Gas Networks Ireland

Code Modification Forum

Minutes of Hybrid Meeting– 16 October 2024

1 Introduction

The Transporter opened the meeting and referred to a thirteen item Agenda and the accompanying Slide Deck..

2 Standing Items

2.1 Approval of minutes of previous meeting

Updated Minutes of CMF meeting of 04/09/2024 were issued on 14/10/2024. As there was no subsequent submissions, either prior to or at the meeting, they were deemed adopted.

2.2 Review of Action Items

Action items C572 - C587 will remain open. In relation to C587 the Transporter reported that the GB exercise (Exercise Fahrenheit) is ongoing and was finishing today (16th of October). It had been agreed with the CRU Security of Supply team that a review of the Natural Gas Emergency Plan (NGEP) would be carried out with a proposed revision by end of this year. The Transporter referred to an existing EU Consultation on Gas Emergency Security of Supply Architecture which would be referred to in AOB.

Action items C596 - C599 will be closed out in a bilaterial meeting between the Transporter and the EAI. Further Action Item C600 was subsequently opened by the Transporter.

2.3 GNI Scheduled Maintenance Update

Kevin O'Keefe, Southern Regional Operations Manager at the Transporter, presented on Planned Maintenance; referring to Slide 8., Mr. O'Keefe detailed that the Transporter does not plan to undertake any maintenance activities during the Gas Year 2024/25 which will interfere with gas flows. All maintenance activities on GNI infrastructure / equipment at the Bellanaboy Entry Point will be coordinated with planned maintenance shutdowns by the Corrib Operator.

Brendan McCarthy, Project Delivery Lead at the Transporter, presented an update on the ongoing Brighouse Bay Station splitting project, referring to slides 10-12.

3 Biomethane Update

3.1 Business Rules for the Mitchelstown CGI

Stephen O'Riordan, Wholesale Market Manager at the Transporter, provided an update on the Business Rules for the Mitchelstown CGI, referring to Slides 24-27. In response to Mr. O'Riordan's presentation, an industry representative queried whether long term lead items have been ordered for the project and whether the Transporter had received a 30% contribution from Producers. In relation to the first point, Mr. O'Riordan confirmed that long term lead items had been ordered for Mitchelstown and, in relation to the second point, Mr. O'Riordan stated that the Transporter is in the process of finalising the customer contributions mechanism proposal for submission to the Regulator. Mr. O'Riordan pointed out that the Mitchelstown CGI is a new regulatory concept as a multi-user facility.

The industry representative stated that he was very concerned with the divergence between the model that the Transporter was describing and direct connections. He went on to further ask Mr. O'Riordan if he could define what a CGI is. Mr. O'Riordan responded that there is a definition for a CGI in the draft Business Rules which needs to be approved by the Regulator. The industry representative queried whether the direct connection facility in Portlaw was a CGI. Mr. O'Riordan queried the industry representative whether the Portlaw facility would be providing nondiscriminatory access to third party producers. The industry representative noted in his response that he would need to see a more detailed version of the Business Rules before he could answer this query. He then queried whether the Transporter has the right to diverge from the CRU connection directive because it is providing nondiscriminatory access.

At this point the Regulator stated that there is a lot of fundamental issues with Mitchelstown that need to be resolved. The Regulator also detailed that it had not agreed to any timelines for the progression of the Mitchelstown project and the finalization of its connection regime. The Regulator also stated that it had not yet received Transporter's customer contributions mechanism proposal.

Mr. O'Riordan pointed out that these are draft Business Rules and the Transporter is looking to receive feedback. He emphasized that the Transporter cannot draft code modification proposals until industry engagement has been completed. He wished to again emphasize that the Transporter is happy to engage with all parties on the matter.

The industry representative referred to a letter that he issued to the Transporter on Friday the 11/10/2024 and queried whether GNI acting as a CGI Operator is a regulated activity. Mr. O'Riordan responded that the Transporter's understanding from the PC5 decision is that this is a regulated activity. He stated that the Transporter (acting as the CGI Facility Operator in this case) is not looking for a commercial rate of return on this project. The industry representative further queried whether this was a subsidized process to which Mr. O'Riordan responded that it was not.

Aine Spillane, Biomethane Regulatory Manager at the Transporter, stated that the Transporter has no intention in running Mitchelstown in a discriminatory fashion. She mentioned that the Transporter is still working through some issues relating to Mitchelstown internally and bilaterally with Regulator and would fully engage with all stakeholders throughout this process. The industry representative stated that this was not his experience to date and he believes that the Transporter is proposing differential treatment for its project.

The industry representative also referred to an email that he sent the Transporter on the 14/10/2024 outlining that he believes that there was insufficient timelines and information relating to the Business Rules. Mr. O'Riordan highlighted that the PC5 consultation was only 8 weeks in duration and that there will be a further industry review period for the Code Modification proposals. The industry representative replied that PC5 was more developed than the Business Rules. Mr. O'Riordan noted that the industry representative's letter mainly referred to the Connections Policy rather than the Code Modification proposals and that they will be engaging with the Regulator on this matter. The Industry Representative indicated that he would take up offline with the Transporter its ongoing and unresolved concerns in this matter.

The Regulator noted that there is a number of fundamental issues with the CGI and that it may have been premature of the Transporter to have develop Business Rules, but did state that they believed it could be a good way to get industry feedback. The Regulator also noted that it would not rule out a wider public consultation on these issues.

Mr. O'Riordan stated that the draft Business Rules have been developed to outline the Transporters current view on how the Mitchelstown CGI Facility (and other similar facilities) will operate; many of the provisions outlined will also be applicable for other RNG Entry Points. The Business Rules are designed to enable industry to understand and comment on the provisions as they relate to the Code prior to the commencement of detailed Code drafting. This will be an iterative process and the Transporter cannot develop all relevant documentation in parallel without some level of agreement on the broad approach.

It was agreed that the industry review period for the Business Rules would end by CoB on Wednesday, 13th of November. At this point, the Regulator stated that it would not rule out a further version of the Business Rules being drafted and a further consultation on the matter in the future.

4 Code Modification Proposals

4.1 A111 – Amendment to Code of Operations to increase oxygen limit for biomethane entry points on transmission network.

Kieran Quill, Senior Market Analyst at the Transporter, presented an update on Code Modification Proposal A111, referring to Slide 14. Mr. Quill stated that the hybrid review period for the Code Modification proposal had elapsed on the 01/10/2024. However, as the final OEM reports are yet to be finalized it was agreed to extend the hybrid industry review period until the week starting the 21/10/2024 where a bilaterial meeting was scheduled to be held between the Transporter and the EAI. The Transporter also agreed that it would consider inviting the Regulator to this meeting and also noted that the progression of this code modification was subject to the Regulators safety team review.

4.2 A112 – Amendment to Code of Operations to the existing Supplier of Last Resort clauses to update new options on Capacity Products and revised arrangements around Supplier of Last Resort invoicing.

Mr. Douglas O'Brien, Gas Point Register Manager at the Transporter, provided a presentation on the Code Modification Proposal A112, referring to Slide 16. Mr. O'Brien stated that the Transporter met with the Regulator on this matter and that the Regulator were considering the Transporters proposal for progressing the modification. Furthermore, Mr. O'Brien noted that the Transporter is currently running its test billing process with the current SOLR.

4.3 A113 – Amendment to Code of Operations to amend gas quality requirements at Entry Points.

Kieran Quill, Senior Market Analyst at the Transporter gave an overview of Code Modification Proposal A113 referring to Slide 18. Mr. Quill reiterated that, as with Code Modification A111, that the hybrid review period for the Code Modification proposal had elapsed on the 01/10/2024. However, as the final OEM reports are yet to be finalized it was agreed to extend the hybrid industry review period until the week starting the 21/10/2024 where a bilaterial meeting was scheduled to be held between the Transporter and the EAI. The Transporter also agreed that it would consider inviting the Regulator to this meeting and also noted that the progression of this code modification was subject to the Regulators safety team review.

