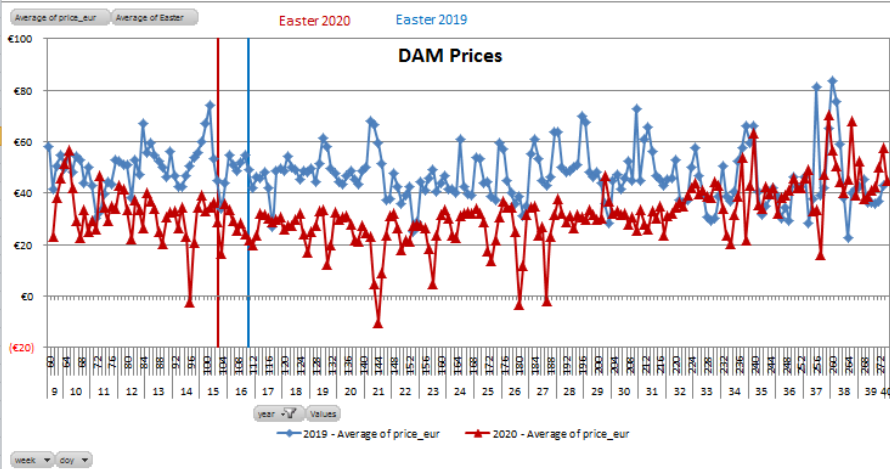
**Using approx. prices and fuel type breakdowns*



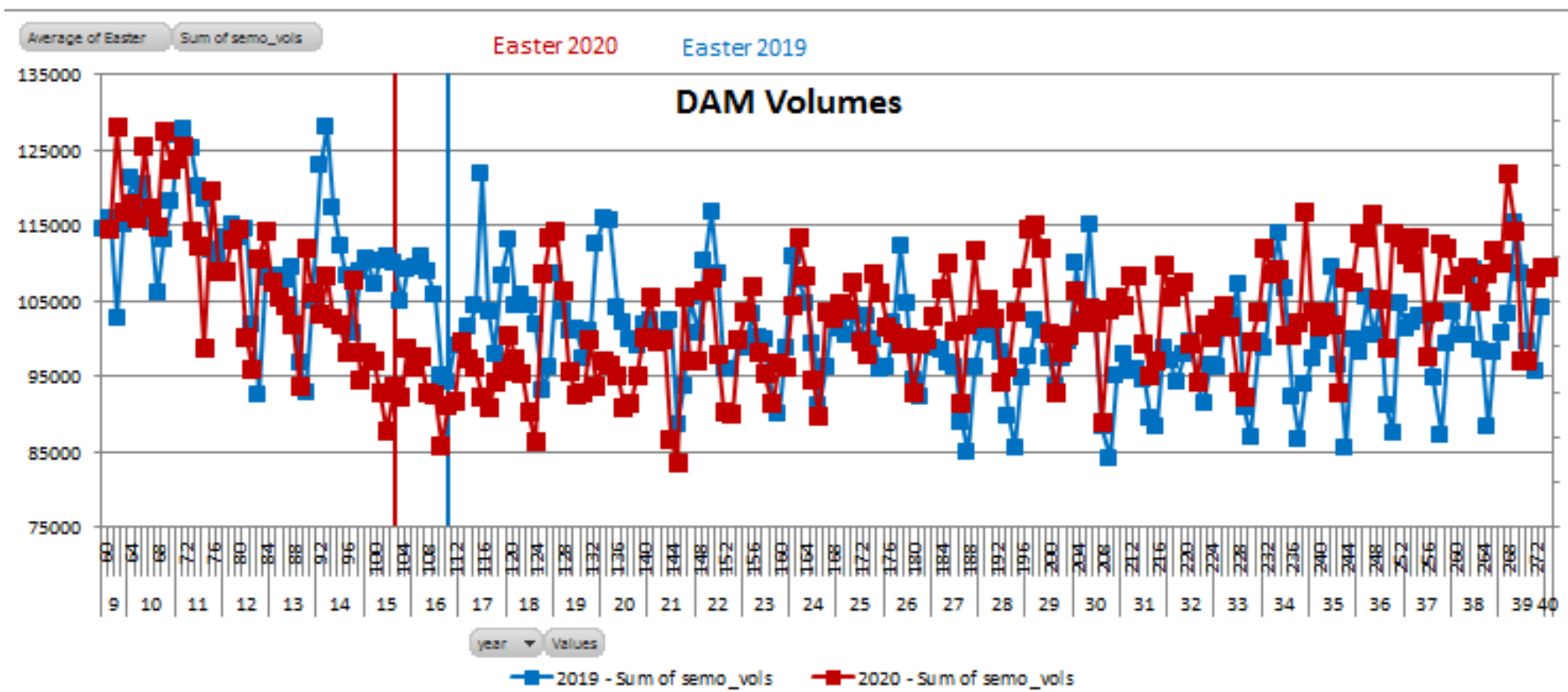
	Value	% of DAM
DAM	€447,817,767	
IDA1	€47,250,283	10.55%
IDA2	€20,008,990	4.47%
IDA3	€6,337,440	1.42%
IDC	€204,374	0.05%

**Based on Generator DAM sell's by Fuel Type*

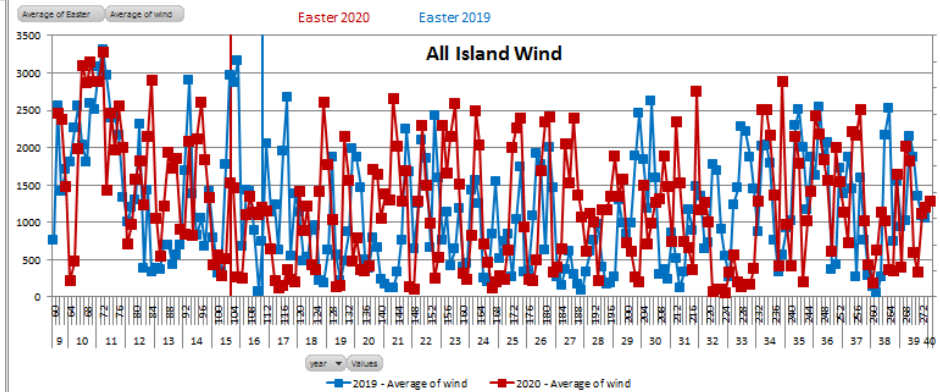
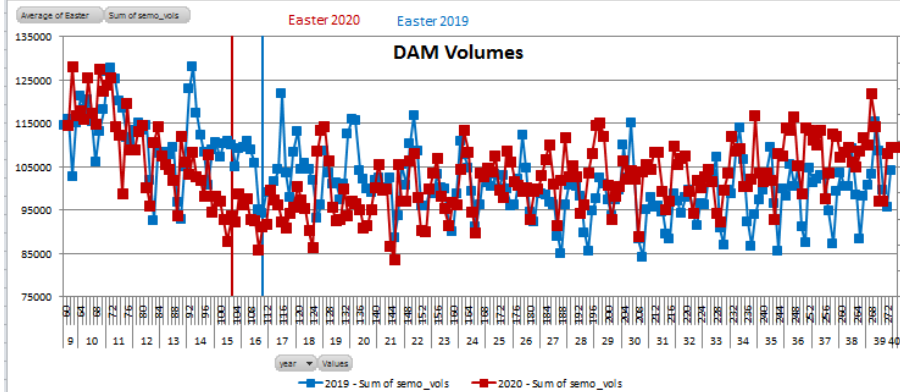
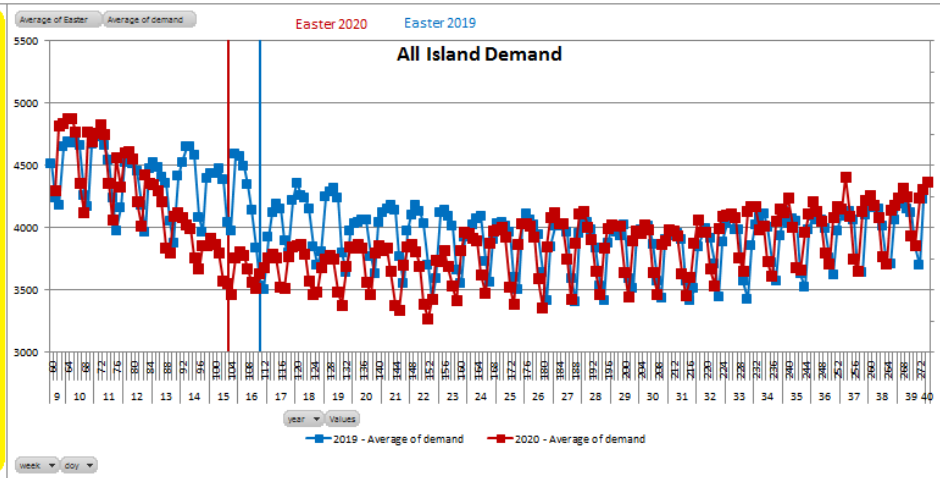
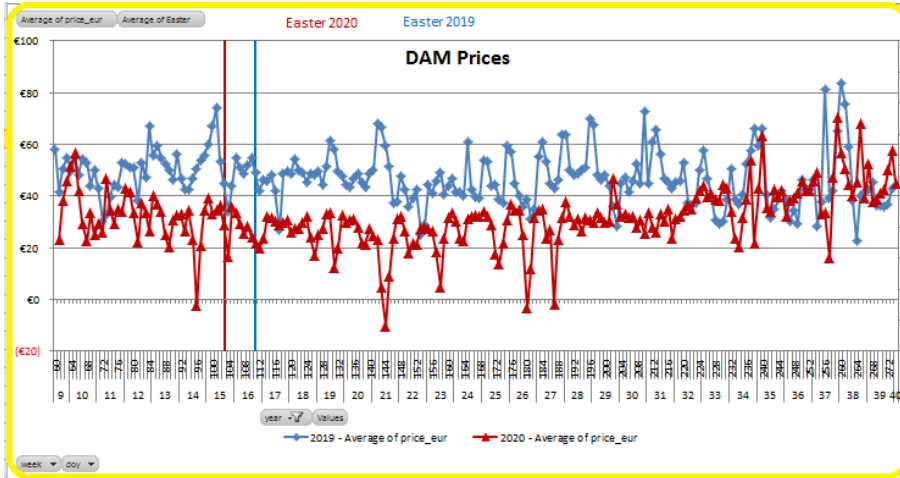
Ex-Ante Markets Reaction to COVID-19



