

18 March 2026

Outturn Availability and Generator Forum 2026



Agenda

- Q&A on published Outturn Availability reports
- Outturn Availability process overview
- Settlement process overview
- Distribution Outage Programme update 2026
- Reminder of Generation Outage Planning timelines

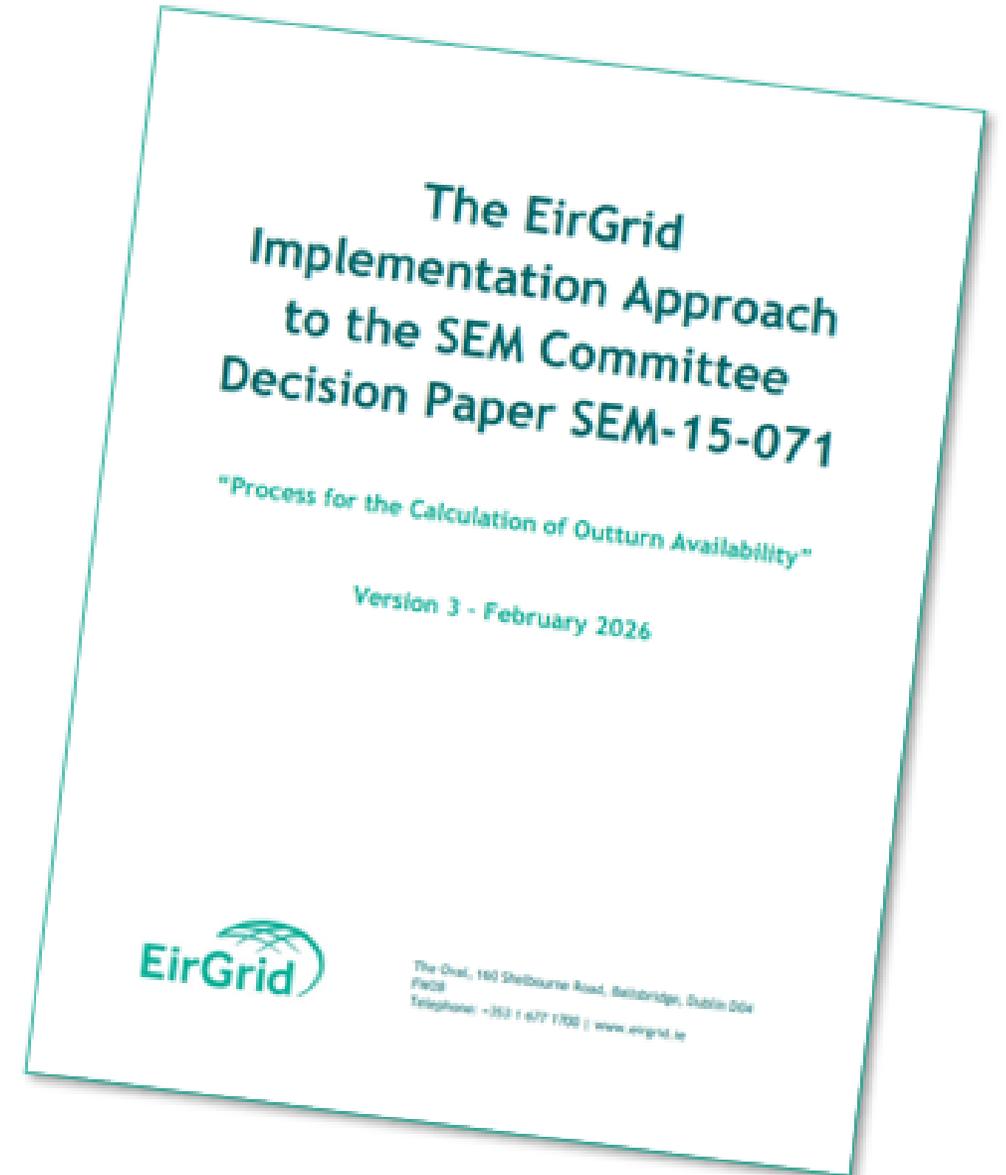


Q&A on published Outturn Availability reports

Outturn Availability Reports and Forum Updates:

Key Changes

- Changes to the OA Ex-Post report and forum were proposed at last year's OA Forum. No feedback was received.
- We have also updated our implementation approach to reflect these changes, which has now been approved by the CRU and is published [here](#).
- Key Updates:
 - No presentation on statistics from previous year.
 - Report now only contains information required under SEM-15-07.
 - Data on changes to Window, Scheduled Days (Month-1), Designated Days (Month-1), and Generator Dates are no longer included.
 - The report continues to provide both planned and actual outage dates, durations, and works for comparison.