4.4 A115 – Amendment to Code of Operations to remove Tolerances at RNG Entry Points.

Kieran Quill, Senior Market Analyst at the Transporter gave an overview of Code Modification Proposal A115 referring to Slide 18. Mr. Quill detailed that the Transporter had received one response from industry on the proposal which they shared with the Regulator. Mr. Quill then proposed an industry review period with a final end date of the 13th of November. The

Regulator confirmed that this is a compliance issue and if there is no rationale for keeping the modification in place, they will be suggesting to progress with the code modification.

4.5 Status of Open Code Modification Proposals

ID	Title	Status	Reason for Status	Status End Date	Next Step
A099	CNG Supply Point Capacity Setting	In abeyance	Awaiting the development of the CNG market and sufficient data to inform the next steps.	TBC	N/A
A111	Amendment to Code of Operations to increase oxygen limit for biomethane entry points on the transmission network	Industry/CRU Review	The final OEM reports are yet to be finalized it was agreed to extend the hybrid industry review period until the week starting the 21/10/2024.	TBC	CRU Review
A112	Amendment to Supplier of Last Resort provisions	Industry Review	Discussions are ongoing with existing SOLR.	TBC	CMF Proposal Report to issue
A113	Amendment to Gas Quality Standards at Entry Points	Industry/CRU Review	The final OEM reports are yet to be finalized it was agreed to extend the hybrid industry review period until the week starting the 21/10/2024.	TBC	CRU Review
A115	Removal of Tolerances at RNG Entry Point	Industry Review	To allow any final submissions to the Transporter.	13/11/2024	Industry Review

5 Other Agenda Items

5.1 Gas and Electricity Generation

Jason Herbert, Policy Analyst at the Electricity Association of Ireland, provided a presentation on the final OEM reports referring to Slides 48-52. Mr. Herbert confirmed that the EAI are still awaiting some final OEM reports and thanked the Transporter and the Regulator for the flexibility and acknowledging the difficulty in completing OEM reports due to the high demand in the UK and Ireland. In response to Mr. Herbert's presentation, an electricity industry representative detailed that their OEMs have informed them that their analysis/reports relates to the proposed 0.5% oxygen content limit, and, if it changed to a 1% limit, would require new analysis.

5.2 Presentation on GNI's Hydrogen Program

Wayne Mullins, Hydrogen Technical Manager and Barry Gould, Hydrogen Regulatory Manager at the Transporter presented an update on GNI's Hydrogen Program referring to Slides 29-40. In response to their presentation, the Transporter received questions from the floor relating to when they expect Hydrogen blends to appear on the system in Ireland.

5.3 Presentation on GNI's Winter Outlook

Laura Ryan, Senior Future Networks Analyst at the Transporter, presented on GNI's Winter Outlook referring to Slides 42-46. Ms. Ryan received a question from the floor on peak day capacity constraints in the ROI and NI and after some discussion the Transporter agreed to take an Action Item to look at South North Pipelines flows. Action Item C600 was opened.

6 Next Meeting/AOB

The next meeting is a virtual meeting scheduled for 4 December.

The Transporter referred to an EU consultation on the European Gas Emergency Security of Supply Architecture and indicated that this was an opportunity for Shippers/Producers to make their points on the associated commercial arrangements. The Transporter committed to circulating the link to this consultation after the meeting.

7 Open CMF Actions

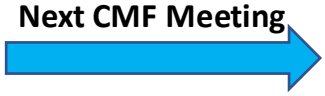
ID	Action	Responsibility	Date Raised	Status
C572	Transporter to monitor the ongoing basis the adequacy of the initial 25% Tolerance for RNG Entry Points	Transporter	27/03/2019	Ongoing
C575	Transporter to furnish required data to CRU in connection with tariff review in relation to Supply Point Capacity Settings	Transporter/ CRU	25/03/2020	Ongoing
C587	Transporter to commence review of the Emergency Section of the code of Operations and provide an update at the next CMF	Transporter	18/10/2023	Ongoing

C596	EAI to follow up with their members about the close out of outstanding OEM reports	EAI	04/09/2024	Ongoing
C597	GNI to consider sending out an automated email alert for gas quality changes	GNI	04/09/2024	Ongoing
C598	GNIs Future Networks team to attend the next CMF and give an update on engagement with EirGrid on dispatch signals	GNI	04/09/2024	Ongoing
C599	Transporter to engage with EAI on the impact of the Methane emissions Reduction Regulation on Generators	GNI	04/09/2024	Ongoing
C600	Transporter to provide an updates on North South flows	GNI	16/10/2024	Ongoing

8 Calendar of meeting for 2024

CMF Dates	Location
14 February	Virtual
24 April	Hybrid (Dublin)
13 June	Hybrid (Dublin)
4 September	Virtual
16 October	Hybrid (Cork)
4 December	Virtual

Next CMF Meeting



9 Attendees

Name	Organization
Conor Murphy	GNI
Kieran Quill	GNI
Stephen O'Riordan	GNI
Emerson O'Callaghan	CRU
David Lindsay	CRU
Douglas O'Brien	GNI
Paul Crowley	GNI
Jason Herbert	EAI
David Meade	Axpo
Martin Regan	Axpo
Aine Spillane	GNI
Kim Kennington	Manx
William Carr	ESB GT
Paul Murphy	ESB GT
Barry Gould	GNI
Wayne Mullins	GNI
Ryan O'Connell	GNI
Brendan McCarthy	GNI
Tom Nolan	Ormonde
Brian McGlinchey	Vermilion
David Grainger	BGE
Therese Lannon Crean	SSE
Stephen O'Hare	GMO
Pranav Kakkar	Epuki
Nicholas Lincoln	Nephin
Paul Hoey	Electric Ireland
Mark Phelan	Electric ireland
Bryan Hennessey	Flogas
Claire Walsh	Centrica
Yvette Jones	GNI

Stephen English	GMO
Cian Fitzgearld	Energia
Anthony Foody	ESB
Laura Ryan	GNI
Padraic Duffy	CRU

10 APPENDIX

At the Code Modification Forum Meeting of 4 December it was agreed that the following text furnished by an Industry Representative in relation to item 3.1 would be inserted in an appendix to these Minutes. The Transporter reiterates that it is satisfied that the text at item 3.1 is a true and accurate recording of the discussion on the matter at the meeting

- **During the meeting that GNI confirmed to the industry representative that it was proceeding with the Mitchelstown CGI even though it had not (I) received any financial contribution; (ii) had not had an financial security posted; and (iii) had not contracted any gas flows for that injection point**
- **Given the foregoing the industry representative queried how the Mitchelstown CGI was being developed in accordance with existing regulations and in particular CRU 18089**
- **GNI also confirmed to the industry representative that there is no existing formal definition of what constitutes a CGI**

Code Modification Forum

Wednesday, 16th of October 2024

Hybrid Meeting, the Dean Hotel Cork

Time: 10:30

No.	Item	Duration (minutes)	Time
1.	*Review of Minutes from last meeting*	5	10:30 - 10:35
2.	*Review of Action Items from last meeting*	5	10:35 - 10:40
3.	*GNI Scheduled Maintenance Update*	5	10:40 - 10:45
4.	*Code Modification Proposal A111 - Amendment to Code of Operations to increase oxygen limit for biomethane entry points on the transmission network*	10	10:45 - 10:55
5.	*Code Modification Proposal A112 - Amendment to Code of Operations to the existing Supplier of Last Resort clauses to update new options on Capacity Products and revised arrangements around Supplier of Last Resort invoicing*	5	10:55 - 11:00
6.	*Code Modification Proposal A113 - Amendment to Gas Quality Standards at Entry Points*	10	11:00 - 11:10
7.	*Code Modification Proposal A115 - Removal of Tolerances at RNG Entry Points*	5	11:10 - 11:15
8.	*Status of Code Modification Proposals*	5	11:15 - 11:20
9.	*Update on Mitchelstown CGI*	20	11:20 - 11:40
10.	*Presentation on GNIs Hydrogen Program*	20	11:40 - 12:00
11.	*Presentation on GNIs Winter Outlook*	10	12:00 - 12:10
12.	*Gas and Electricity interaction*	15	12:10 - 12:25
13.	*AOB Items/ Next Meeting / Close of the CMF*	10	12:25 - 12:35

Microsoft Teams meeting

Join on your computer, mobile app or room device

Click here to join the meeting

Meeting ID: 397 049 737 732

Passcode: 5bx8hS

Download Teams | Join on the web

Code Modification Forum – the Dean Hotel Cork

Gas Networks Ireland

Tuesday, 16 October 2024 – Hybrid Meeting

Agenda

1. Review of Minutes from last meeting
2. Review of Action Items from the last meeting
3. GNI Scheduled Maintenance Update
4. Code Modification Proposal A111 - Amendment to Code of Operations to increase oxygen limit for biomethane entry points on the transmission network
5. Code Modification Proposal A112 - Amendment to Code of Operations to the existing Supplier of Last Resort clauses to update new options on Capacity Products and revised arrangements around Supplier of Last Resort invoicing
6. Code Modification Proposal A113 - Amendment to Gas Quality Standards at Entry Points
7. Code Modification Proposal A115 - Removal of Tolerances at RNG Entry Points
8. Status of Code Modification Proposals
9. Update on Mitchelstown CGI
10. Presentation on GNIs Hydrogen Program
11. Presentation on GNIs Winter Outlook
12. Gas and Electricity Interaction
13. AOB Items/Next Meeting

1. Review of minutes from last meeting

- Updated Minutes of CMF meeting of 4 September were issued on 14 October.