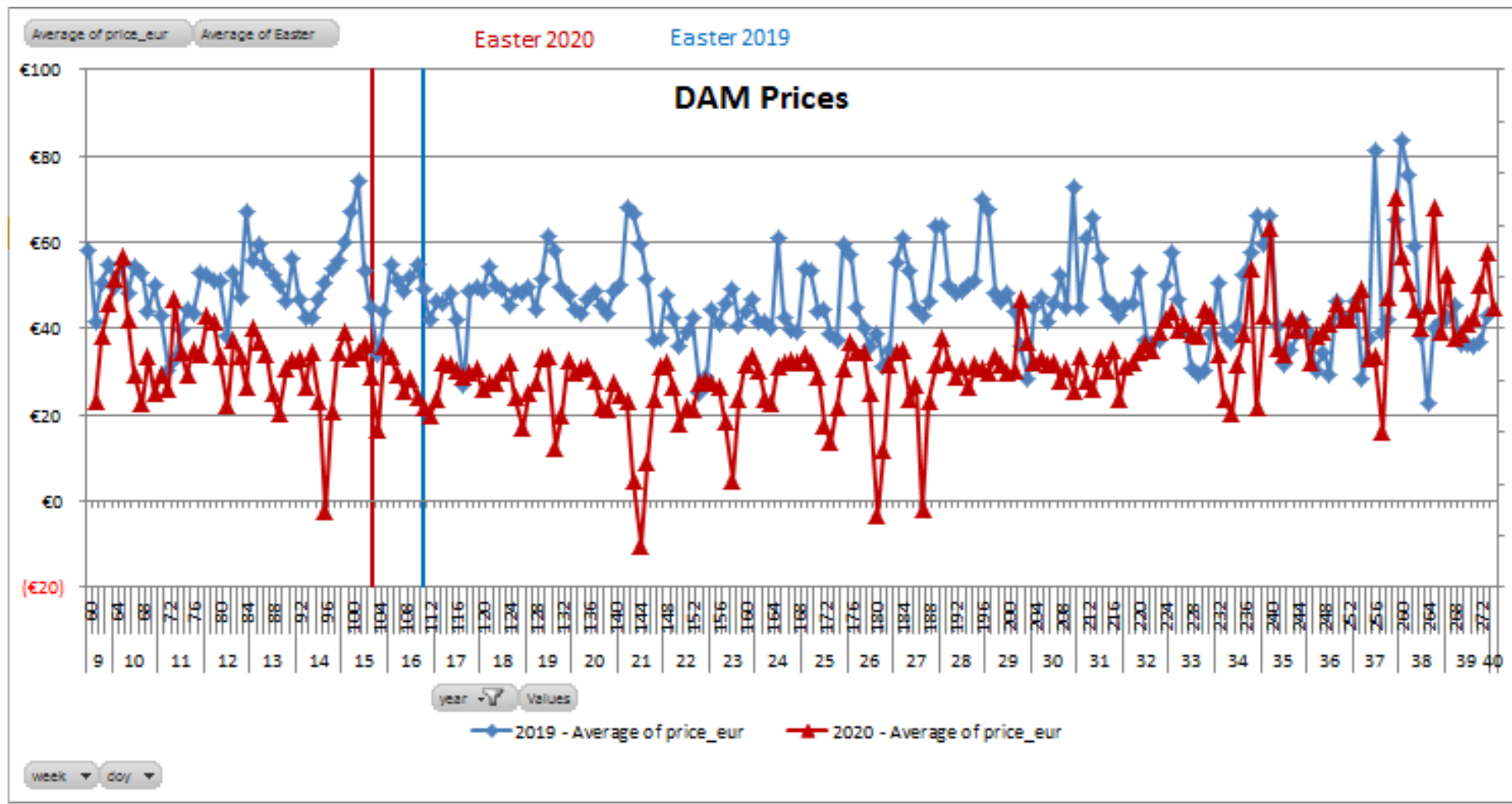
Ex-Ante Volume, Demand, Wind, Prices 2020 versus 2019



Ex-Ante Volume, Demand, Wind, Prices 2020 versus 2019



Ex-Ante Volume, Demand, Wind, Prices 2020 versus 2019



Amber Alert – 15th September



Dear Market Participant,

Due to a generation shortfall in Ireland, an Amber alert (for Ireland only) is issued effective from **16:18 15/09/2020**.

This alert is in place until further notice. A further communication will be issued when the Amber Alert has been lifted.

Kind Regards,
SEMO Team
[Unsubscribe](#)

SEMOpX, Nominated Electricity Market Operator
SEMOpX is a joint venture between EirGrid plc and SONI Limited.
ROI : The Oval, 160 Shelbourne Rd, Dublin D04 FW28
'Tel : 1800 283 010
NI : Castlereagh House, 12 Manse Road, Belfast, BT6 9RT
'Tel 0800 008 3010

Ex-Ante Market Analysis

- **In Summary**

- ✓ Simple Look Back Analysis located on SEMOpx website here :

- ✓ https://www.semopx.com/documents/general-publications/lookback_mkt.xlsx

ETS Releases

Version	Content	Client	Impact	Timeline
V3.4.6	<ul style="list-style-type: none"> • 77 – Trading session automation (Internal Enhancement) • 121 - Retrieve trading limits from API (New Request type on API) • 178 - API - ETS Auction max cancellation time (New Request type on API) • Password reset (Members will be able to password reset themselves) • 30' Complex orders ☒ DB changes (SEMOPx) • 30' Complex orders ☒ Functional changes (SEMOPx) 	New client	Upgradable client from v.3.3.2	29th of September 2020
V3.5	<ul style="list-style-type: none"> • Changing the certificate handling in ETS (Enhancement on API) • Change in the handling of the cypher suite admission (Internal enhancement for API connections TSL) 	New Client	Not-upgradable	Q1 2021

M7 Releases

Version	Content	Impact	Timeline
V6.10	Release notes / Impact to be sent.	<ul style="list-style-type: none"> • Password expiration (Only for Prod) • Contract Closure indicator • Mandatory ComTrader 6.10 upgrade • Changes in API Scheme. 	10th November 2020
V6.11	Release notes / Impact to be sent.	<ul style="list-style-type: none"> • No information yet. 	Q2 - 2021
V6.12	Release notes / Impact to be sent.	<ul style="list-style-type: none"> • No information yet. 	Q4 - 2021

ETS Maintenance Planning

Date & time	Impact	Reason	Communication
13/10/2020	ETS not accessible	Monthly Maintenance	ETS chat message (1 hour before the maintainance) + OMM message (email sent a week in advance and on the same morning)
10/11/2020	ETS not accessible	Monthly Maintenance	ETS chat message (1 hour before the maintainance) + OMM message (email sent a week in advance and on the same morning)
08/12/2020	ETS not accessible	Monthly Maintenance	ETS chat message (1 hour before the maintainance) + OMM message (email sent a week in advance and on the same morning)

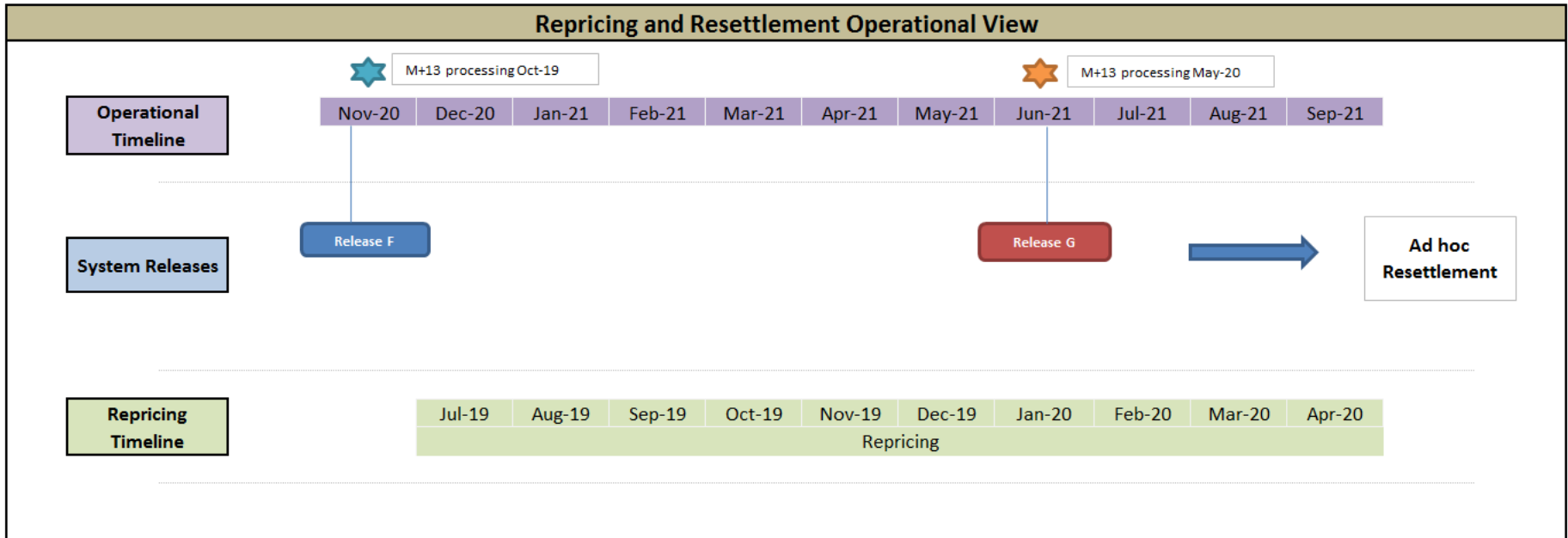
M7 Maintenance Windows

Date & time	Impact	Reason	Communication
13/10/2020	FPM update + EPEX network/infrastructure changes.	ECC	M7 chat message (1 hour before the maintenance) + OMM message (email sent a week in advance and on the same morning)
10/11/2020	V6.10	DBAG, ECC & EPEX	M7 chat message (1 hour before the maintenance) + OMM message (email sent a week in advance and on the same morning)
08/12/2020	Possibility of cancellation.	DBAG, ECC & EPEX	M7 chat message (1 hour before the maintenance) + OMM message (email sent a week in advance and on the same morning)