Questions on OA Reports

EirGrid Ex-Post Outturn Availability Connection Asset Maintenance Report for 2025

February 2026



The Oval, 160 Shelbourne Road, Ballsbridge, Dublin D04 FW28
Telephone: +353 1 677 1700 | www.eirgrid.com

EirGrid Ex-Ante Outturn Availability Connection Asset Maintenance Plan for 2026

February 2026



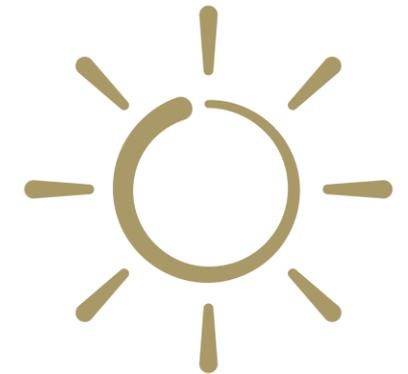
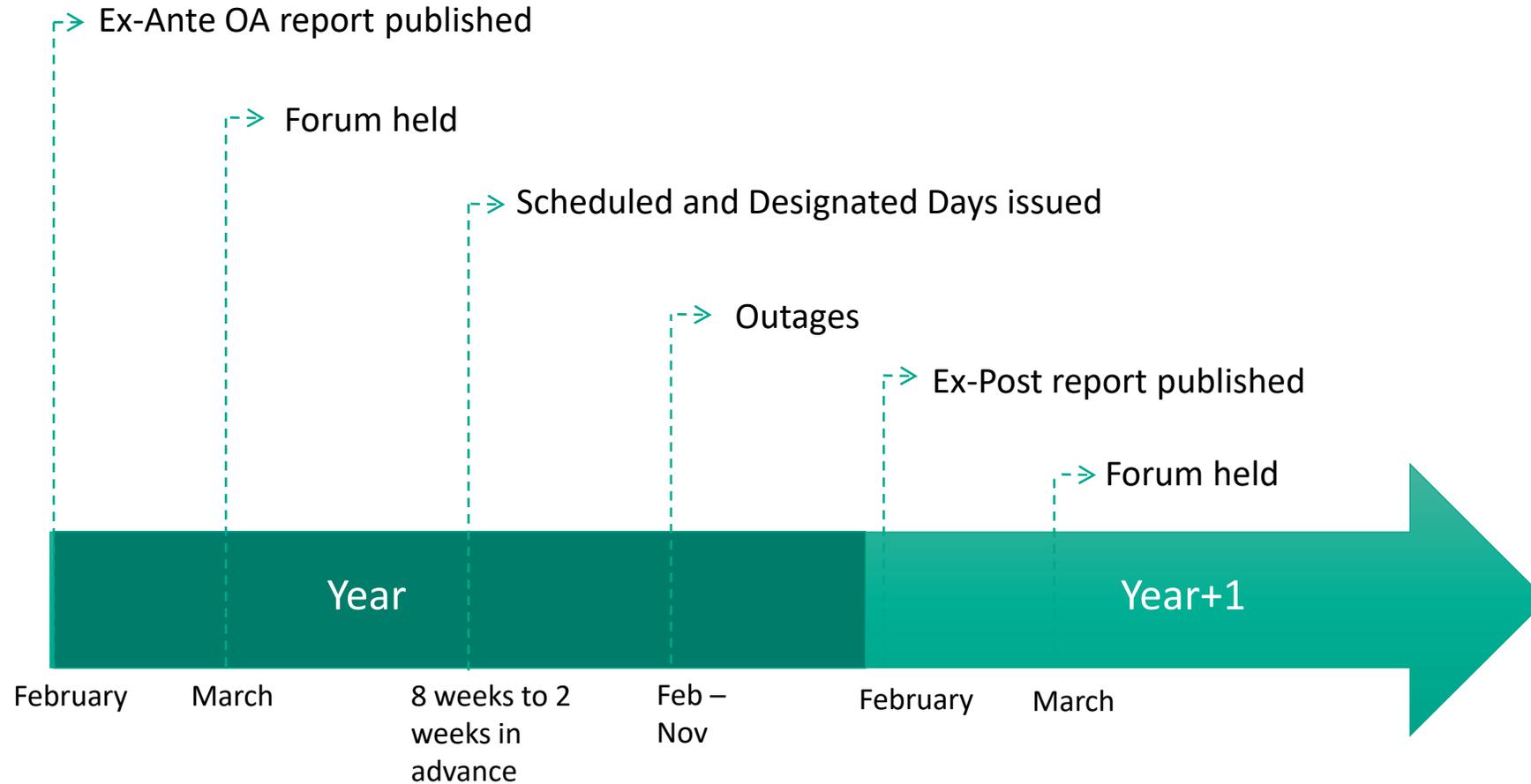
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Outturn Availability process overview



Process Timeline



Scheduled and Designated Days

Throughout the season, each generator receives details of the days scheduled for the works and the designated days for the purposes of Outturn Availability (OA).

Hello X,

The following works are now scheduled:

GENERATOR TRANSFORMER - XXXXX						
TO-XX-XX-XXXX-XX ISO week: 17mo - 17sa Date: 24 Apr - 29 Apr Duration: 6 Days (5 WD) Status: Scheduled						
WORK	LOCATION	WORK ID	STATUS	DAYS	DESCRIPTION/COMMENTS	
				6	Total Maintenance Outage Duration Requested	
OS	XX		DO	5	220kV SF6 Cubicle Ordinary Service	
AMCAB	XX		DO	2	Annual Insp. 400 & 220 Station OF Cable	
PROT	XX		DO	1	P1 - Maintenance of the bay protection relays	
CMCAB	XX	XXXX	DO	1	Replace Low & Differential Oil Alarm Gauge	

The designated days are the 24, 25, 26, 27, 28 April.

