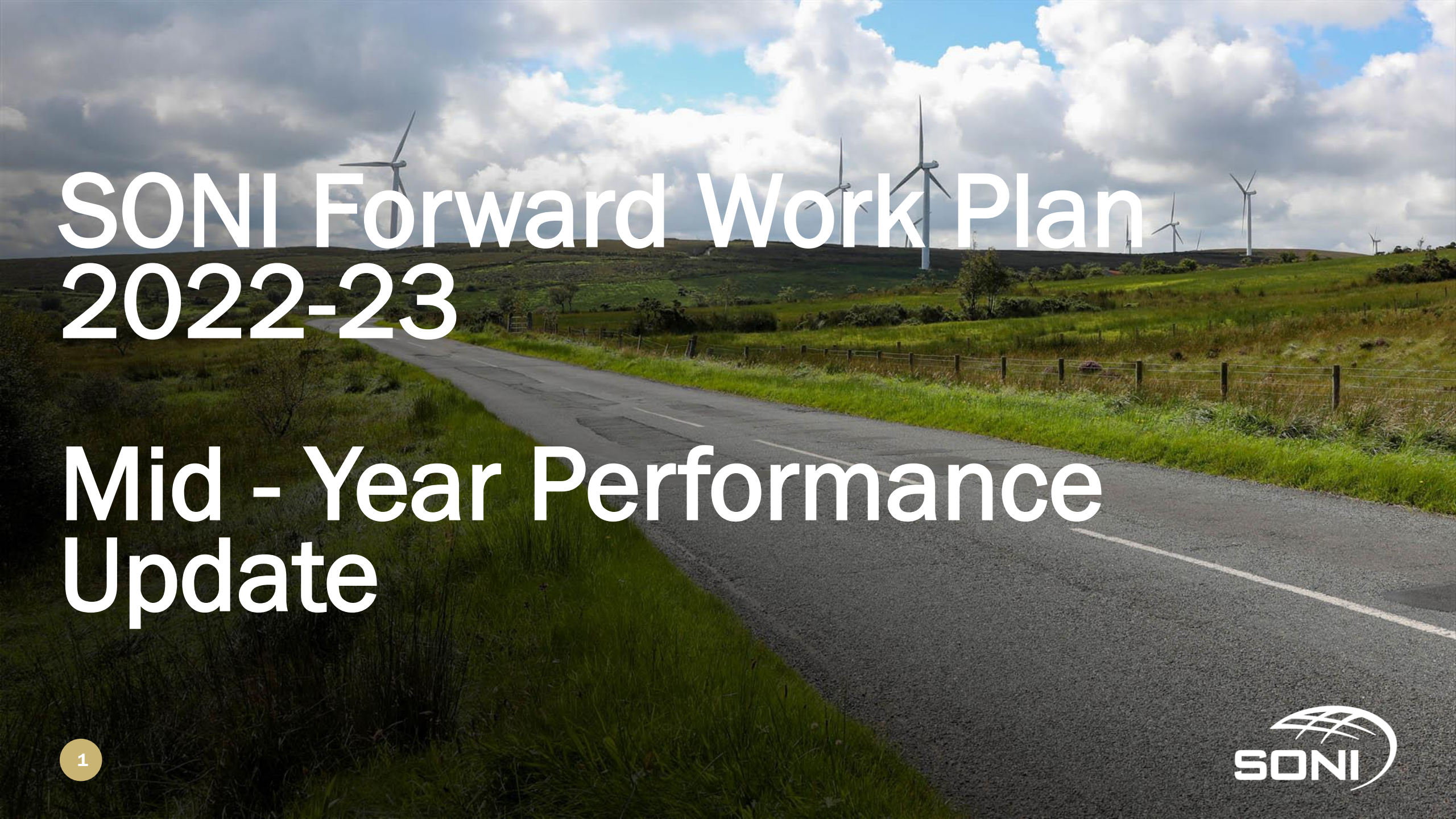


SONI Forward Work Plan 2022-23

Mid - Year Performance Update

Agenda

1. Overview of the Evaluative Performance Framework
2. SONI's 4 Roles
3. Role 1 System Operation
4. Role 2 Independent Expert
5. Role 3 System Planning
6. Role 4 Commercial Interface
7. SONI Governance
8. Stakeholder Engagement
9. A Day in the Life of the Control Room
10. SONI Planning Perspectives
11. Q & A