2. Review of Open Actions

Gas Networks Ireland

2. Review of open actions

ID	Action	Responsibility	Date Raised	Status
C572	Transporter to monitor the ongoing basis the adequacy of the initial 25% Tolerance for RNG Entry Points	Transporter	27/03/2019	Ongoing
C575	Transporter to furnish required data to CRU in connection with tariff review in relation to Supply Point Capacity Settings	Transporter/ CRU	25/03/2020	Ongoing
C587	Transporter to commence review of the Emergency Section of the code of Operations and provide an update at the next CMF	Transporter	18/10/2023	Ongoing

2. Review of open actions

ID	Action	Responsibility	Date Raised	Status
C596	EAI to follow up with their members about the close out of outstanding OEM reports	EAI	04/09/2024	Ongoing
C597	GNI to consider sending out an automated email alert for gas quality changes	GNI	04/09/2024	Ongoing
C598	GNIs Future Networks team to attend the next CMF and give an update on engagement with EirGrid on dispatch signals	GNI	04/09/2024	Ongoing
C599	Transporter to engage with EAI on the impact of the Methane emissions Reduction Regulation on Generators	GNI	04/09/2024	Ongoing

3. Maintenance Days

Gas Networks Ireland

3. 2023/2024 Maintenance Days

- GNI does not plan to undertake any maintenance activities during the gas year 2023/24 which will interfere with gas flows.

- All maintenance activities on GNI infrastructure/equipment relation to the Bellanaboy entry point will be co-ordinated with planned maintenance shutdowns by the Corrib operator.

Brighouse Bay Station Splitting Project Update

Gas Networks Ireland

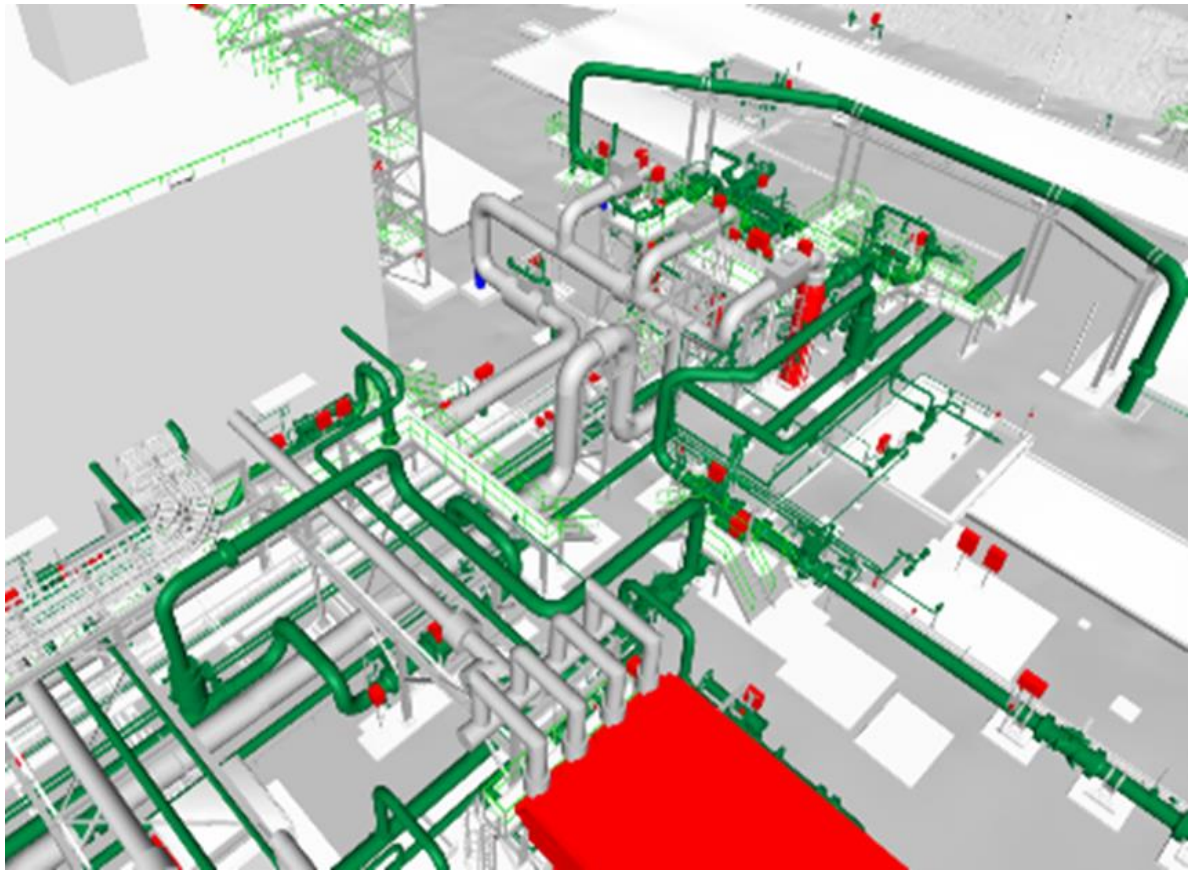
Brendan McCarthy – Project Delivery Lead