Regards,

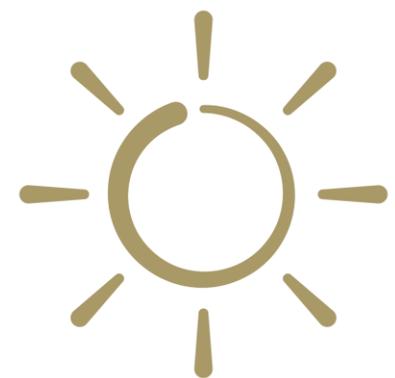
Generation Outage Planning

Outturn Availability profiles for SEM Controllable units

- For Outturn Availability profiles, we capture the full period when a generator is disconnected due to transmission works and is Outturn Available.
- Profiles are an average of the forecast availability received from our renewable forecast vendors.
- Profiles are submitted to the SEM.



VO Start time	
Circuit Breaker open time	
Beginning of outturn available period	
Profile start time	
VO end time	
Circuit Breaker close time	
Profile end time	



Key timelines for OA



Outturn Availability Profiles are submitted by the Outage Planning team before 1200hrs every Monday, Wednesday and Friday.



TSO customers should receive all OA profiles through the EirGrid Customers' team.



DSO customers should receive all OA profiles through the DSO outage programme team.



If you have a query on the profile, please email outageplanning@eirgrid.com

Balancing Market Settlement

Outturn Available v Designated Outage

- The compensatory BM settlement mechanisms differ for when units are deemed Outturn Available or are on Designated Days (i.e. not Outturn Available)
- Units can be deemed on designated days (not Outturn Available) for 5 calendar days per year.

Outturn Available

- Decremental action from TSO.
- Dispatch Quantity (QD) is zero for BM settlement.
- Metered Quantity (QM) is zero for BM settlement.
- Availability (QAA) is non zero for BM settlement if the generator has output capability.
- Participants would typically trade ex-ante (QEX). QEX typically non zero for BM settlement.
- Final Physical Notification (FPN) should be aligned with QEX as per TSC obligations.

Designated Outage

- Decremental action from TSO.
- Dispatch Quantity (QD) is zero for BM settlement.
- Metered Quantity (QM) is zero for BM settlement.
- Availability (QAA) is zero for BM settlement.
- Participants would not typically trade ex-ante (QEX). QEX typically zero for BM settlement.
- Final Physical Notification (FPN) should be aligned with QEX as per TSC obligations. FPN is typically zero for BM settlement.

Balancing Market Settlement Components

CIMB

- Calculated based on the units ex-ante quantity (QEX) and loss adjusted metered quantity (QMLF).
- If a generator has traded ex-ante but a decremental action has been taken to set their output to zero, this will result in a CIMB charge (assuming PIMB is positive).

$$CIMB_{u\gamma} = PIMB_{\gamma} \times (QMLF_{u\gamma} - QEX_{u\gamma})$$

where:

- (a) $PIMB_{\gamma}$ is the Imbalance Settlement Price in Imbalance Settlement Period, γ , calculated in accordance with Chapter E (Imbalance Pricing);
- (b) $QMLF_{u\gamma}$ is the Loss-Adjusted Metered Quantity for Generator Unit, u , in Imbalance Settlement Period, γ ; and
- (c) $QEX_{u\gamma}$ is the Ex-Ante Quantity for Generator Unit, u , in Imbalance Settlement Period, γ .

Balancing Market Settlement Components (cont. i)

CDISCOUNT

- CDISCOUNT may be applicable when the a decremental action is taken by the TSO resulting in a QAB (Accepted Bid Quantity) MW quantity.
- The QAB is derived from the difference between the Dispatch Quantity and FPN. The availability (QAA) is also assessed to ensure the QAB is accurate for BM settlement purposes.
- CDISCOUNT is a compensatory payment to ensure a generator has not been charged more per MW in CIMB than what they were willing to be charged for a decremental action per MW.
- CDISCOUNT assesses the generators PBOA_QAB against the imbalance price (PIMB) to determine if CDISCOUNT is applicable.

$$\begin{aligned}
 & CDISCOUNT_{uy} \\
 &= \sum_o \sum_i \left(\text{Min}(PBO_{uoiy} - PIMB_y, 0) \right. \\
 &\quad \times \left(QABLF_{uoiy} \right. \\
 &\quad \left. - \text{Min}(QABBPOLF_{uoiy}, QABBIBAS_{uoiy}, QABUNDEL_{uoiy}, QABNFLF_{uoiy}, QABCURLLF_{uoiy}, \right. \\
 &\quad \left. \left. QABTOTSOLF_{uoiy} \right) \right)
 \end{aligned}$$

Balancing Market Settlement Components (cont. ii)

CDISCOUNT - Wind & Solar Units

- Wind & Solar units are deemed to have a PBOA_QAB of €0.
- If these units trade in line with their availability, the CIMB and CDISCOUNT will offset resulting in a net Balancing Market settlement of €0.
- Important consideration is that if these units obtain an ex-ante position that exceeds their availability, they can be charged more in CIMB than what they may be paid for in CDISCOUNT.
- This is due to the QAB being derived from the difference between the Dispatch Quantity and FPN. Wind & solar units FPN is derived from their availability.