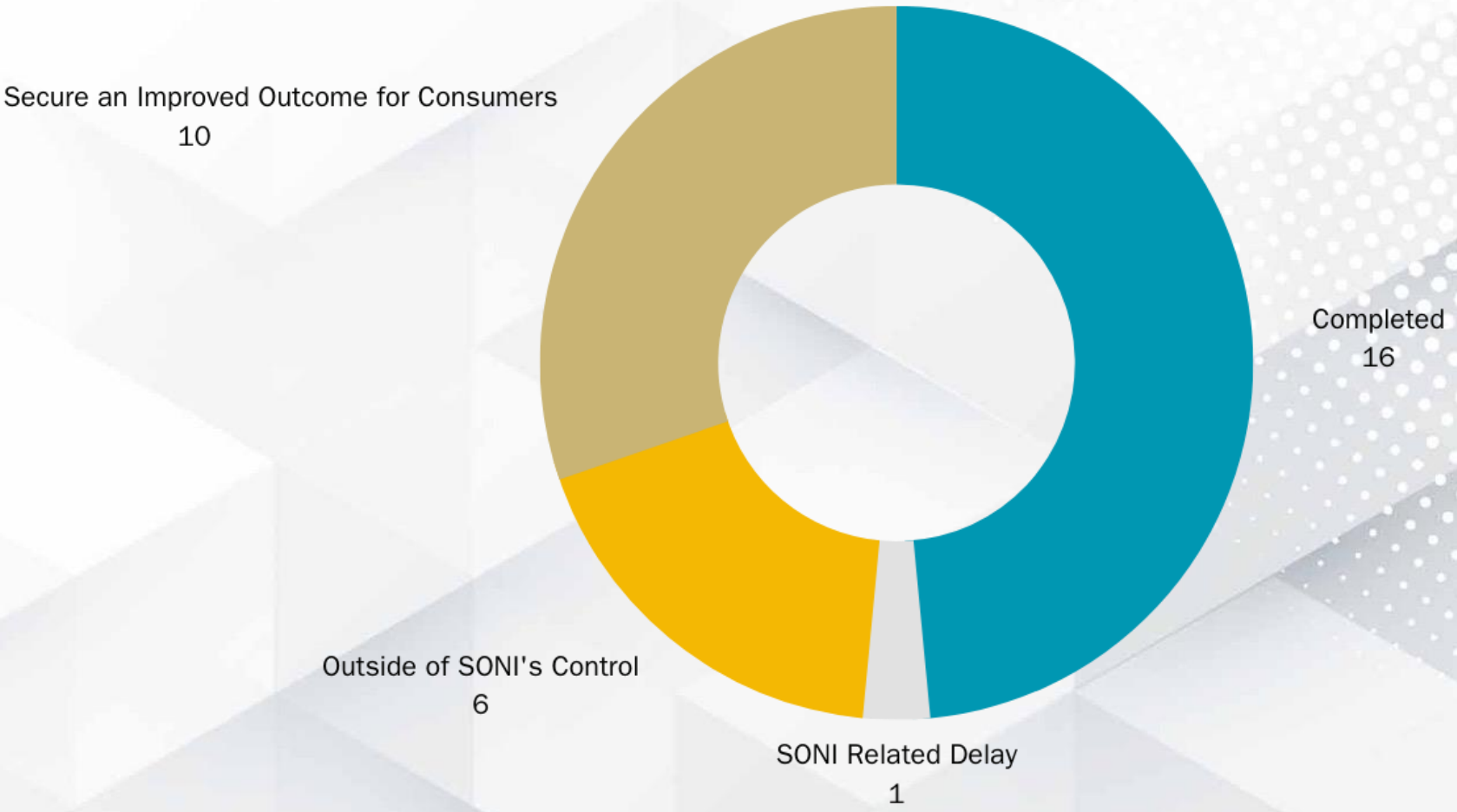
Overview of the Evaluative Performance Framework Process

SONI's 4 Roles

Overall Project Delivery

SONI have completed 16 out of the 33 milestones planned for this 6-month period.

Of the 17 remaining milestones which are not complete, 1 is a SONI-related delays, 6 were delayed outside of SONI's control, and 10 have been postponed in order to deliver an improved outcome for consumers.



Role 1
System Operation and Adequacy

Role Overview

Role 1 primarily captures the **Operations and Markets related activities** and a focus on Scheduling & Dispatch, Future Arrangements, Emergency Preparedness and Security of Supply

Our work in facilitation of renewable generation is also key within the context of the Northern Ireland Energy Strategy.
This Role is fully aligned with the requirements under the SEM