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Repricing Update



Release F

1. Contains fix for repricing reports error; release allows repricing to start.
2. Oldest dates will be repriced first.
3. Repeat batches in simulation environment to determine materiality before publishing to production.
4. First publications in production estimated for December 2020.

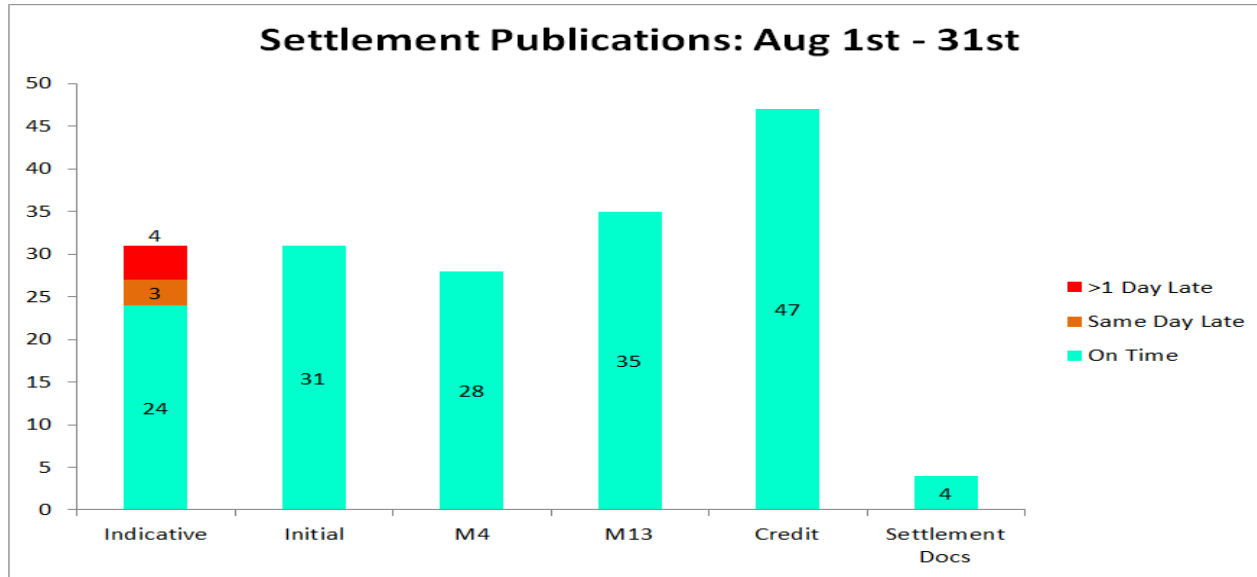
Release G

1. Contains fix enabling the transfer of repricing tags/flags to for Settlement processing.
2. Ad hoc Resettlement will be required post deployment of Release G in June 2021.
3. This will be a final 'repricing' related resettlement containing updated both updated prices; and tags/flags.

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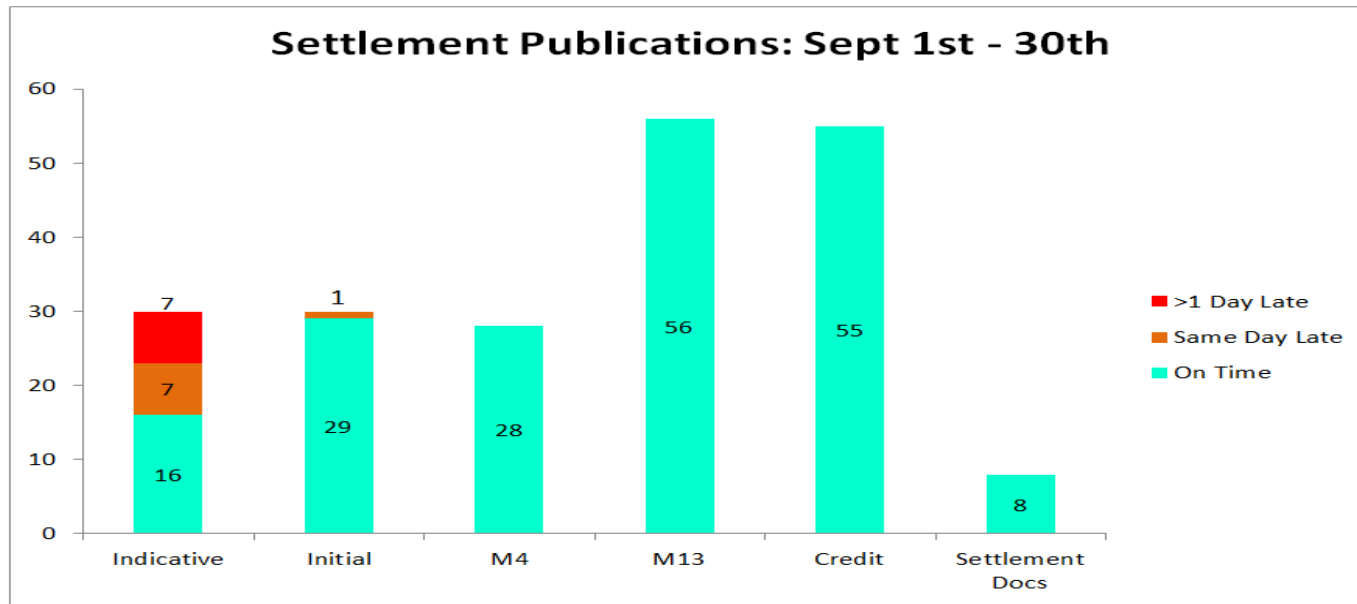
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Settlement publications & timelines : August 2020



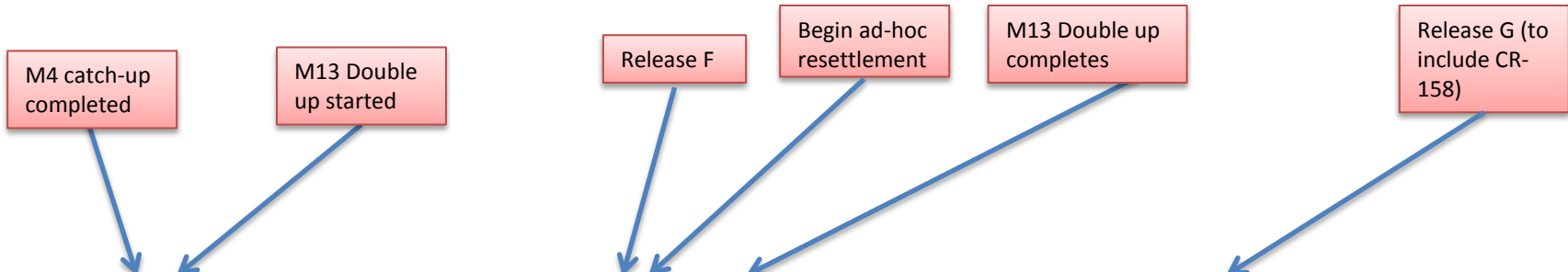
- **Indicative publications:** 7 delayed days in August due to **KIR #186987** “IP (Instruction profiling) data push times”. Issue resolved in Settlement systems Oct 6th 2020.
- **Initial, M4, M13 Settlement Documents:** On time for August 2020
- **Credit Reports:** One credit report not published on August 12th – impact of KIR #186987.
- **M13:** Double M13 schedule continued in August

Settlement publications & timelines : September 2020



- **Indicative publications:** 14 delayed days in September due to **KIR #186987** “IP (Instruction profiling) data push times”. Issue resolved in Settlement systems Oct 6th 2020.
- **Initial, M4, M13 Settlement Documents:** 1 Initial delayed due to additional analysis required before publication. M4, M13 and Settlement Documents were on time in September.
- **Credit Reports:** One credit report not published on September 17th – impact of KIR #186987.
- **M13:** Double M13 schedule continued in September (M13 now up to July 2019)

SEMO Resettlement plan – Oct 2020 update



Calendar Month	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21	Aug-21	Sep-21	Oct-21	Nov-21
M+4 Month (s)	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20	Nov-20	Dec-20	Jan-21	Feb-21	Mar-21	Apr-21	May-21	Jun-21	Jul-21
M+13 Month	Feb-Mar '19	Apr-May '19	June-July '19	Aug-Sep '19	Oct-19	Nov-19	Dec-19	Jan-20	Feb-20	Mar-20	Apr-20	May-20	Jun-20	Jul-20	Aug-20	Sep-20	Oct-20
Adhoc Month	-	-	-	-	Oct-18	Nov-18	Dec-18	Jan-19	Feb-19	Mar-19	Apr-19	May-19	Jun-19	Jul-19	Aug-19	Sep-19	Oct-19

Key Events:

M4 double up completed on schedule in July 2020
M13 double up due to start in July 2020
M13 double up due for completion in Dec
Release F into production – Oct 2020
Planned start of ad-hoc resettlement in Nov 2020

Key Assumptions

M13 double keeps on schedule
Release F keeps on schedule
IP re-runs are required for ad-hoc resettlement of Release F fixes

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System Alerts & Winter Outlook

Diarmaid Gillespie



Power System Alerts

Level	Description
Alert	Elevated risk of not being able to meet system demand and/or risk of operational security limits (frequency/voltage) being violated.
Emergency	High risk of failure to meet system demand. Operational security limits (voltage/frequency) are violated.
Blackout	More that 50% of the system is without supply or the system has split into a number of power islands.