E.g. Wind unit FPN = 20 MWh

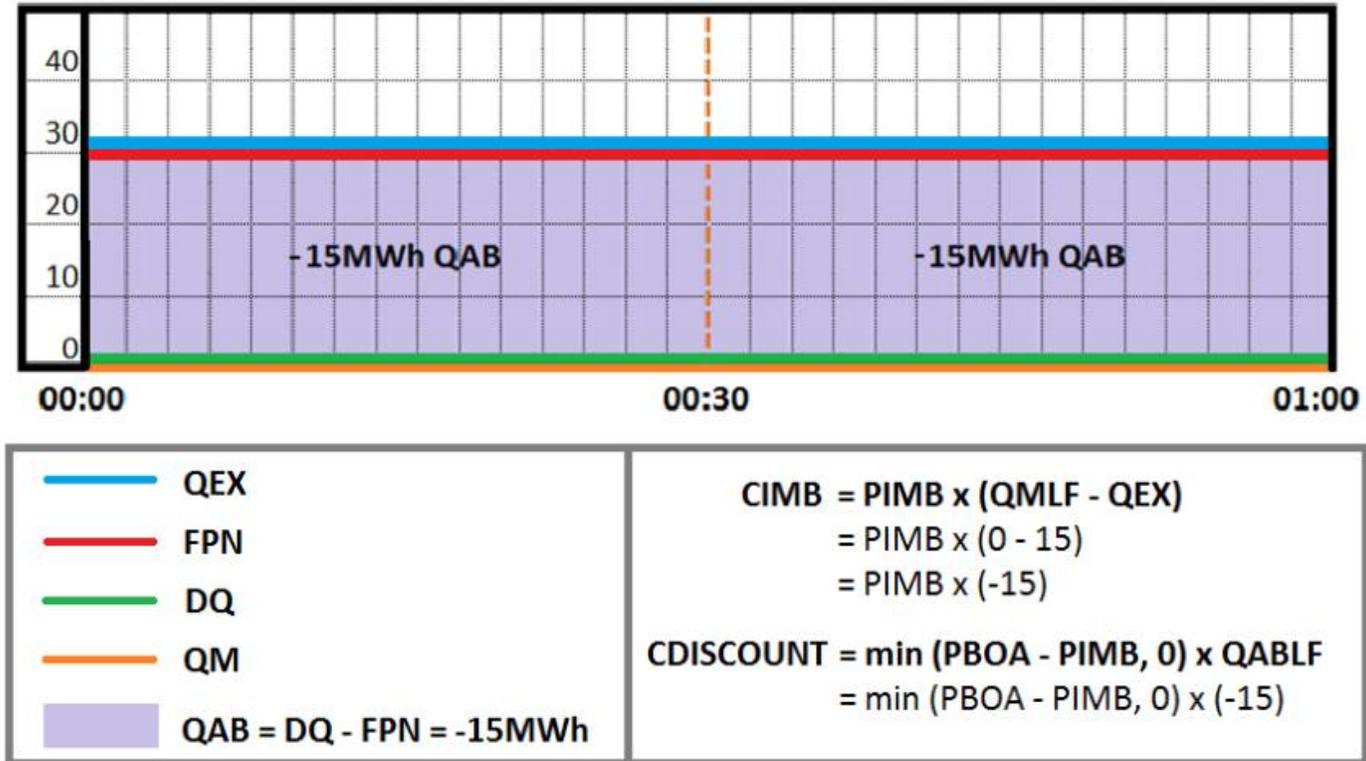
QAA = 20 MWh

QEX = 30 MWh

DQ = 0 MWh

The QAB is -20 MWh for CDISCOUNT compensation but the CIMB charge is based on the 30 MWh. CIMB charge would exceed the CDISCOUNT payment.

Example Scenario



Net Balancing Market settlement:

- For wind units: €0 as PBOA = €0
- For conventional units:
 - Settled at PIMB if PBOA > PIMB
 - Settled at PBOA if PBOA < PIMB

Firm v Non-Firm Quantities

- Units can be deemed fully firm, non-firm or partially firm.
- Fully Firm units are applicable for CDISCOUNT.
- Fully Non- Firm units are not applicable for CDISCOUNT. While a QAB value may be calculated, the non-firm quantity will be removed with the QABNFLF determinant within the CDISCOUNT calculation.
- Partially Firm units are applicable for CDISCOUNT up to their firm quantities.
- All other conditions of CDISCOUNT compensation apply where PBOA_QAB is assessed against PIMB to determine if CDISCOUNT payment is applied in BM settlement.

$$\begin{aligned}
 & CDISCOUNT_{uy} \\
 &= \sum_o \sum_l \left(\text{Min}(PBO_{uoiy} - PIMB_y, 0) \right. \\
 &\times \left(QABLF_{uoiy} \right. \\
 &\left. - \text{Min}(QABBPOLF_{uoiy}, QABBIA S_{uoiy}, QABUNDEL_{uoiy}, \boxed{QABNFLF_{uoiy}}, QABCURLLF_{uoiy}, \right. \\
 &\left. \left. QABTOTSOLF_{uoiy} \right) \right)
 \end{aligned}$$

Synopsis

- Generators deemed Outturn Available are eligible for CDISCOUNT payments if all conditions are satisfied.
- If a generator has an availability of zero, then a QAB will not be generated. Generators on Designated Outage have an availability of zero hence why CDISCOUNT will not apply in BM settlement.
- Certain generators who are applicable for CDISCOUNT should acknowledge scenarios where trading differently to their availability may result in CIMB charges exceeding CDISCOUNT compensation in the BM.
- Fully non-firm units are not eligible for CDISCOUNT payments within BM settlement.
- Generators must have traded in the ex-ante markets to be applicable for CDISCOUNT.
- Submission of market data by participants for Outturn Available generators should adhere to all relevant codes such as the Trading & Settlement Code and any other licence obligations.