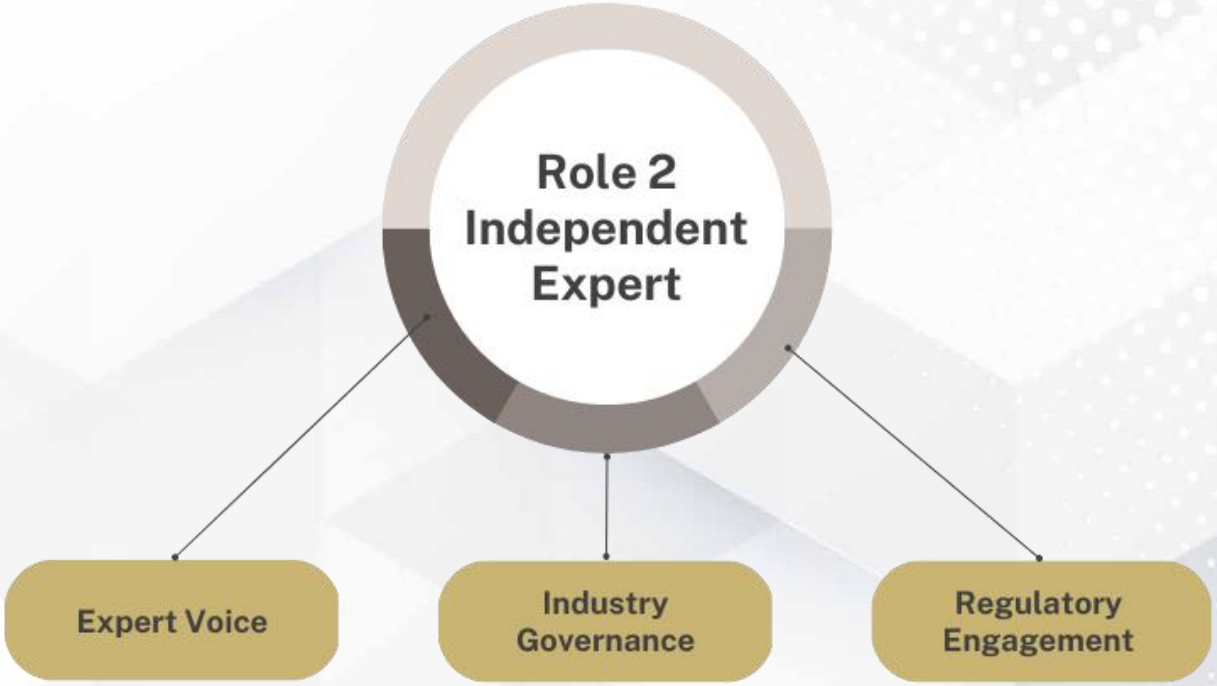
Project Delivery

SONI have completed 7 out of the 13 milestones planned for this 6-month period.

The 6 remaining milestones which are not complete have been postponed in order to deliver an improved outcome for consumers.

Role 2
Independent Expert

Role Overview

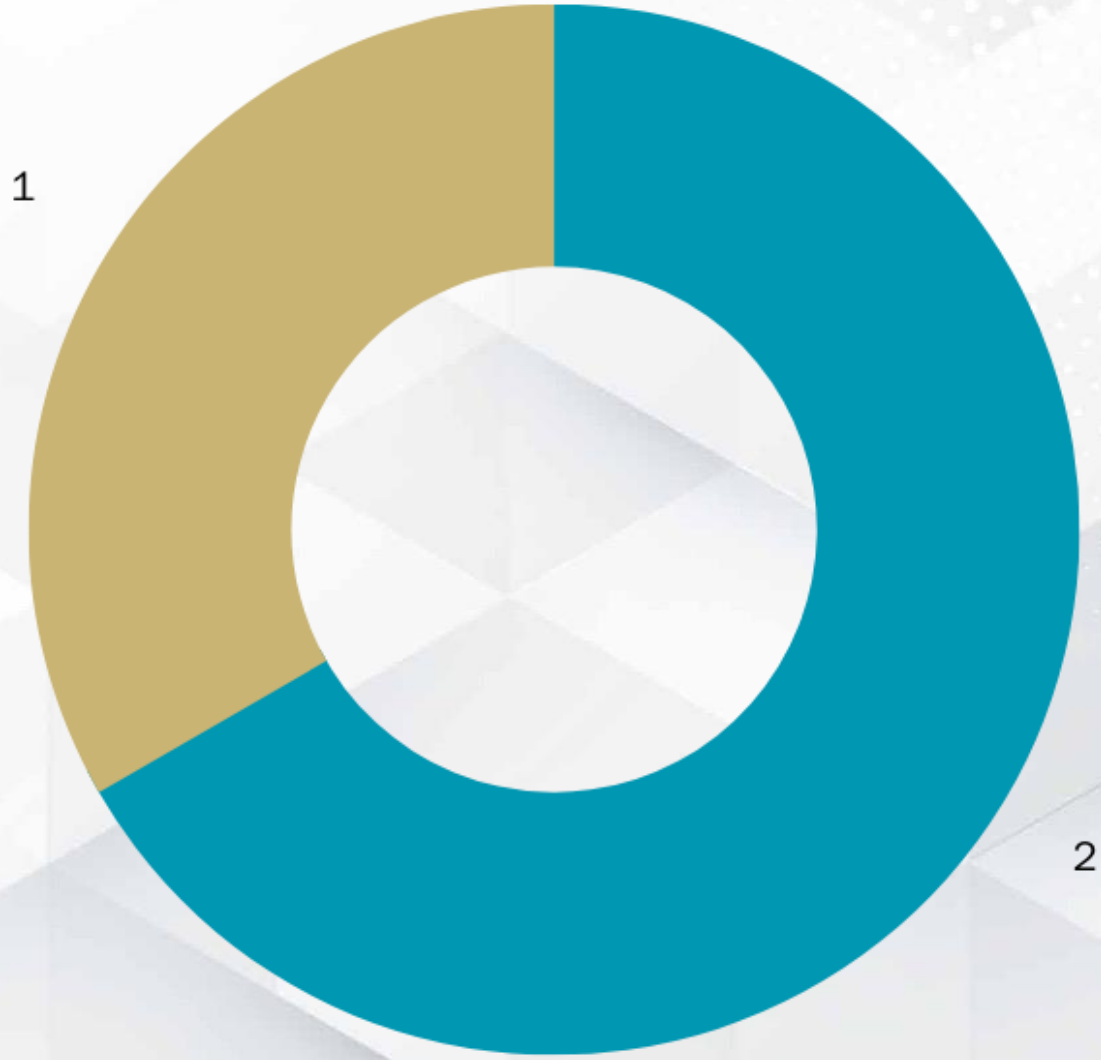


Role 2 Independent Expert looks towards activities where we are **actively engaging with stakeholders**, providing key materials for stakeholders to remain informed on future activities and SONI's role in supporting the energy strategy.