New SO GL aligned System States

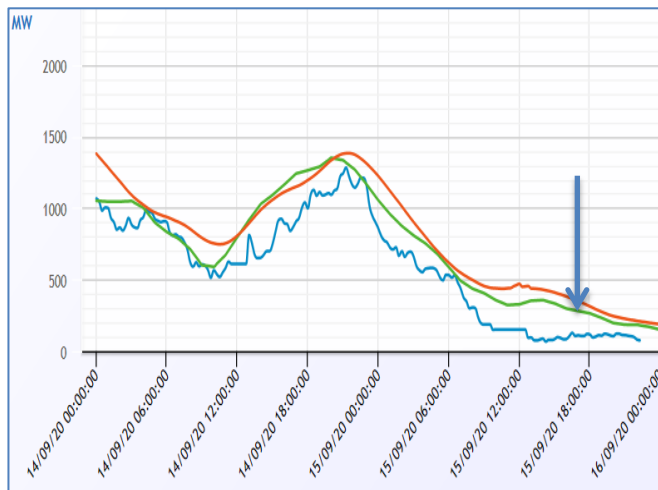


Previous Alert System States

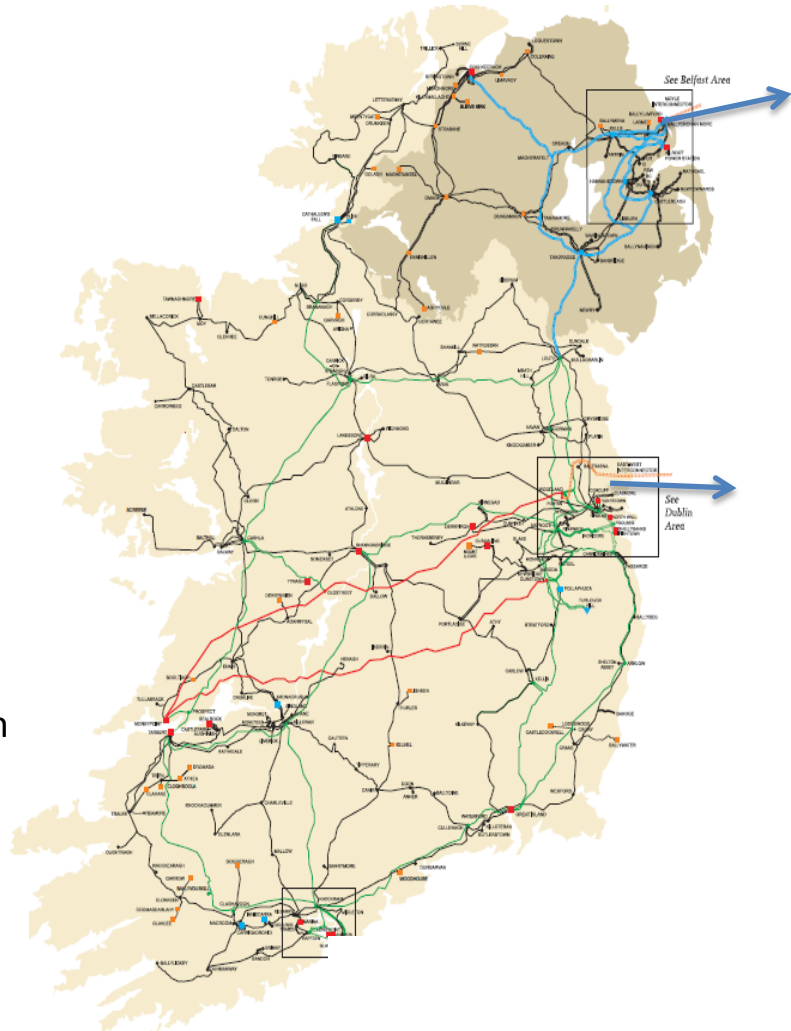
https://www.sem-o.com/documents/general-publications/BP_SO_09.2-Declaration-of-System-Alerts.pdf

Alert of 15 September 2020

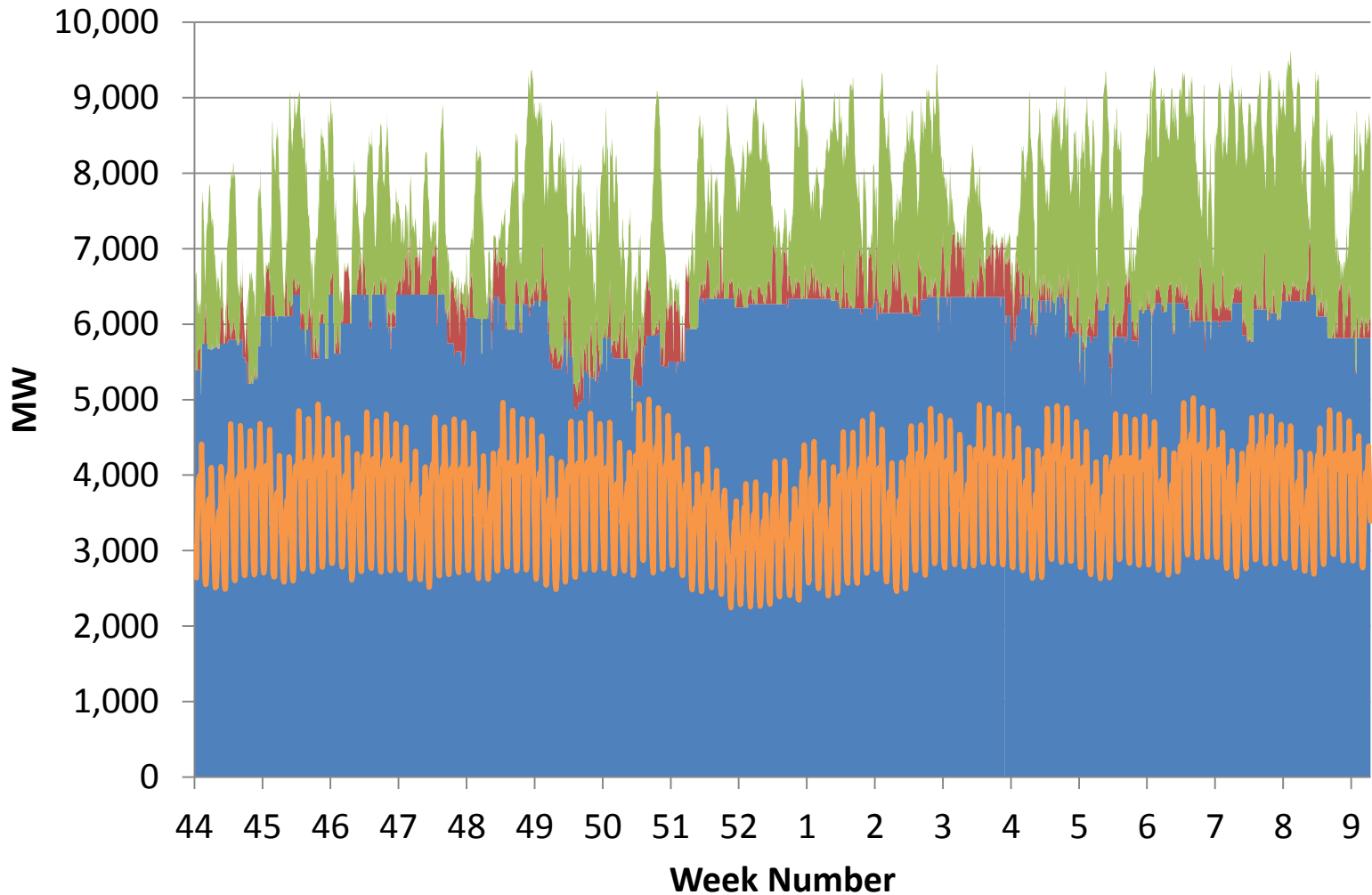
1. High generator Forced Outage Rate (19.4%) plus additional transmission restrictions forcing a large generator off.
2. Low wind at peak of the day.



3. Interconnectors at zero / exporting to GB
4. Additional large generation trip and delay in return to service of others.