NETWORKS

Distribution Outage Programme (DOP) Update 2026

EirGrid Outturn Availability & Generator Forum

9th March 2026

John Whelan

Distribution Outage Programmer, HV Operations, ESB Networks

The DOP

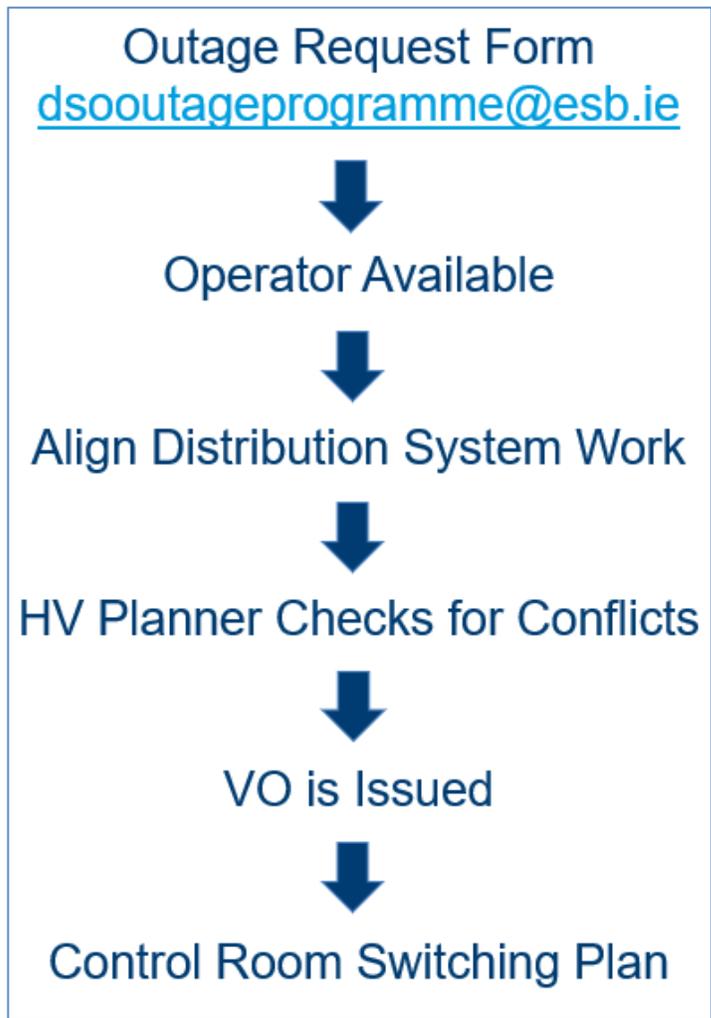
The **D**istribution **O**utage **P**rogramme (DOP) is a mechanism to capture and align DSO outages with HV Customer outages.

The following outages are included on the DOP:

- Outages of HV Customer plant (where ESB Networks operators are needed to telemess).
- All DSO/TSO outages which force a HV Customer off the system.
- All 110 / 38 kV transformer and selected 110 / MV transformers.

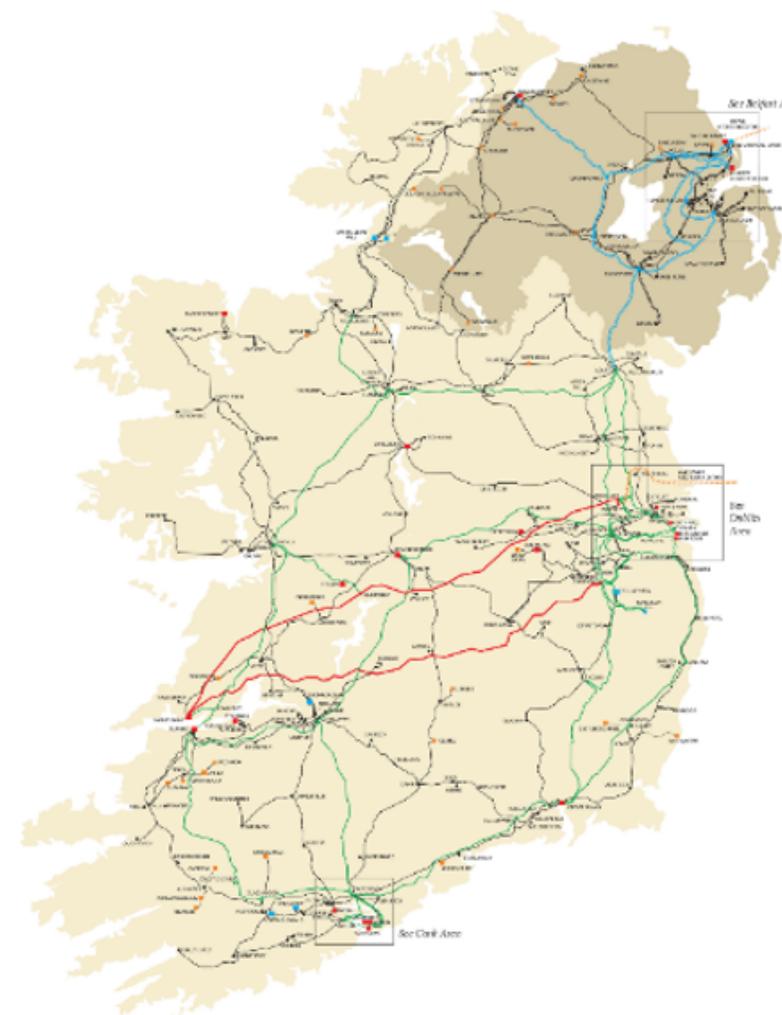
All communication through – dsooutageprogramme@esb.ie

Coordinated by John Whelan and supported by the HVSM and the HV Planners.