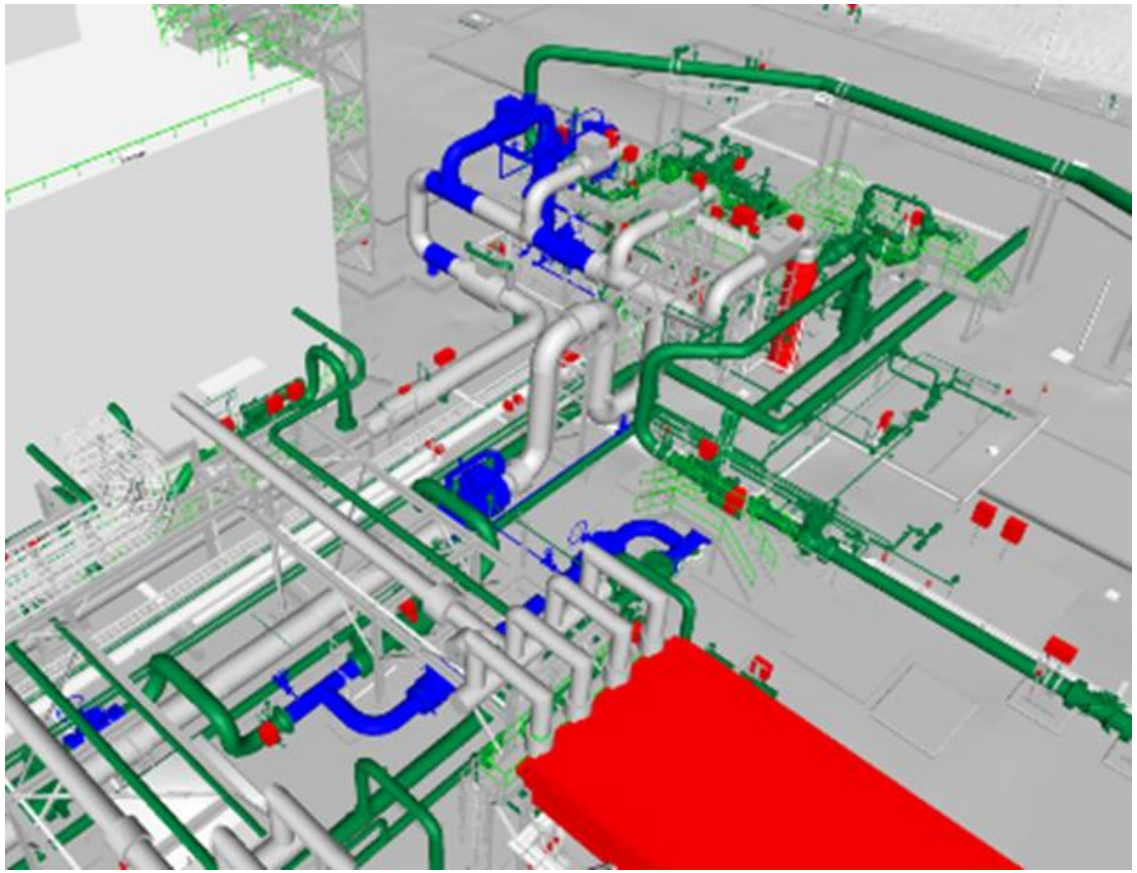
Project Update

- Status:
  - Inlet and outlet header to scrubbers and new isolation valve to Hall 1 completed w/c 23rd September.
  - Again, thanks for assistance with nominations at the time.
- Next steps:
  - W/c 28th October will be completing works on the discharge headers of the Station. It will take place between 28th October and 5th November with different phases dependent on different Halls through the period with hold points and engagement with Grid Control. Notification for assistance will be issued 1-2 days in advance but are looking for nominations as early as you can through this period. Purpose, it assists with knowledge of available time for Grid Control and Operations on site;
    - Communications will be issued if there is an issue during an outage i.e. if during an outage there is a failure of a component or a leak path which may need immediate repair but outcome may be unable to make up gap in nominations for gas day as priority is safety and giving time to people to complete works;
    - Post completion of works starting 28th October there are two valve replacements to be done in November to complete scope.

Hall 1 New Isolation Valve

W/C 28th Oct – 5th Nov – IC1 and IC2 Crossover





4. Code Modification Proposal A111

Gas Networks Ireland

Amendment to Code of Operations to increase oxygen limit for biomethane entry points on transmission network

4. Code Modification Proposal A111 - Increasing the oxygen limit for biomethane entry points on the transmission network

Issued and circulated on 15 June 2023

Documents issued with Code Modification Proposal can be found here.

- Explanatory Memorandum
- Proposed Legal Text
- Penspen Report
- Report Analysis Summary

Update

- Upper limit for oxygen is 0.2% for natural gas in Transmission and Distribution Networks
- RNG injected into the distribution network has upper limit of 1%
- Industry review date extended to 1 October 2024.
- Industry submissions to date can be accessed on slides 42 and 43 on the following Slide Deck.
- **Next Steps:** Currently in CRU Review Period.

ID	Title	Status	Reason for Status	Status End Date	Next Step
A111	Amendment to Code of Operations to increase oxygen limit for biomethane entry points on the transmission network	CRU Review	Extended hybrid review period has now ended	04/12/2024*	Instruction & Rationale to issue

- *Provisional status end date for the CRU Review Period, to be reviewed at the next CMF.

5. Code Modification Proposal A112

Amendment to Code of Operations to the existing Supplier of Last Resort clauses to update new options on Capacity Products and revised arrangements around Supplier of Last Resort invoicing

5. Code Modification Proposal A112 – Supplier of Last Resort

Four SoLR documents previously issued at Code Mod Forum can be found here.

The combined proposals outline how GNI and the SoLR will manage an event to take account of:

- New short-term capacity products in the DM/LDM market;
- Amended SoLR invoicing and Disbursement billing processes in the month of the SoLR event;
- Permit SoLR CoS/EUA at SoLR Affected DM & LDM Offtakes at the end of any month of the SoLR event; and
- Recent experience in NDM SoLR events.

Next Steps: GNI continues to engage with BGE on their SoLR comments around the Failed Supplier obligations, Entry arrangements, , "SoLR affected Shippers" and GNI reporting.

ID	Title	Status	Reason for Status	Status End Date	Next Step
A112	Amendment to Supplier of Last Resort provisions	Industry Review	Discussions are ongoing with existing SOLR.	TBC	CMF Proposal Report to issue

6. Code Modification Proposal A113

Gas Networks Ireland

Amendment to Code of Operations to amend gas quality requirements at Entry Points

6. Code Modification Proposal A113 - Amending gas quality requirements at Entry Points

- The Health and Safety Executive (HSE) in the UK has recently approved changes to the Great Britain (GB) gas quality specification in the Gas Safety Management Regulations (GSMR). The relevant changes approved by HSE include the reduction in the lower WOBBE limit to 46.5 MJ/m3 and the replacement of the Incomplete Combustion Factor and Soot Index with the relevant density limit of ≤0.7. The replacement of ICF and SI with a RD limit has become effective in the UK as of 6 April 2023.
- GNI has reviewed the implications of the planned changes to the GSMR specification and concluded it would be best to realign the RoI gas quality specification in the Code with the new GSMR specification.
- The implementation of the lower WOBBE limit has been deferred until 6th April 2025 (to allow sufficient time for industry to prepare for the change).
- GNI published relevant Supporting Documentation on the 11th of August 2023.
- GNI have issued an end user Gas Quality Change Notification to all Shippers and have subsequently followed up with all Shippers in the NDM/DM market to ensure that they have issued the notice to their perspective end users.
- **Next Steps:** Currently in CRU Review Period.

ID	Title	Status	Reason for Status	Status End Date	Next Step
A113	Amendment to Gas Quality Standards at Entry Points	CRU review	Extended hybrid review period has now ended	04/12/2024*	Instruction & Rationale to issue

*Provisional status end date for the CRU Review Period, to be reviewed at the next CMF.

7. Code Modification Proposal A115

Gas Networks Ireland

Removal of Tolerances at RNG Entry Points

7. Code Modification Proposal A115 – Removal of Tolerances at RNG Entry Points

- The Proposal is to Remove Tolerances at RNG Entry Points .
- As outlined in the most recent ENTSOG Implementation Monitoring Report, Ireland has not complied with the obligation in Article 45 of the Balancing Network Code to **discontinue the use of interim measures (which include balancing tolerances) within five years from the date of entry into force of the Code, i.e. 16 April 2019, due to the remaining outstanding tolerance at RNG Entry Points.**
- The rationale for retaining the RNG Entry Point tolerance was to support the development of renewable gas injection. On reviewing this relief, GNI is of the view that its retention is no longer justifiable as it does not provide any benefit to RNG producers and is of small benefit to Shippers granting them a more favorable cashout price.
- This is a matter of compliance and practical implementation is straight forward. Amending Part E (Balancing/Shrinkage) of the Code of Operations to remove tolerances from RNG Entry Points will ensure full compliance with the Balancing Network Code.
- GNI issued the proposal along with supporting documentation on the 31st of July.
- **Next Steps:** GNI now propose an industry review period with a final end date of the 13th of November.

ID	Title	Status	Reason for Status	Status End Date	Next Step
A115	Removal of Tolerances at RNG Entry Point	Industry Review Period	To allow formal submissions on the matter to the Transporter	13/11/2024	CRU Review Period

8. Status of Code Modification Proposals

Gas Networks Ireland

8. Status of Code Modification Proposals

ID	Title	Status	Reason for Status	Status End Date	Next Step
A099	CNG Supply Point Capacity Setting	In abeyance	Awaiting the development of the CNG market and sufficient data to inform the next steps.	TBC	NA
A111	Amendment to Code of Operations to increase oxygen limit for biomethane entry points on the transmission network	CRU Review	Extended hybrid review period has now ended	04/12/2024*	Instruction and Rationale to issue
A112	Amendment to Supplier of Last Resort provisions	Industry Review	Discussions are ongoing with existing SOLR.	TBC	CMF Proposal Report to issue
A113	Amendment to Gas Quality Standards at Entry Points	CRU Review	Extended review period has now ended	04/12/2024*	Instruction and rationale to issue
A115	Removal of Tolerances at RNG Entry Point	Industry Review Period	To allow formal submissions on the matter to the Transporter	13/11/2024	CRU Review Period

*Provisional status end date for the CRU Review Period, to be reviewed at the next CMF.