Representing the NI voice is a key aspect, and in order to do so we must ensure that we are listening to all of our stakeholders.

Project Delivery

- SONI have completed 2 out of the 3 milestones planned for this 6-month period.
- The 1 remaining milestone which is not complete, is postponed in order to deliver an improved outcome for consumers.



Role 3
System Planning

Role Overview

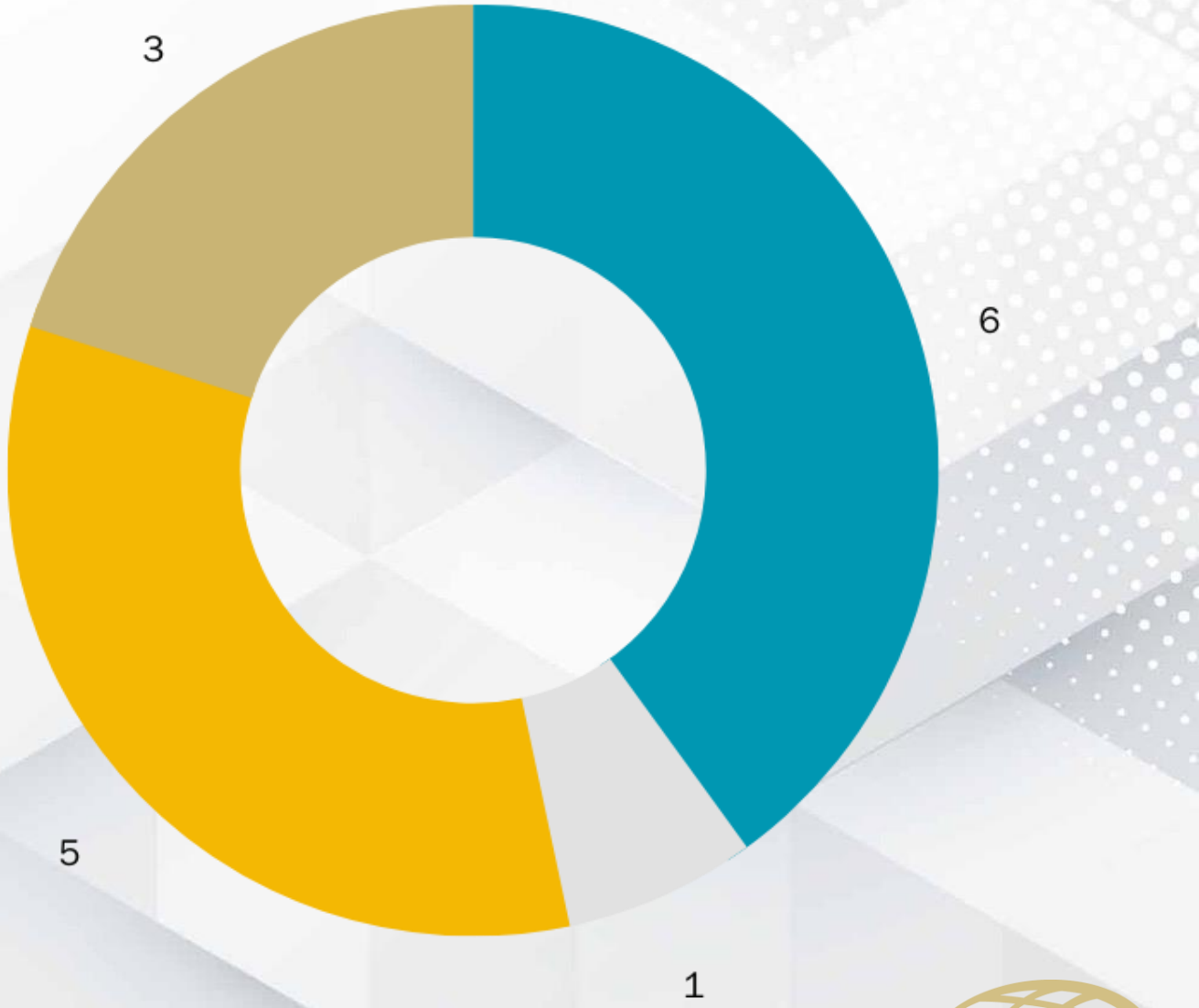
Role 3 is focused on System Planning.

The development of the transmission network and interconnection and the associated projects are detailed in the Transmission Development Plan for Northern Ireland (TDPNI).