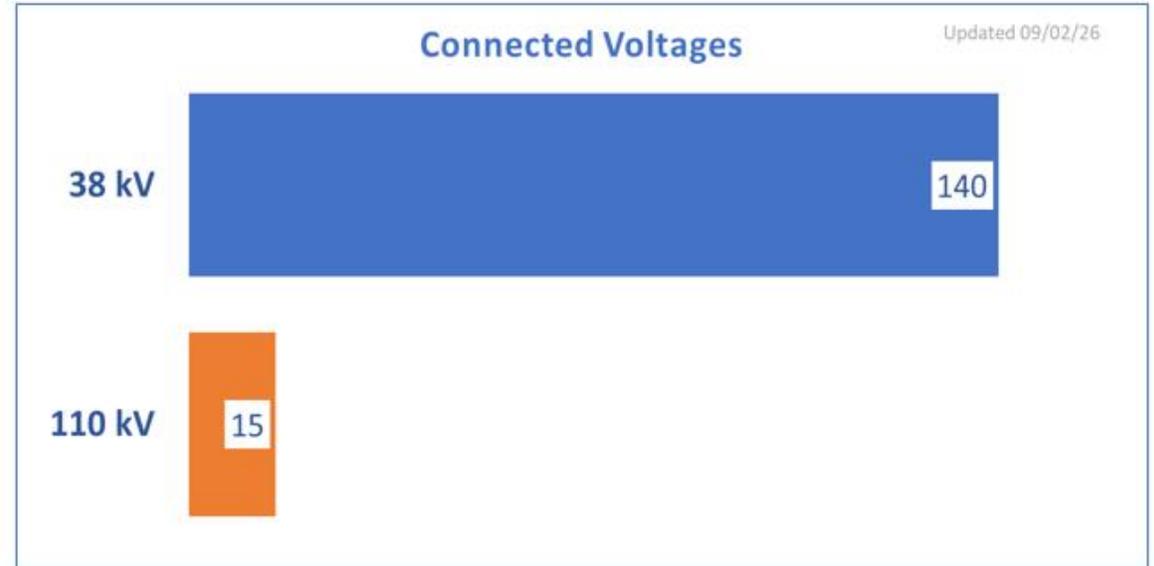
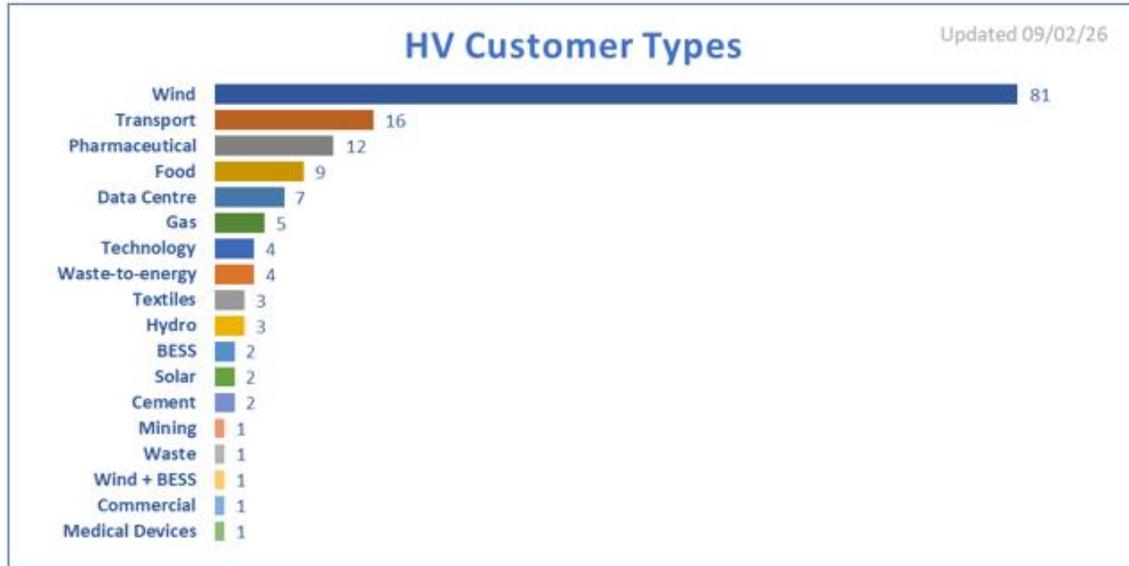


System Controllers

Voltage	System Manager	System Controller	Operator
400 kV	TSO	NCC	NCC / NTs
220 kV	TSO	NCC	NCC / NTs
110 kV	TSO/DSO	NCC / NDCC	NCC / NDCC / NTs
38 kV	DSO	NDCC	NDCC / NTs
MV	CSS	NDCC	NDCC / NTs
LV	CSS	CSS	NTs



155 HV DSO Customers



Stakeholders – Owners / Assets Managers / Contractors



NEOEN



ND NeoDyne



ENERGYPRO
MAXIMISING WINDFARM VALUE



ABO
WIND



MV MEGA VAR
ELECTRICAL SERVICES



Orsted

amazon

enèrgia
Switched on



ENERCON
ENERGY FOR THE WORLD



POWERCOMM
GROUP



Google

SAORGUS | ENERGY LTD



Reasons for DSO Outages

- HV Equipment Maintenance Cycles
- OHL Surveys / Construction Work
- Timber Cutting
- Circuit Diversions
- Equipment Faults
- Asset Replacement Programs
- Storm Damage
- New Connections
- TOP Outages