9. Update on Mitchelstown CGI

Gas Networks Ireland

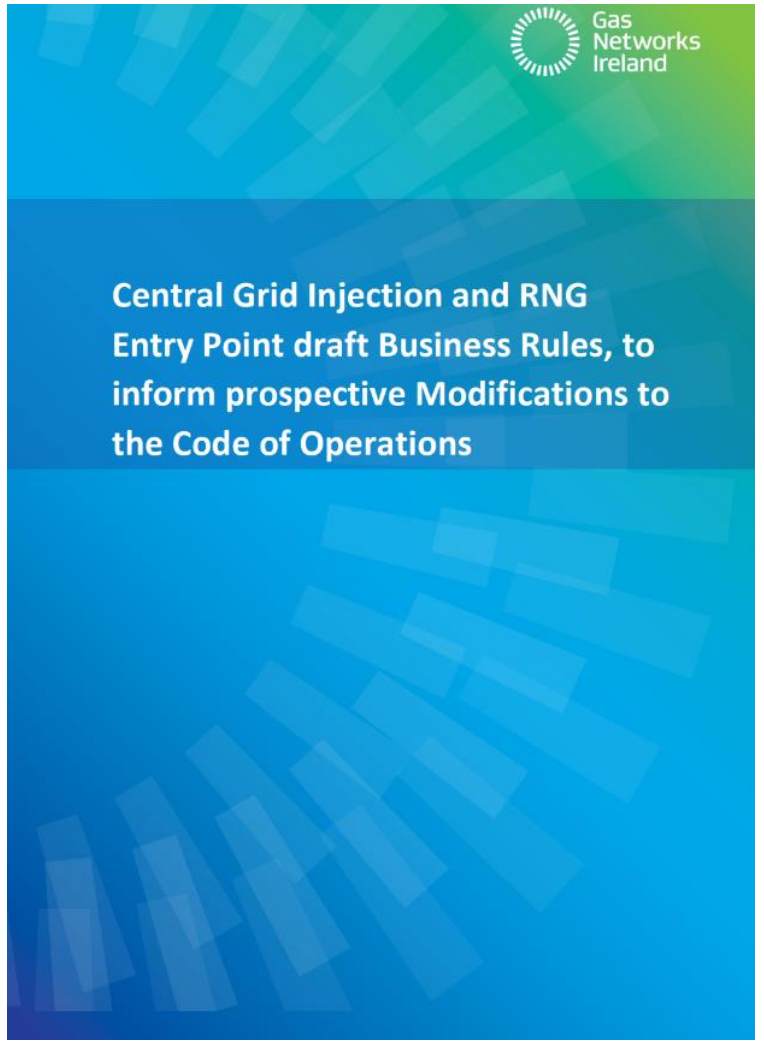
Stephen O’Riordan – Wholesale Market Manager

Project update

- The **Mitchelstown CGI facility** is currently in the detailed design phase with equipment procurement underway, with construction due to begin in the coming months.
- The CGI is part of the GRAZE project which is supported by more than **€8.4m in funding** from the Department of Environment, Climate and Communications' (DECC) Climate Action Fund, as part of the Government's national energy security framework.
- The **CRU's PC5 decision** allows for the delivery of the Mitchelstown CGI facility within the PC5 timeframe, in particular;
  - The CEPA Future Role of Gas (FROG) paper notes that GNI has proposed a 30% customer capex contribution policy relating to biomethane grid connections and that *"the approach to contributions from CGI's would need to be determined*."
  - This point is also acknowledged in the CRU Decision on the PC5 Regulatory Framework which sets an incentive for GNI in relation to Biomethane connections which requires GNI to develop a "*customer contributions mechanism for CGIs*".
- GNI is currently developing a proposal in relation to the **customer contribution mechanism** for Producers wishing to use the CGI facility, and will be submitting this proposal to CRU shortly.
- It is anticipated that contracts will be offered to biomethane Producers in line with the current GNI Connections Policy and CRU 18/089; i.e. Producers will be required to make a **standard contribution of 30%** towards the capital costs of developing the facility and will be required to provide **Financial Security for a period of 7 years**.

Business Rules process

- The Central Grid Injection and RNG Entry Point draft Business Rules were issued for industry review on the **7th of August 2024**.
- GNI formally introduced the draft Business Rules at the Code Mod Forum, on the **4th of September 2024**.
- An interim industry review period agreed until 16th of October, with final industry review period timeline to be agreed at the CMF on the **16th of October**.
- GNI proposes that the industry review is extended to the **13th of November,** and we request industry feedback by this date.
- Once industry review is complete the CRU review will commence – **final Business Rules will be published following approval by the CRU.**



Purpose of the Business Rules and next steps

- The **draft Business Rules** have been developed to outline GNI's current view on how the Mitchelstown CGI Facility (and other similar facilities) will operate; many of the provisions outlined will also be applicable for other RNG Entry Points.
- The business rules are designed to enable industry to understand and comment on the provisions as they relate to the Code prior to the commencement of detailed Code drafting.
- This will be an **iterative process** and GNI cannot develop all relevant documentation in parallel without some level of agreement on the broad approach.
- **Code Modifications Proposals** will be advanced in line with the Business Rules once approved by CRU and will include the proposed legal drafting amending the Code of Operations.
- For the avoidance of doubt, **Code Modification proposals including the detailed legal drafting will also be presented for industry review in due course** – other relevant documents will be presented as directed by CRU e.g. PSA / CSA etc.

Sections 1 through 4 of the draft Business Rules document are included to provide an overview of the CGI structure, and the general context to support discussion of the Business Rules. Sections 5 and 6 outline the Business Rules and Code Impacts and are designed to inform prospective Code Modifications; we welcome your comments on these Sections in particular.

Next steps…

- Please submit your comments on the Central Grid Injection and RNG Entry Point draft Business Rules by CoB on Wednesday the 13th of November.

10. Presentation on GNIs Hydrogen Program

Gas Networks Ireland

Wayne Mullins – Hydrogen Technical Manager

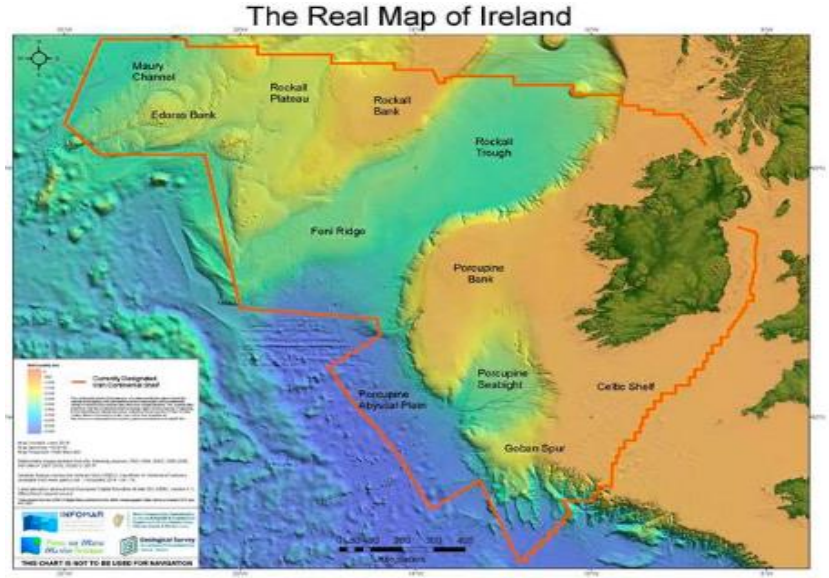
Barry Gould – Hydrogen Regulatory Manager

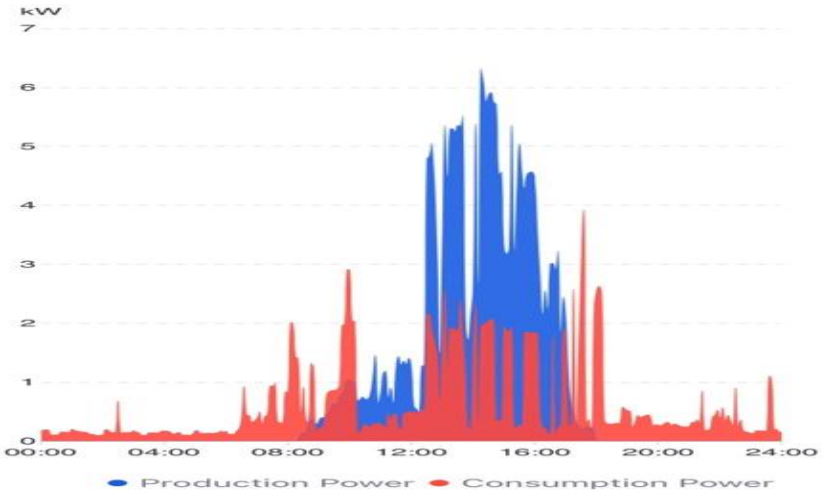
The energy conundrum for Ireland....