Project Delivery

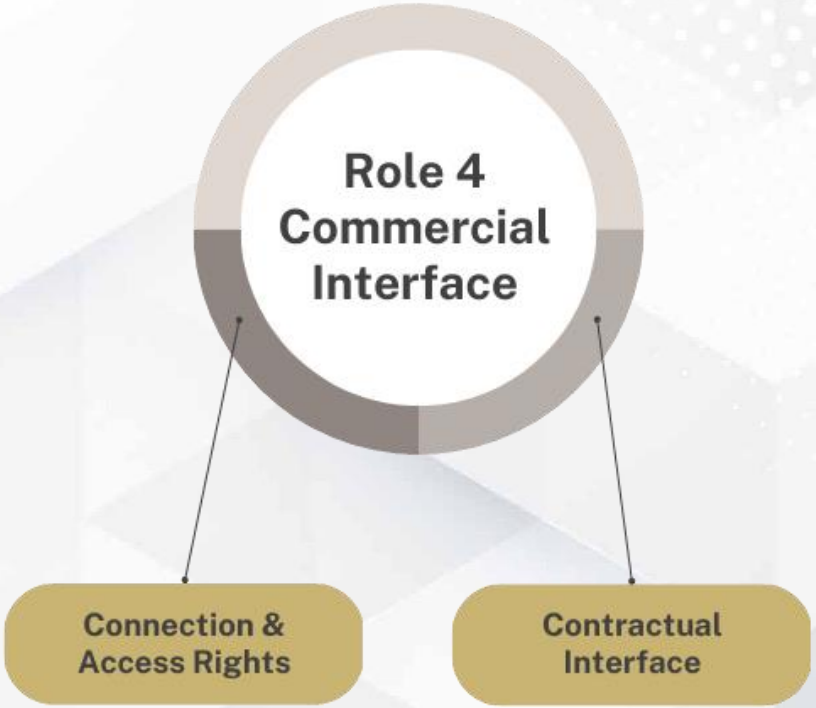
SONI have completed 6 out of the 15 milestones planned for this 6-month period.

Of the 9 remaining milestones which are not complete, 1 is a SONI-related delay, 5 were due to delays outside of SONI's control and 3 are postponed for an improved outcome for consumers.



Role 4
Commercial Interface

Role Overview



Role 4 primarily focuses on our **interactions with customers through the Connection Offer Process**, engaging with NIE Networks through associated Construction Offers and Preparation of Connection Agreements and Transmission Use of System Agreements. It also looks at Moyle Interconnector and the contractual arrangements we facilitate for connectees.

Project Delivery

SONI have completed 1 out of the 2 milestones planned for this 6-month period.

The 1 remaining milestone which is not complete, has been postponed due to reasons Outside of SONI's Control

SONI Governance

SONI has initiated a programme to fully implement the new licence requirements relating to SONI Governance.

The initial focus is on the establishment of a new SONI board and a discovery phase which is considering the organisational structure based on a demerger from EirGrid.

Stakeholder Engagement

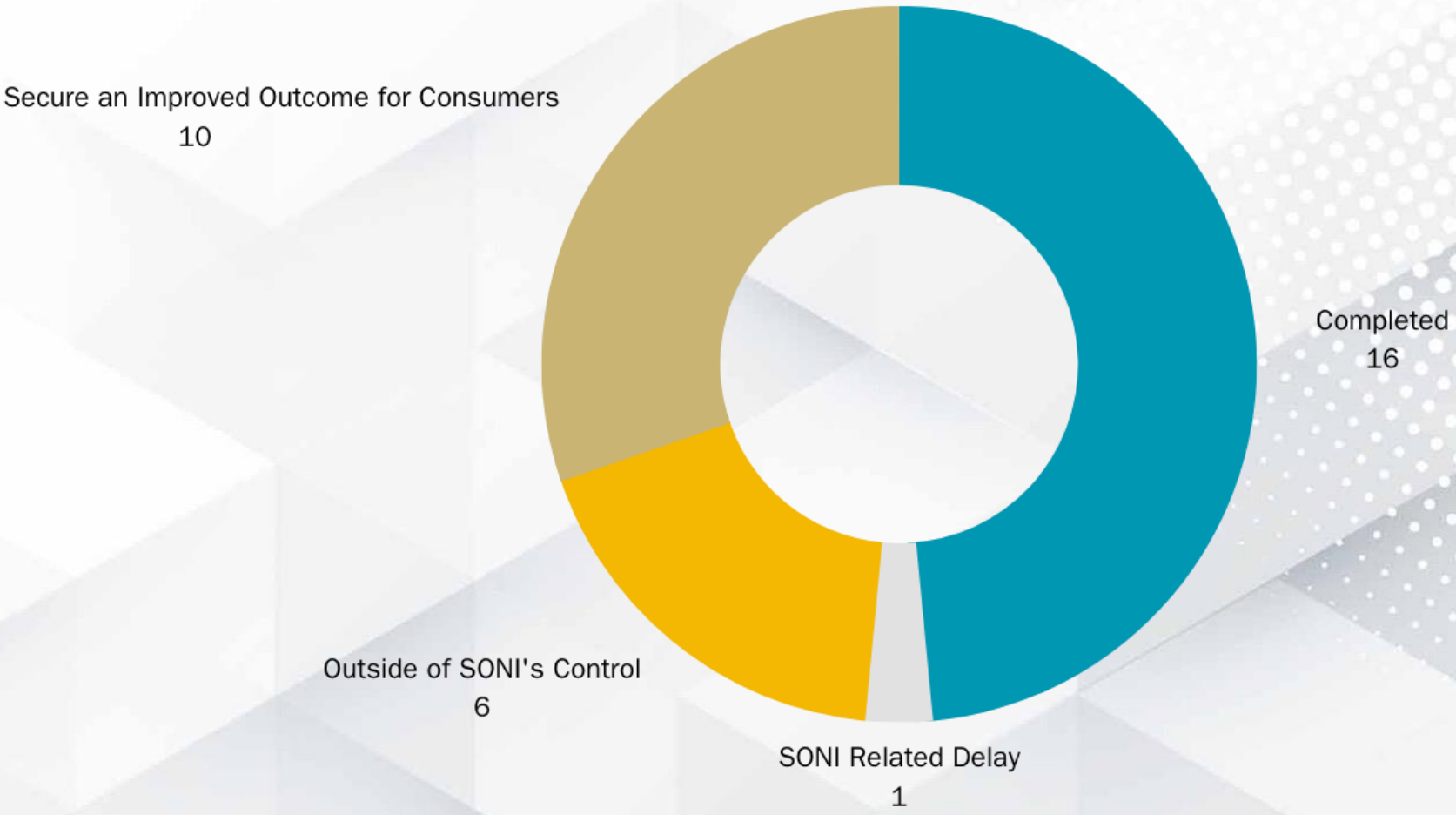
Please see detailed below a snapshot of the stakeholder engagement SONI has both organised and participated in between October 2022 and April 2023.