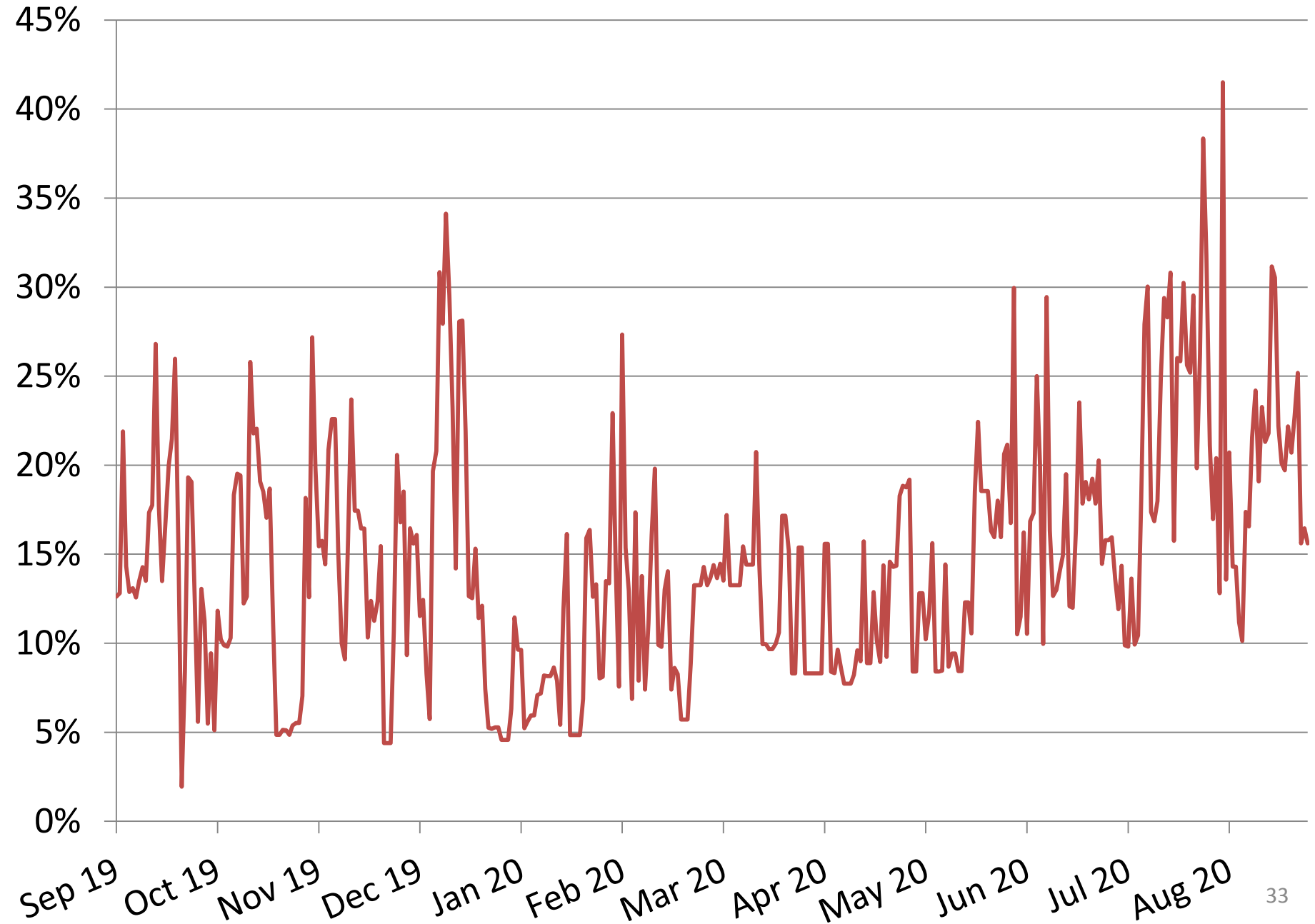


Review of Winter 2019/20



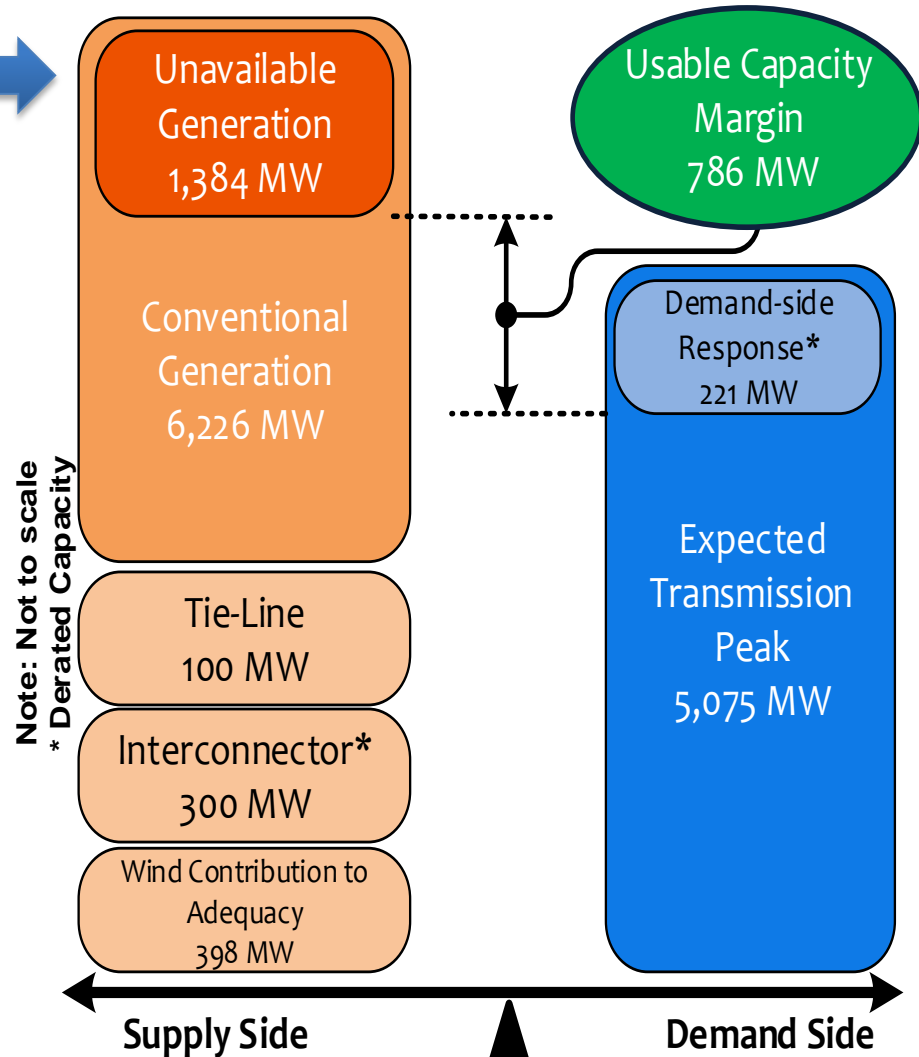
Available Dispatchable Generation Interconnector & Tie-Line
Wind Output Demand