Significant Offshore Potential

Curtailment and misalignment of real time electricity demand and supply

Hard to Decarbonise Sectors





.....So the energy system needs two key issues addressed:

1. How to Tackle Sectors not suited to electrification
2. Better Alignment of Energy Demand and Supply

What can a hydrogen economy offer?

Supply Side

- Maximise Renewable Energy
- Indigenous Energy Supplies
- Better Alignment of Energy Demand and Supply
- Security of Supply

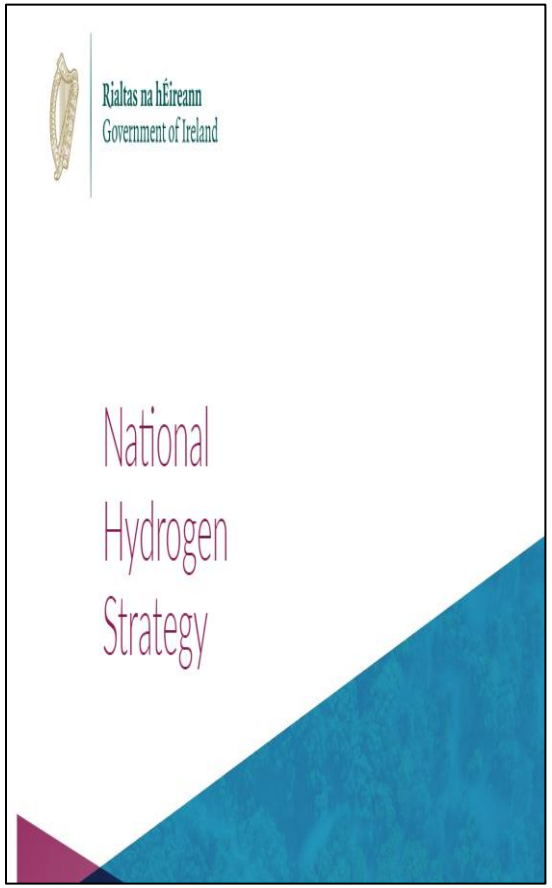
Connectivity and Route to Market

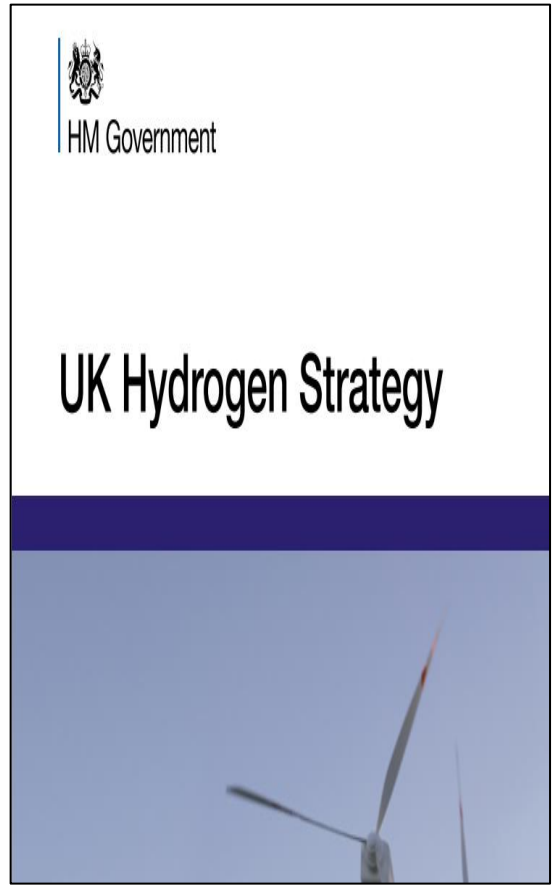
Demand Side

- Hard to Decarbonise Sectors
- Power Generation Optimisation
- New emerging areas of Demand
- Export Opportunities

Strategic Context for GNI's Hydrogen Journey

- 3 key fundamental policy drivers for GNI's hydrogen journey.





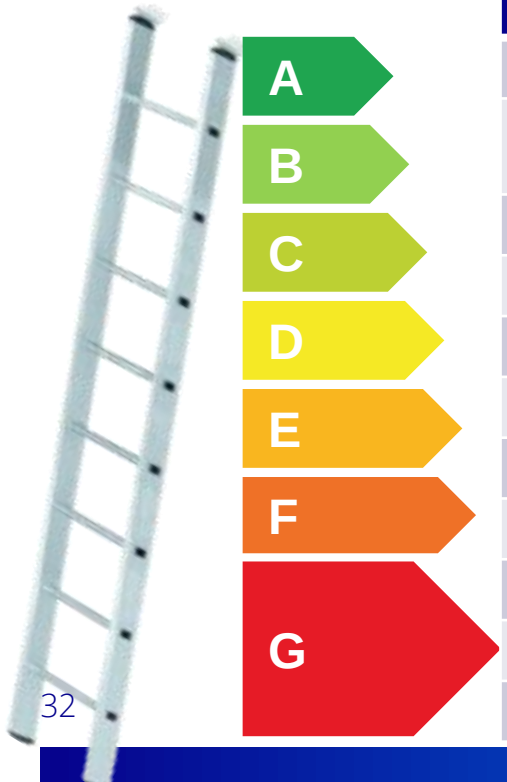
Users for Hydrogen – Priority as set out in National Hydrogen Strategy

NATIONAL VISION

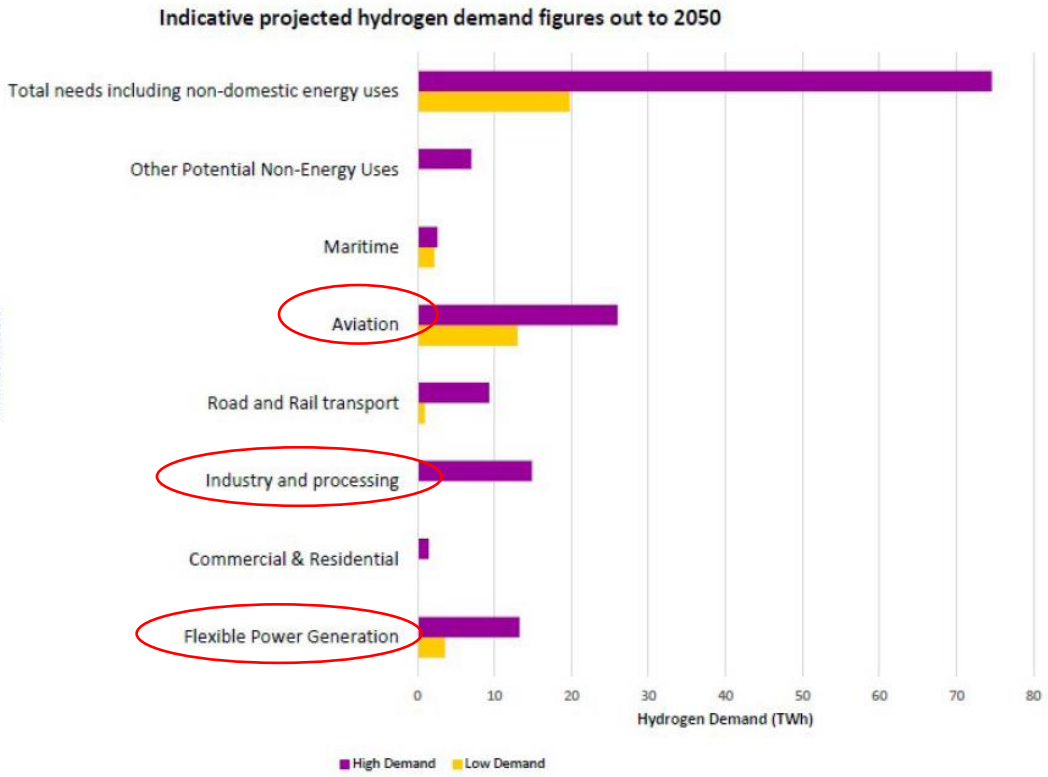
- Significant role for indigenously produced renewable hydrogen.
- Ireland has the potential to produce renewable hydrogen in excess of our own needs in the long-term.
- Prior to 2030, hydrogen will be produced from grid connected electrolysis from surplus renewables.