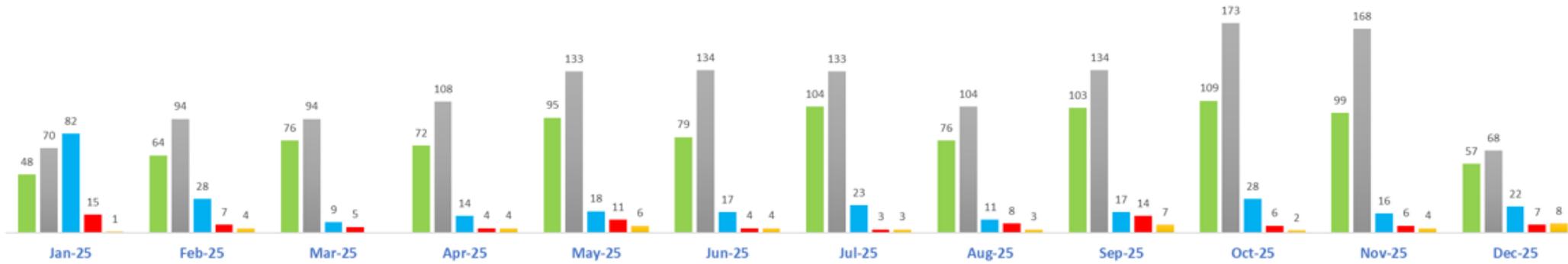


38 kV Outage Statistics 2025

HV Outage Statistics - All - 2025 (Total = 2816)

Updated 09/02/2026

VOs Issued (982) VOs Modified (1413) FOs Issued (285) VOs/FOs Cancelled (90) Energisation Instructions (46)

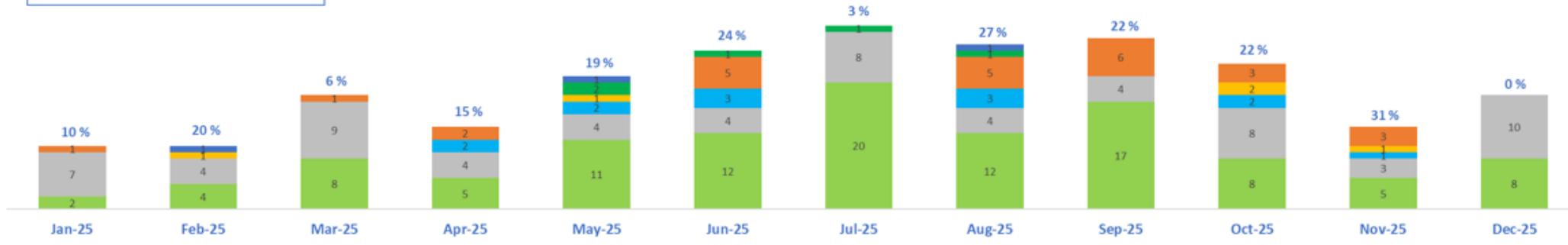


HV Customers Outage Alignment - 2025 (Total = 233)

Updated 09/02/26

Customer Only (112) DSO Only (69) TSO Only (13) TSO/DSO (5) DSO/Customer (26) TSO/Customer (5) TSO/DSO/Customer (3)