This stakeholder engagement analysis was informed by a survey of the different teams across SONI on engagement activity between 1 October 2022 – 31 March 2023. Due to differences in audience segmentation and reporting methodology, the survey results do not reflect to totality of engagement in SONI during this period but rather a snapshot in time. As such, the figures represented should be treated as approximates for the purposes of this update. As part of the Forward Work Plan, SONI is undertaking a new Stakeholder Needs Assessment to inform a new Stakeholder Management Plan. This Plan will outline a new monitoring methodology to inform future reporting of engagement activity. It should be noted the figures represent engagement activity as opposed to the number of people involved in that engagement. In addition to the overall figure of 625 engagements, we have sought to highlight components which we feel will be of particular interest. As such, the figures provided in the breakdowns may not equate to the overall total.

Overall Project Delivery

SONI have completed 16 out of the 33 milestones planned for this 6-month period.

Of the 17 remaining milestones which are not complete, 1 is a SONI-related delays, 6 were delayed outside of SONI's control, and 10 have been postponed in order to deliver an improved outcome for consumers.



A Day in the Life of the Control Room

System Operations

Responsible for the safe, secure, efficient and reliable Operation of Transmission Network

CHCC is the operational control centre with responsibility for:

- Real-time operation of the NI Transmission System
- Scheduling of generation
- Balancing of generation supply and demand
- 24/7/365 operations

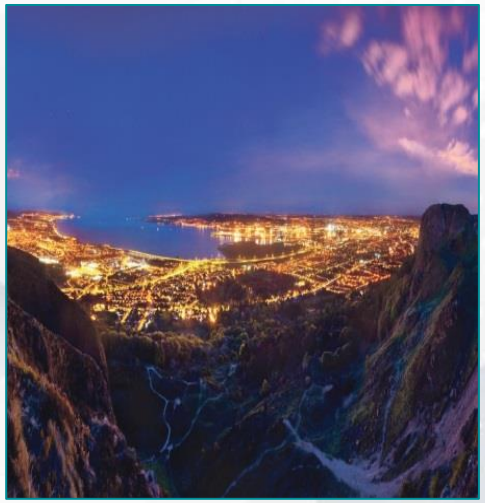
SONI

Northern Ireland Power System

Generation

Transmission

Distribution



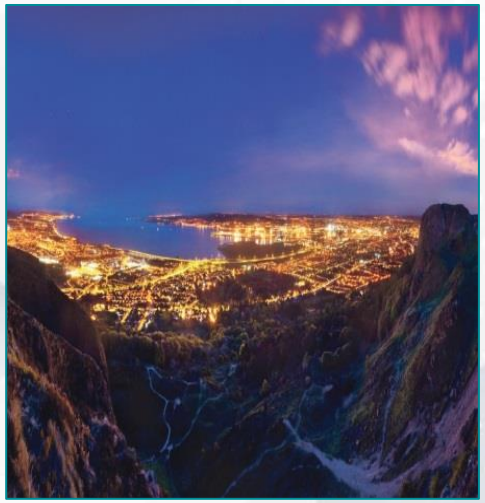
Customers

All-Island Wholesale Electricity Market

SONI

Northern Ireland Transmission System

Northern Ireland Power System



Generation | Transmission | Distribution | Customers

All-Island Wholesale Electricity Market

SONI

Northern Ireland Generation

Loading Engineer – Generation Desk

Responsible for the scheduling and dispatch of generation

- All-island role since ISEM comprising 2 distinct roles – Scheduling and Dispatch

- **Scheduling**
  - Produce All-island generation schedule to meet forecast demand, taking account of Interconnector flows and forecast levels of renewables
  - Energy Trading on Interconnectors – to maximise output of renewables and ensure secure levels of generation
  - Approve Generator Testing within the scope of generation schedule
- **Dispatch**
  - Issue Sync, Desync and MW instructions via electronic dispatch tool
  - Give consent for generation testing to proceed
  - Dispatch wind generation