Ireland Dispatchable Generation Daily FOR



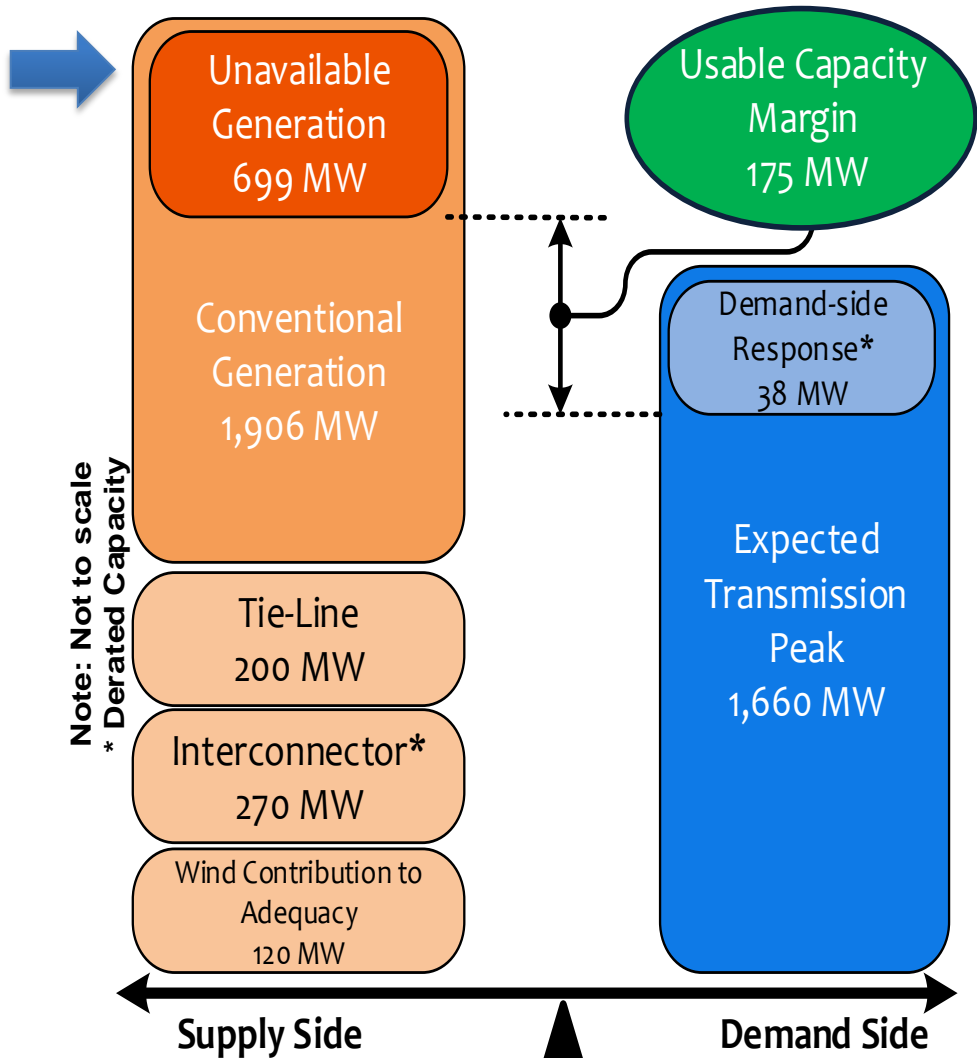
Ireland Capacity Margin

15% FOR
400 MW Scheduled Outage
106 MW Transmission Constraints



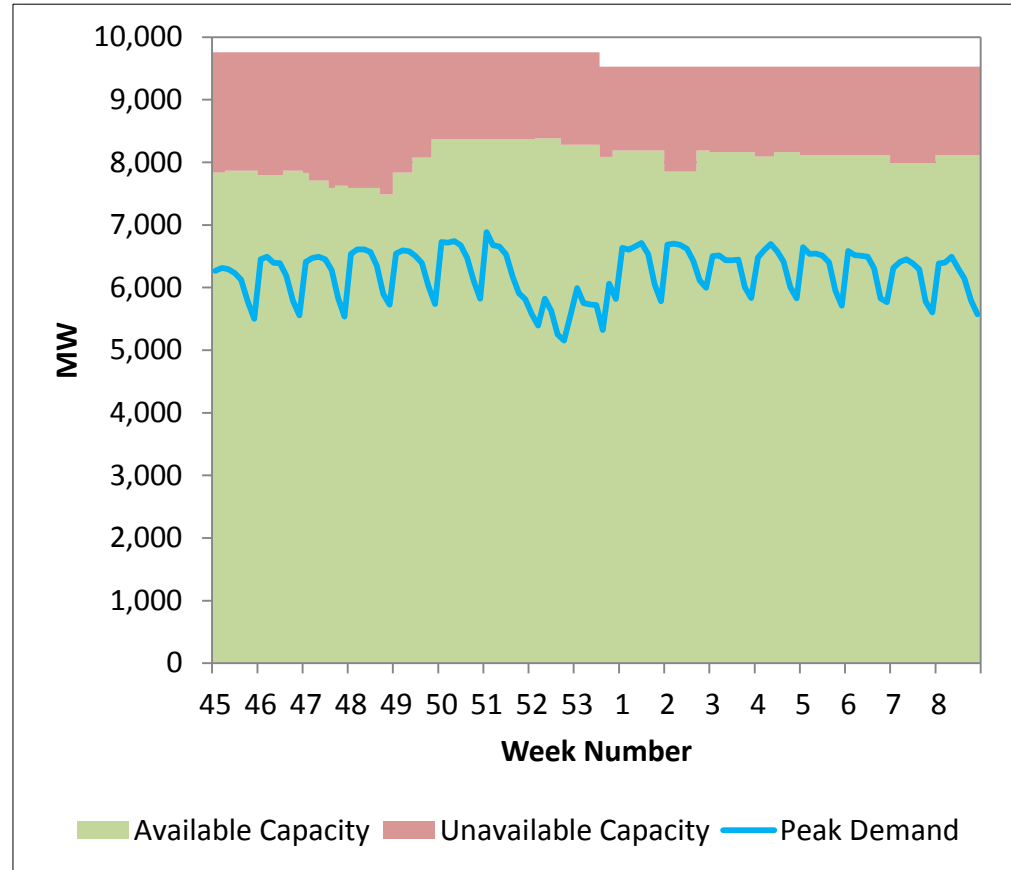
Northern Ireland Capacity Margin

One large unit forced out (e.g. C30)
B31 & KGT3 Scheduled Outage



Summary

- Capacity Margin is tight this winter
- If the high FOR continue there is risk of further System Alerts, particularly when wind generation is low and GB unable to provide support over EWIC and Moyle
- The margin is predicted to be at its tightest at the end of November and start of January.



Winter Outlook / Readiness

- Over the summer we have restricted 'run hours' on a number of large gas fired units to preserve their running for winter.
- Meeting with all generating companies to assess their readiness (technical and COVID-19 risks, fuel stocks etc.)
- Met with National Grid to discuss their winter outlook (appears healthy)
- Annual emergency exercises ongoing
- Reviewing our own alert procedures and communications
- Engaging with ESN/NIEN on alert response and emergency procedures
- Ensuring that critical transmission circuits are returned to maximise generation availability and security of supply on the network

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Brexit Central Scenario

October 2020

Background

- The **Central Scenario** is based on the likely worst case scenario for Brexit, whereby no subsequent trade agreement has been reached between the UK and EU before the end of the transition period defined in the **Withdrawal Agreement** and related **Northern Ireland Protocol**.
 - Acceptance by both sides that even if an enduring solution is agreed as part of the FTA that these new arrangements will not be in place by Jan 1 2020
- Central Scenario is in line with existing communications from both the EU and UK regarding the arrangements for the Single Electricity Market (SEM) and its coupling with the GB and EU Internal Energy Markets.
 - The communications include:
 - [Northern Ireland Protocol](#) (part of the Withdrawal Agreement - Article 9 and Annex 4)
 - [EU Communication \(July 2020\)](#) [section C. + footnote 24]
 - [SEM Committee Statement on Brexit](#)

Central Scenario - Post Transition Period

- The **SEM will continue to operate as an all-island market post transition period.**
- In the **Central Scenario** the implications for the day ahead and intraday cross border markets are:
 - **Day ahead market :**
 - An all-island local day-ahead market will continue
 - There will no longer be day-ahead cross border trade
 - **Intraday market:**
 - Will continue as is, including cross border trade
- SEMOpx will work with relevant parties to implement new cross border arrangements, should they be needed, but this will not be available on day 1 post the transition period.
- On day 1 in the **Central Scenario** the key difference will be the removal of the cross border day ahead auction but all other elements of the trading arrangements will remain the same.

Brexit - Auction Timings and Trading Periods “As is”

The table below summarises the SEMOpx auctions:

Market Name	Gate Window Closure	Delivery Periods	Market Coupling
DAM	11:00 (D-1)	23:00 – 23:00 (24 * 1 hour)	Coupled with Europe
IDA – 1	17:30 (D-1)	23:00 – 23:00 (48 * ½ hour)	Coupled with GB
IDA – 2	08:00 (D)	11:00 – 23:00 (24 * ½ hour)	Coupled with GB
IDA – 3	14:00 (D)	17:00 – 23:00 (12 * ½ hour)	Local trading only

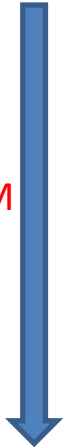
Brexit - Auction Timings and Trading Periods “To Be”

On Day One

The table below summarises the SEMOpx auctions:

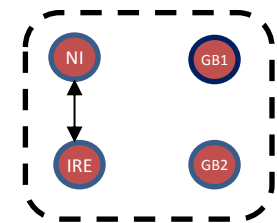
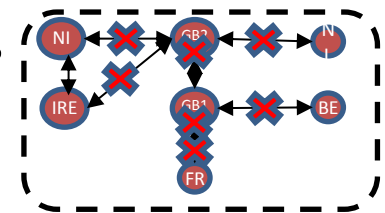
Market Name	Gate Window Closure	Delivery Periods	Market Coupling
DAM Local	11:00 (D-1)	23:00 – 23:00 (24 * 1 hour)	Isolated Local Auction with Zero IC capacity
IDA – 1	17:30 (D-1)	23:00 – 23:00 (48 * ½ hour)	Coupled with GB
IDA – 2	08:00 (D)	11:00 – 23:00 (24 * ½ hour)	Coupled with GB
IDA – 3	14:00 (D)	17:00 – 23:00 (12 * ½ hour)	Local trading only