NATIONAL TARGET:

- A 2 GW target of non-grid connected offshore wind, which could be used for the production of renewable hydrogen, to be in development by 2030.



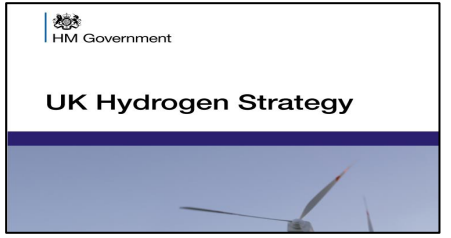
Sector	Likely Timelines
Existing Hydrogen Uses	2025-2030
Flexible Power Generation and energy storage	2030-2035
Integrated energy parks (back up)	2025-2030
Industrial Heat and Processing	2030-2035
Aviation (alternative to jet fuel)	2035-2040
Maritime (shipping)	2035-2040
Road/rail transport (heavy duty)	2025 – 2030
New uses e.g. fertiliser production	N/A
Exports	2035-2040
Blending	2025-2030
Commercial and Residential Heating	2035-2040



Strategic Context for GNI – EU Developments

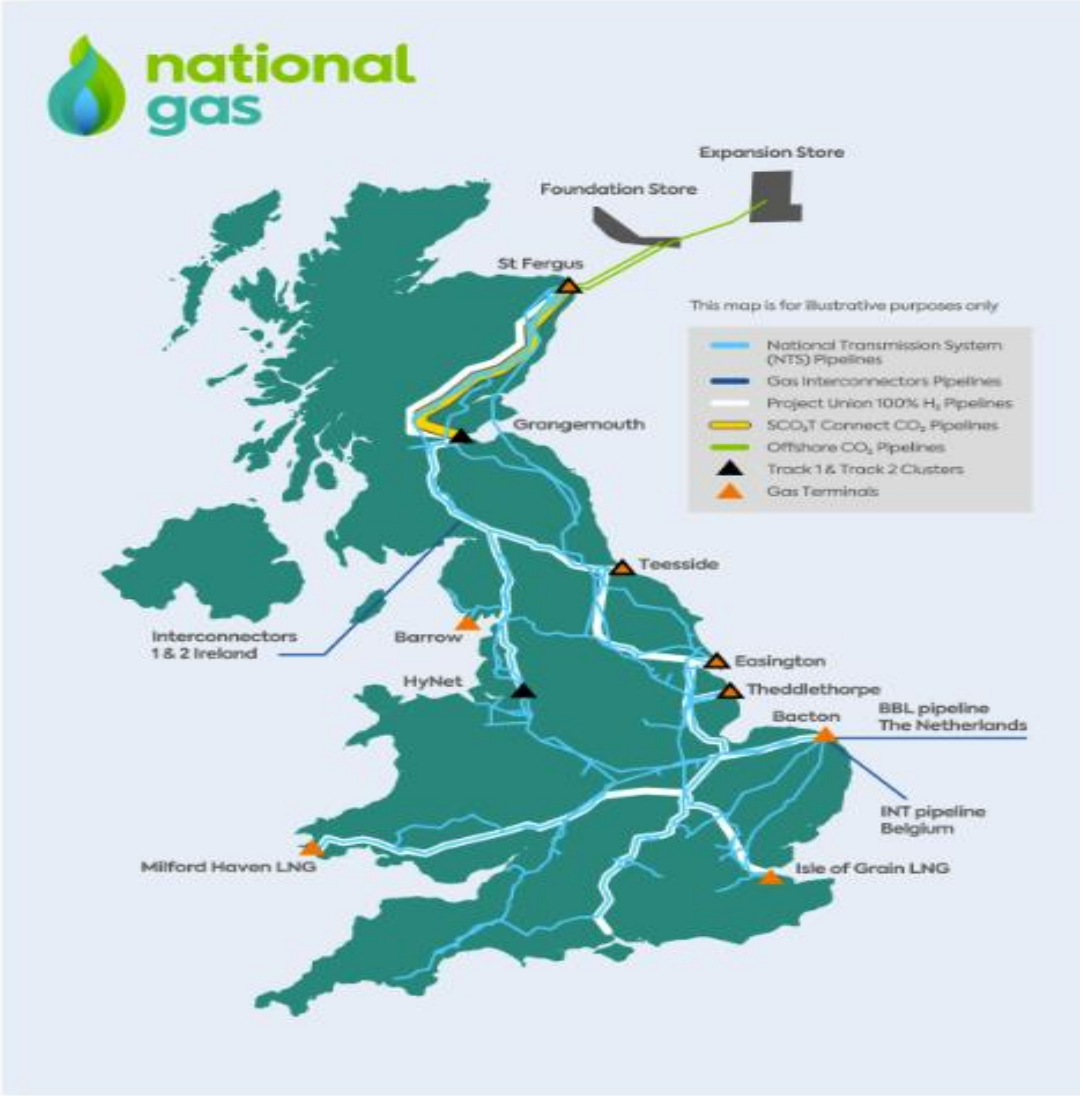
- In response to the hardships and global energy market disruption caused by Russia's invasion of Ukraine, the European Commission is implementing its REPowerEU Plan.
- REPowerEU sets a target of 10 million tonnes of domestic renewable hydrogen production and 10 million tonnes of renewable hydrogen imports by 2030.
- The gas and hydrogen package in Europe is:
  - Promoting the extended penetration of renewable gases
  - Sets out a framework for the establishment of how hydrogen network operation would operate across Europe
  - Promotes the designation of hydrogen network operators in the transmission and distribution networks.
- GNI actively involved in the establishment of European Network of Network Operators for Hydrogen (ENNOH), due to go live in Q2 2025 and be fully operational by 1st January 2027.
- As planned, the operators have now submitted to the European Commission and to the Agency for the Cooperation of European Regulators (ACER) the draft statutes, a list of members and draft rules of procedure for ENNOH to be established. GNI is listed as a founding member.
- Focus of the group has now turned to activities to be progressed before formal establishment.

Strategic Context for GNI – GB Hydrogen Strategy



Gas Networks Ireland

- Significant work ongoing in GB to test compatibility of existing gas networks to take on hydrogen injection.
- Prospect of hydrogen blends in the Scottish transmission gas system, thereby creating the prospect of Ireland importing blended hydrogen in the coming years;
  - Ireland needs to be technically ready for this.
  - EU have set target that member states should be able to facilitate blends of up to 2% initially (UK aligned to this objective).
  - GNI are engaging with National Gas to understand their blending approach and roadmap.
- National Gas are embarking on a similar journey to EU network operators;
  - a transmission network blending decision from the Department for Energy Security and Net Zero (DESNZ) is expected by Q1 2025.
  - thereafter the Health and Safety Executive (HSE) will need to approve the safety case for hydrogen blending.
  - Project Union will repurpose existing gas transmission pipelines and build new pipelines to create a hydrogen 'backbone' for the UK. Nine regional networks will be connected to create a 2,500-mile hydrogen transmission network across GB.