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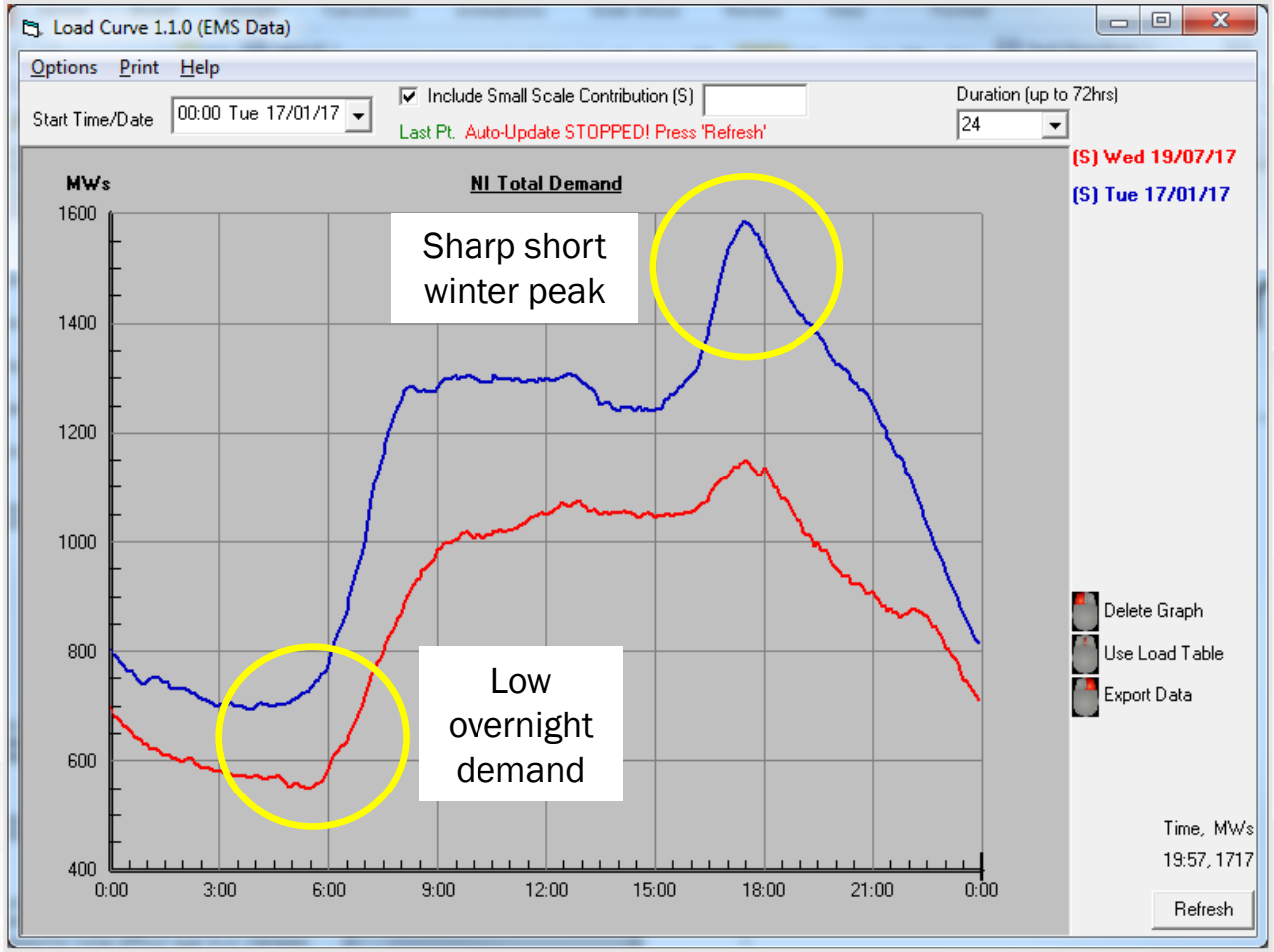
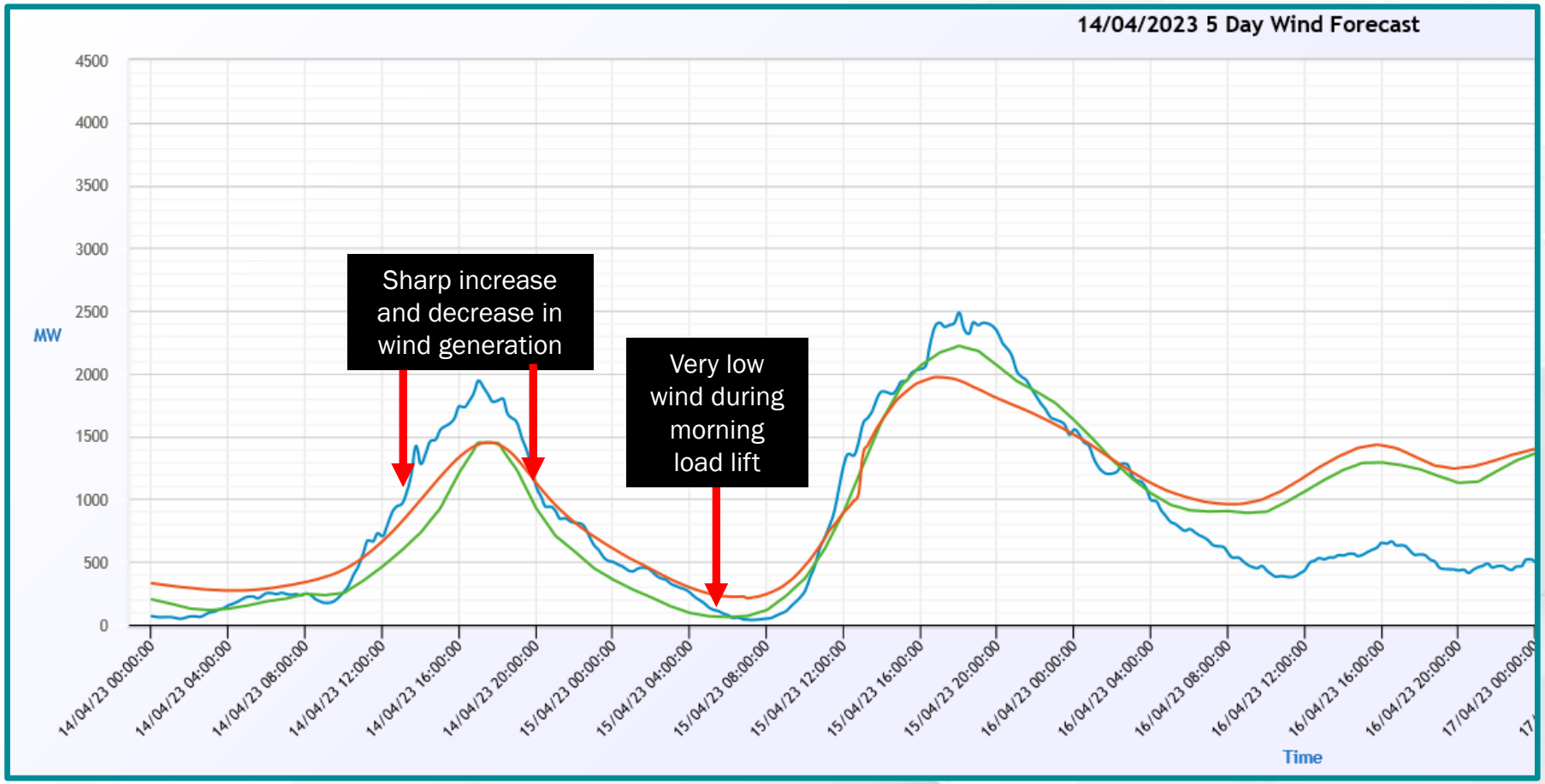
Operational Challenges