IC Capacity Transfers from DAM to IDAs



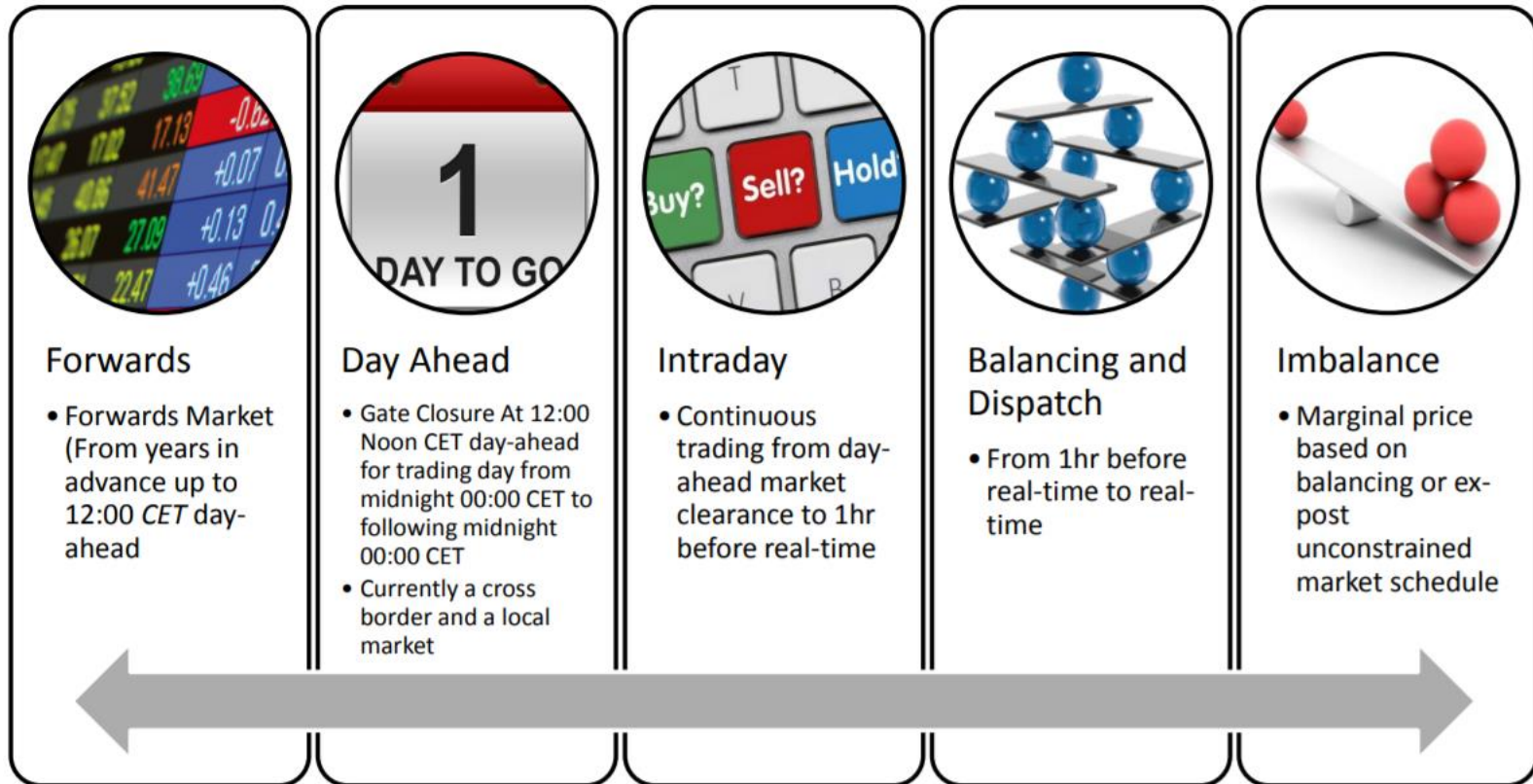
Brexit - SEMOpx Service Implications

- No functional changes to trading in Auctions or Continuous
- Products and result publication timings remain unchanged
- Post Coupling services (ECC Physical and Financial Settlement) remain unchanged
- Technical implementation:
 - An interim solution with no MRC topology changes but no DAM coupling following a number of months
 - An enduring solution with permanent MRC topology changes and no DAM coupling

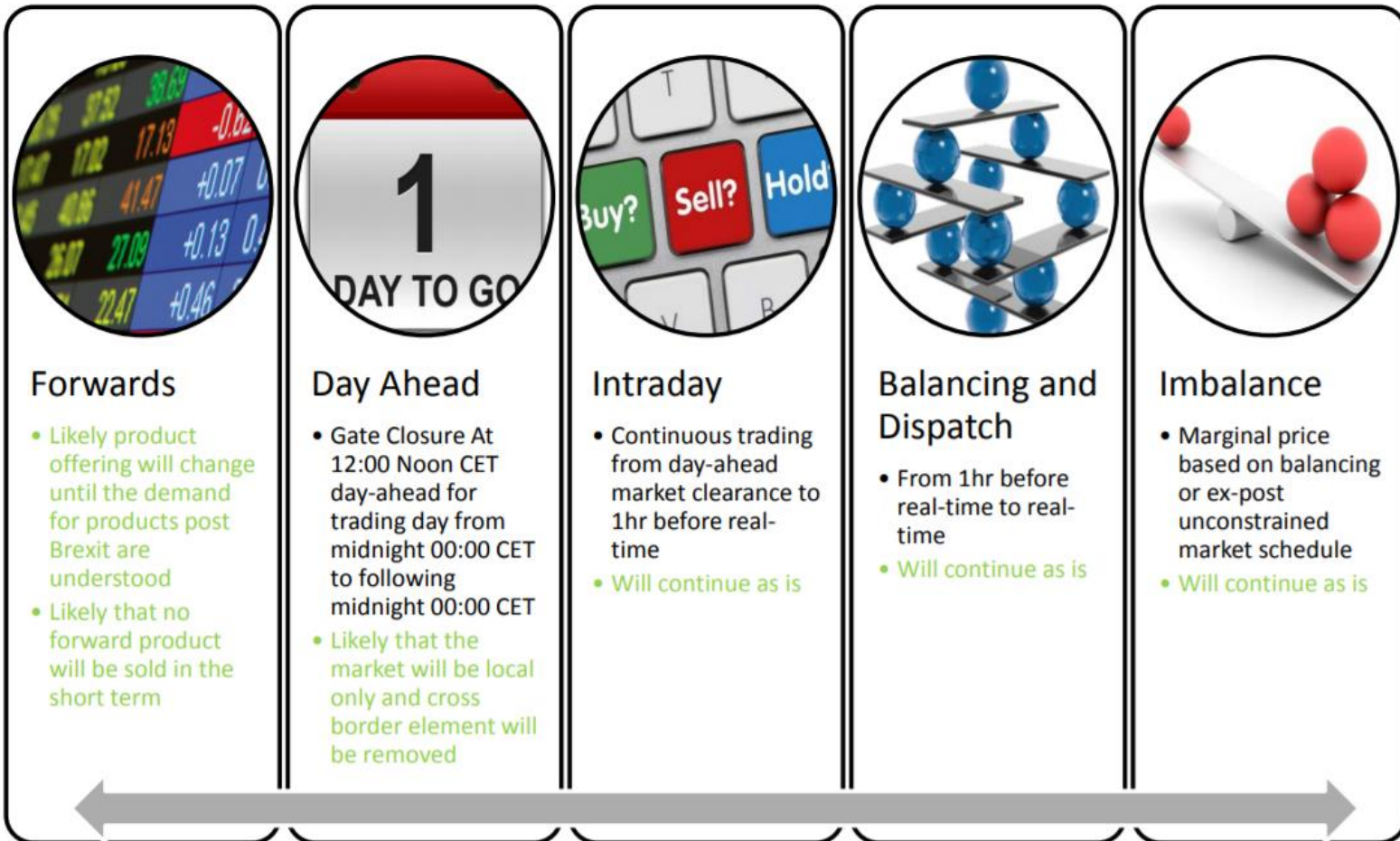


Other Markets - SEM

SEM Market Timeframes



Other Markets – SEM – Central Scenario



Considerations – short term

- Complex Orders in IDA
- Communications plan around central scenario
- Monitoring the efficiency of the central scenario
 - Need to attract additional liquidity?
- Customs declarations and VAT changes

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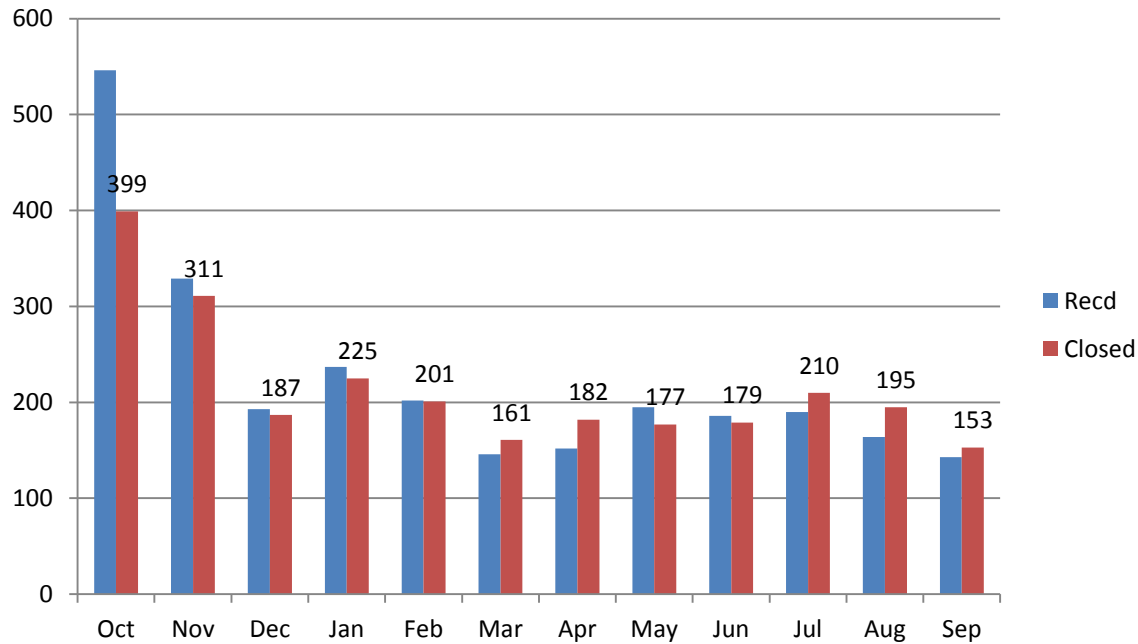
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Market Interface Update