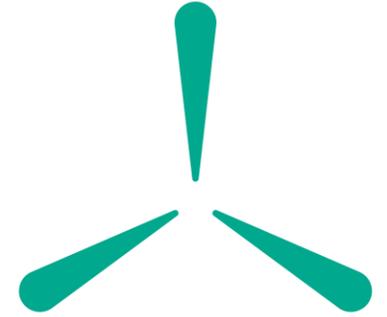
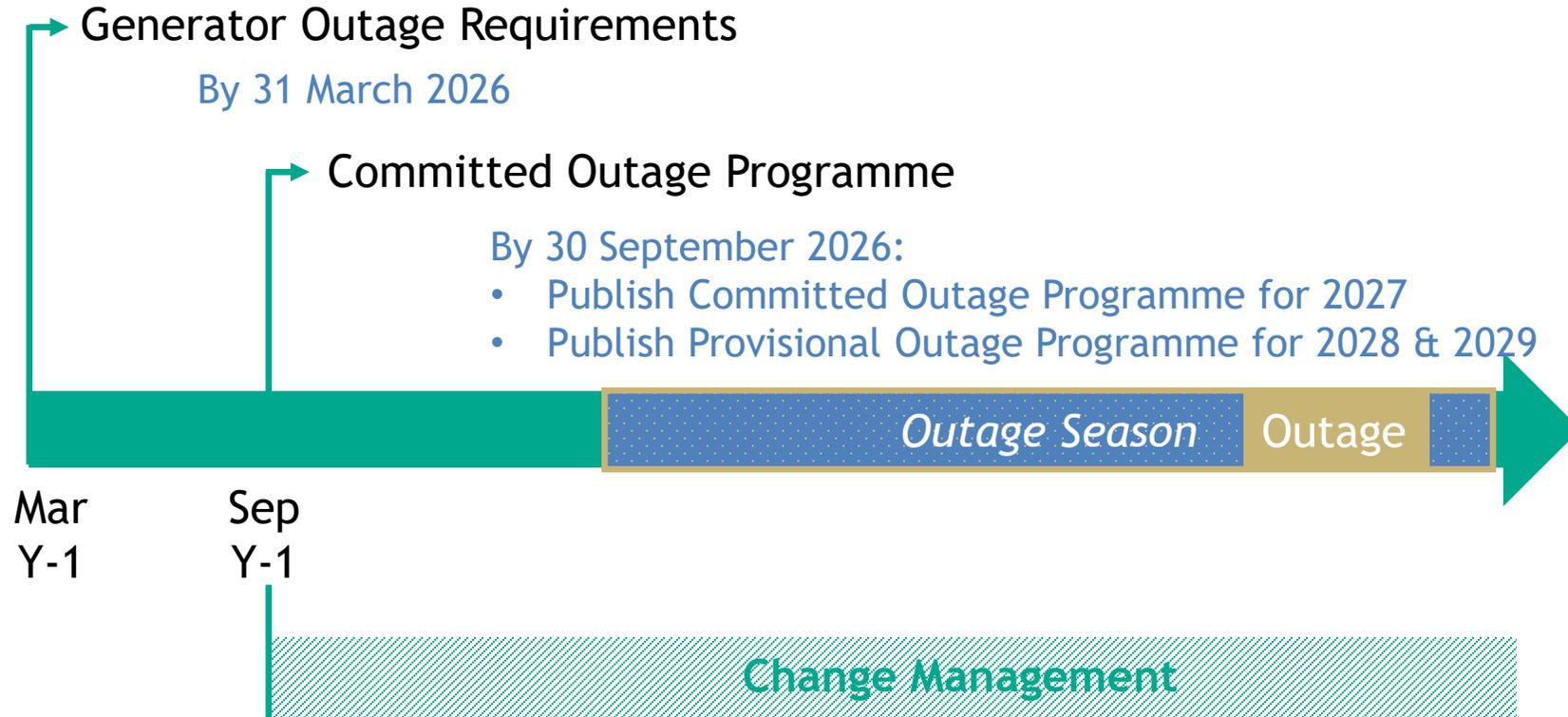
Average Outage Alignment Rate = 17 %



End

Reminder for Generation Outage Planning timelines

Outage Planning



Generator Outage Detail - Form GEN04

GEN-04 form also needs to be submitted for the committed outages of 2027

Generator Outage Detail Form – Form GEN04

Section 1: Outage Details

Unit ABC	MW Unavailable 500MW	Outage Start Time/ Date 08:00 03/09/2026	Outage Finish Time/ Date 20:00 17/09/2026
Outage Reason (please provide as much detail as possible)			

Section 2: Availability of supply to the Generator Transformer

	Y/N	If Yes please provide details (including estimated dates)
1. Are there any restrictions as to when EirGrid can schedule outages of your generation connection assets during the unit outage?	N	
2. Is work planned on the Grid-Connected Transformer?	N	
3. If yes to question 2, is this work mutually exclusive with ESBN work on 110kV/ 220kV/ 400kV side?	N	
4. If yes to question 2, will ESBN be requested to remove earths from the transmission side?	N	
5. If yes to question 2, will the HV connections of the bushings need to be removed as part of the work?	N	
6. If yes to question 2, will standard points of isolation/disconnection be provided in adherence with the Operational Instruction, if no, please provide more information?	N	

Section 3: Testing

Will there be On-load Testing during the outage such the unit transformer would be required to be in service to facilitate exporting of energy up to base-load ?	Y/N	If Yes please provide details (including estimated dates)
	N	

Will there be any alteration to technical or operational capabilities, flexibilities or limitations of the Generation Unit (including auxiliaries) such that **Grid Code Testing** may be required?

This may be due to ageing of plant or apparatus and include, but are not limited to, alterations to software, turbine overhaul, governor, AVR etc.

	Y/N	If Yes please provide details (including estimated dates)
	N	

Section 4: Commissioning & Energisation Requirements

Will there been any **material change to any of the HV equipment at the generator's site such that:**

an **EirGrid Energisation Instruction** (and hence an ESBN commissioner) is required e.g. changes to HV plant including CBs, VTs, CTs, connections, transformer, transformer auxiliaries etc.?

design and/or works are required to be carried out on the EirGrid side of the connection e.g. design and/or works affecting the interface such as protection, metering, interlocking, earthing, etc.?

a change to the **Operating Instruction** for the associated HV transmission station is required?

	Y/N	If Yes please provide details (including estimated dates)
	N	
	N	
	N	

Transmission Outage Request - VO

All transmission outages must be submitted on the VO request form to TOP@eirgrid.com & neartime@eirgrid.com

Network operator requirements must be shared at least three weeks ahead of the planned outage



EirGrid Customer Form:

REQUEST FOR TRANSMISSION OUTAGE

To:	Transmission Outage Planning (TOP) & System Operations, EirGrid	
Company Name:	Date of Application:	
Contact Details of Requesting Party: Name: Email: Phone no:		
Plant:		
From:	Hrs on:	
To:	Hrs on:	
Description of works/Purpose of Switching ¹ :		
Is an Energisation Instruction (EI) Required? ²		
Station In Charge of Switching:		
Declaration of Fitness Required(Y/N):		
Signed:		
Copies to:		
<ul style="list-style-type: none"> > neartime@eirgrid.com; & TOP@eirgrid.com; > Cc: Info@eirgrid.com 		

Thank you!