Variable demand – winter demand vs summer demand



Operational Challenges

Variable generation – wind



SONI Planning Perspective

Shaping Our Electricity Future

Shaping Our Electricity Future is a Multi-Year Multi-Dimensional Plan balancing Supply and Demand

- Increase annual renewable share to 80% by 2030 while accounting for Demand growth
- Network investment required to deliver government ambition is expected.

- Operate a power system with 95% of electricity coming instantaneously from non-synchronous sources; up from 75% today!
- Changes are required in operational policy and practices, so we can operate at new levels of renewables

- Market adaptions are required to underpin a changing paradigm in investment opportunities
- We make recommendations on how the markets should evolve to align with a dynamic, highly renewable power system and compliance with EU requirements

- Ongoing Engagement across stakeholders is essential; an industry forum has been established known as “Shaping Advisory Council”

A Secure Transition to Net Zero

- The Generation Capacity Statement is published annually and provides insights on the balance between supply and demand over the next 10 years.

- Shaping Our Electricity Future Roadmap; the next edition provides:
- **A central view on the power system** changes required to support government policies for delivery of 80% renewables and carbon budgets.
- **Power system reliability**, the biggest future risks are multi-day low renewable output and/or the risk of gas disruption
    - We are currently updating our reliability assessment methods to that of the National Resource Adequacy Assessment which is aligned to the European Resource Adequacy Assessment
- **A balanced portfolio of technologies** on the power system to secure the transition to an 80% renewable power system by 2030.
    - Shaping considers a wide range of technologies including renewable gas ready Combined Cycle / Open Cycle Gas Turbines, interconnection, long duration storage, demand side management, onshore/offshore wind, hydro and solar.

Supporting the Climate Action Plan

- A benchmark study into Northern Ireland's power sector emissions; based on Northern Ireland power sector specific data sources.
- The study utilises data and a modelling approach tailored to the Northern Ireland power system.
- Analysis is aligned with the latest available data on capacity and demand from the Shaping Our Electricity Future; the study considers a renewable capacity that achieves 80% of electricity from renewables (RES-E) by 2030.
- **The studies do NOT aim to provide projections for future carbon budgets**; the study does not consider policy or market changes required to support a 2023-2027 carbon budget.
- We have used an in-house emissions tool; we have used this tool for our investigations into drivers behind emissions.

SONI

Q&A