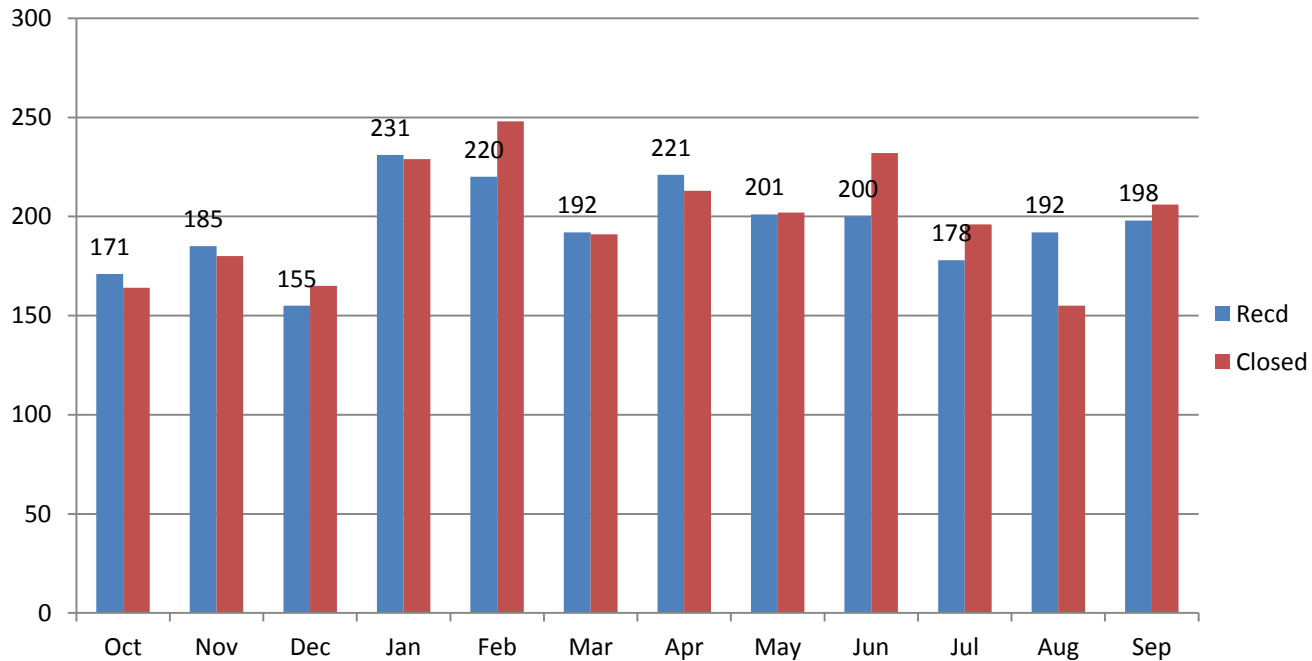
2024/2025 T-4 Capacity Auction: Upcoming dates on Timetable

Review	B.22	System Operators notification of outcome Date	12/10/2020
Disputes	B.24	Qualification Dispute Notice Date	19/10/2020
Disputes	B.25	Qualification Dispute Decision Date	16/11/2020
Qualification	A.6	Final Qualification Submission Date	17/11/2020
Qualification	A.7	Final Qualification Results Date	04/12/2020
Qualification	A.8	Qualification Results Publication Date	08/12/2020
Info	A.9	Final Locational Capacity Constraint Limits Date	08/12/2020
Info	A.10	Final Auction Information Pack Date	08/12/2020
Auction	A.11	Capacity Auction Submission Commencement	14/01/2021
Auction	A.12	Capacity Auction Submission End	21/01/2021 10:00
Auction	A.13	Capacity Auction Run Start	21/01/2021 12:00
Auction	A.14	Capacity Auction Completion Date	26/01/2021
Auction	A.15	Capacity Auction Provisional Results Date	29/01/2021

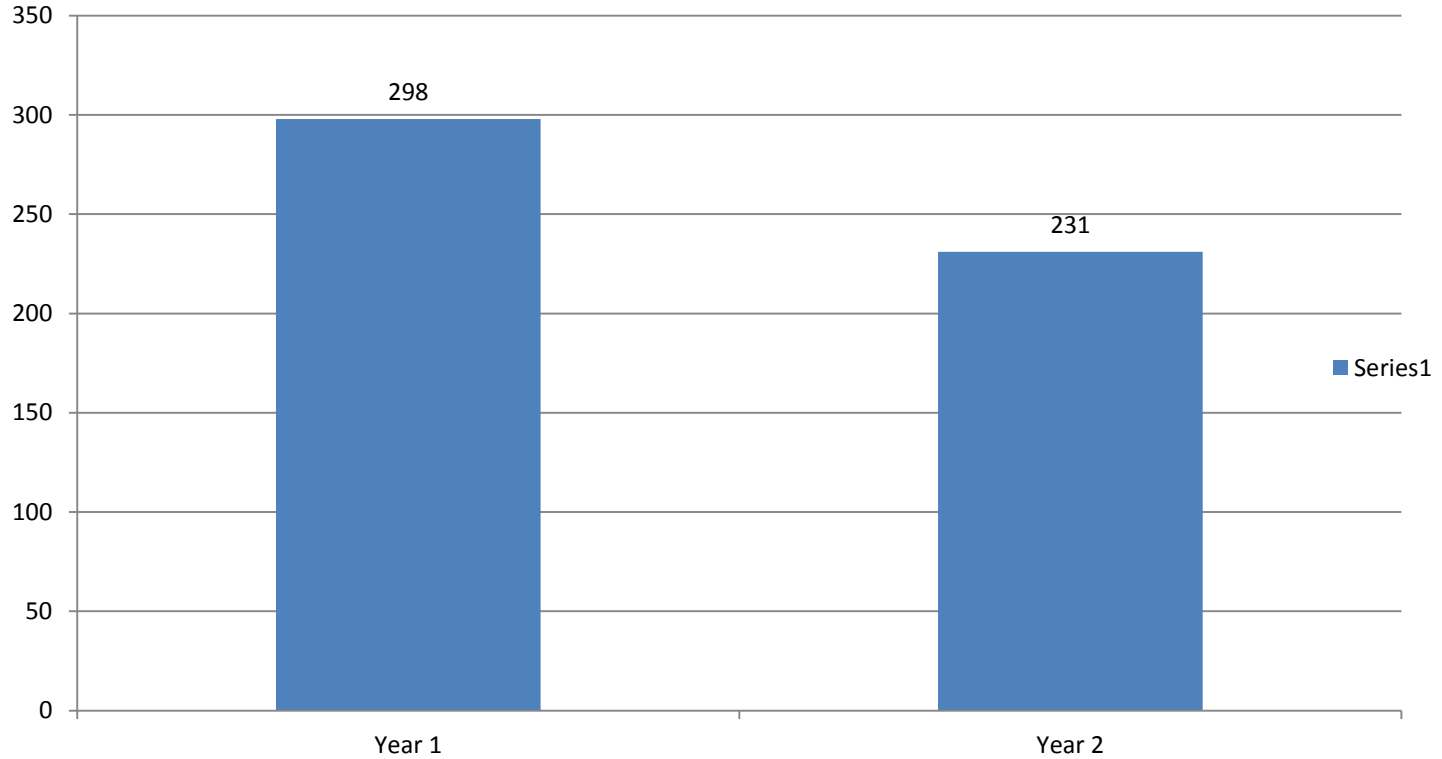
General Query Summary – Year One



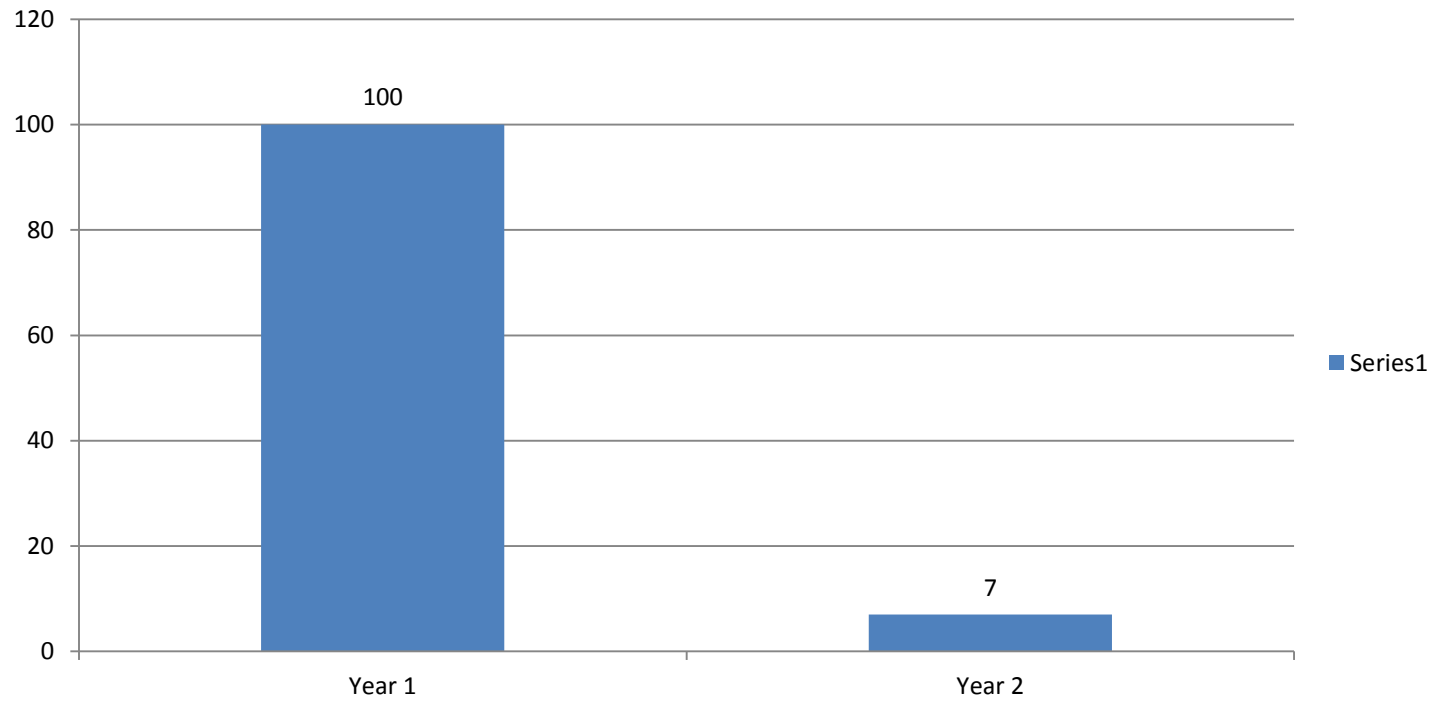
General Query Summary – Year 2



Formal Queries



Disputes



Close

- SEMO Website: <http://www.sem-o.com/>
- Semopx Website: <http://www.semopx.com/>
- Queries: Info@sem-o.com; Info@semopx.com
- Capacity Market: CapacityMarket@sem-o.com

Thank you for your attendance.