GNI's Hydrogen Journey – internally

New hydrogen programme team successfully mobilised and programme plan in place

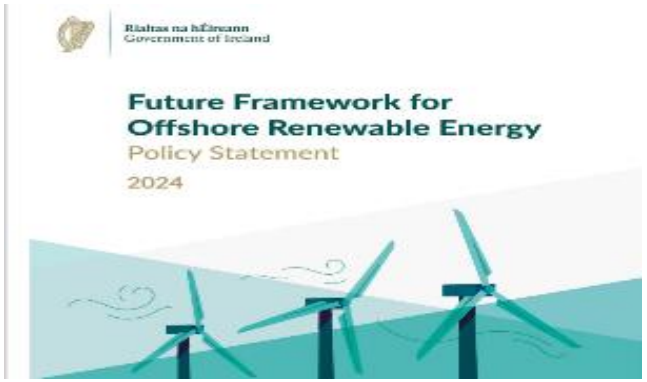
Technical readiness is being benchmarked with input from external expertise and legal/economic implications being assessed

Commercial opportunities are being actively progressed

GNI's Hydrogen Journey – externally

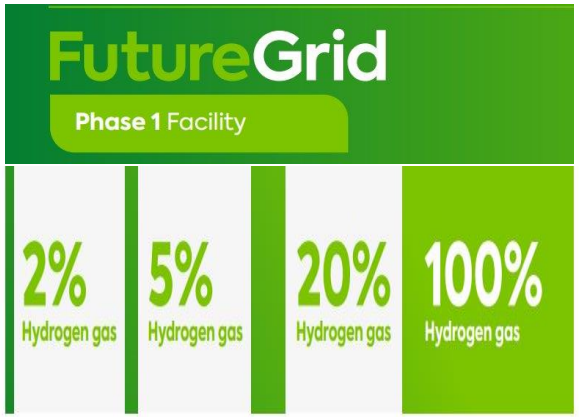
Nationally

Plenty of offshore policy developments and interest in hydrogen nationally



UK

National Gas UK has successfully tested up to 100% H_2 on a simulated gas grid



EU

The EU has approved the Gas and Hydrogen Package, the first European Hydrogen Bank auction took place and start up activities for ENNOH are underway

ennoh

Germany grants €4.6bn to 23 green hydrogen projects after EU approval

Up to 1.4GW of electrolyser capacity and 2,000km of pipelines have received state aid

Hydrogen vs. natural gas

Parameter	Natural Gas	Hydrogen	Hydrogen..... So what?
Flammability range	5% - 15%	4% - 75%	**Hydrogen is highly flammable in almost any concentration**
Flame visibility	Visible	Invisible	**Hydrogen burns invisible and is difficult to detect without equipment**
Sound velocity	388 m/s	1,203 m/s	**Hydrogen molecule is small and fast which is prone to leaking**
Ignition energy	0.25 mJ	0.017 mJ	**Hydrogen can ignite with very little energy**
Calorific value	37.7 MJ/m^3	12.7 MJ/m^3	**Three times as much volume required for hydrogen to meet same energy demand**
Diffusion in air	0.61 m^2/s	0.2 m^2/s	**Hydrogen is lighter than air and disperses much faster than natural gas**

- Like natural gas, hydrogen is a colorless, odorless, tasteless, non-toxic, non-poisonous asphyxiant gas
- Unlike natural gas, hydrogen's small atoms can embrittle steel and other materials resulting in premature failure
- Current regulations and standards limit hydrogen content in natural gas to 0.1% volume
  - Like natural gas, safe management, operation and controls are key to transport/ supply hydrogen
  - This will be demonstrated through our safety cases

Progression with 2% blend preparation

- Objective
  - Demonstrate readiness of the network for up to 2% blends received from the UK
- What's involved?
  - Certify all network assets and activities for 2% hydrogen under current existing gas safety framework and GS(M)R
  - Enable import, transportation and supply of a 2% blend across the network through amendments to the Code of Operations
- Why?
  - **EU requirement** for connected states and support DESNZ blending decision on UK NTS
    - EU regulation on interoperability for 2% blends expected to be in place by January 2025
    - UK are aligned to this; albeit out of EU, due to interdependent markets
  - **Security of supply**
    - Risk to UK gas imports if not aligned to 2% at Moffat IP
  - **Supports Ireland's National Hydrogen Strategy Action Plan**
    - DECC action #11: Prove the technical capabilities of the gas network
  - **2% blends equates to an annual hydrogen requirement of c. 480 GWh**
    - Equates to a significant volume of hydrogen to import in the short/ medium term

What is a Hydrogen Cluster?

- A hydrogen cluster is a collection of businesses and applications working in or associated with the hydrogen industry in a geographical area.
- It would likely include:
  - companies producing hydrogen;
  - distributing it across the region;
  - any associated supply chain companies; and
  - industrial businesses using it as energy.
- Clusters are a key part of the development of hydrogen in economies like Ireland and aligned to the National Hydrogen Strategy, they provide:
  - A route to market for renewable generation / hydrogen.
  - Ability for energy users to decarbonise and avail of “local” green energy solutions.
- GNI are actively investigating potential cluster locations across our network to deliver opportunities such as:
  - Repurpose pipelines to transport and store hydrogen to allow connectivity between demand and supply in the cluster (and beyond).
  - Showcase the transportation of 100% hydrogen.
  - Retain existing large energy users and securing new energy users on the network.
  - Deliver future connectivity of hydrogen clusters via a nationwide hydrogen network.

Key Activities and Priorities at Present....

Preparing for Low Levels of Hydrogen blends into existing natural gas supplies (EU requirement)

Progressing Development of Industrial Clusters in context of GNI Pathways 2045 delivery

(100% Hydrogen transportation)

Technical Due Diligence

Research Programmes

Equipment compatibility & testing

Collaboration with other pipeline operators

Regulatory Due Diligence

Compliance with EU requirements

Hydrogen Regulatory Framework

Customer and Policy

National Hydrogen Strategy

Network Transition Plan

External engagement

Immediate Focus Areas Include

Supporting the delivery of the National Hydrogen Strategy.

Progressing a technical programme to be ready for a 2% blend.

Influencing the shape of ENNOH.

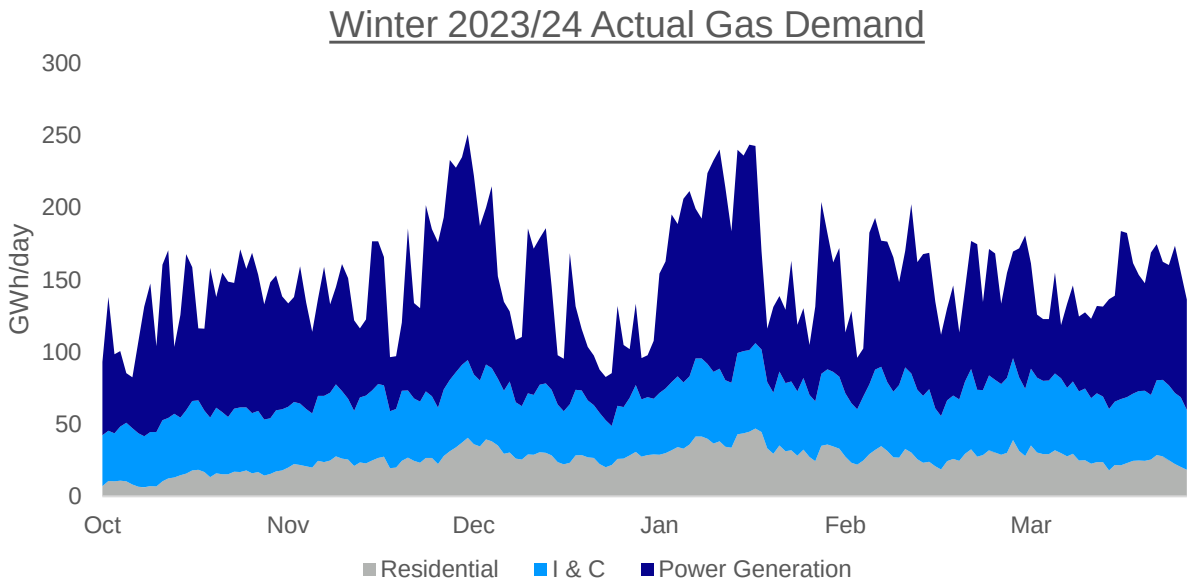
Progressing cluster opportunities for a 100% H_2 network.

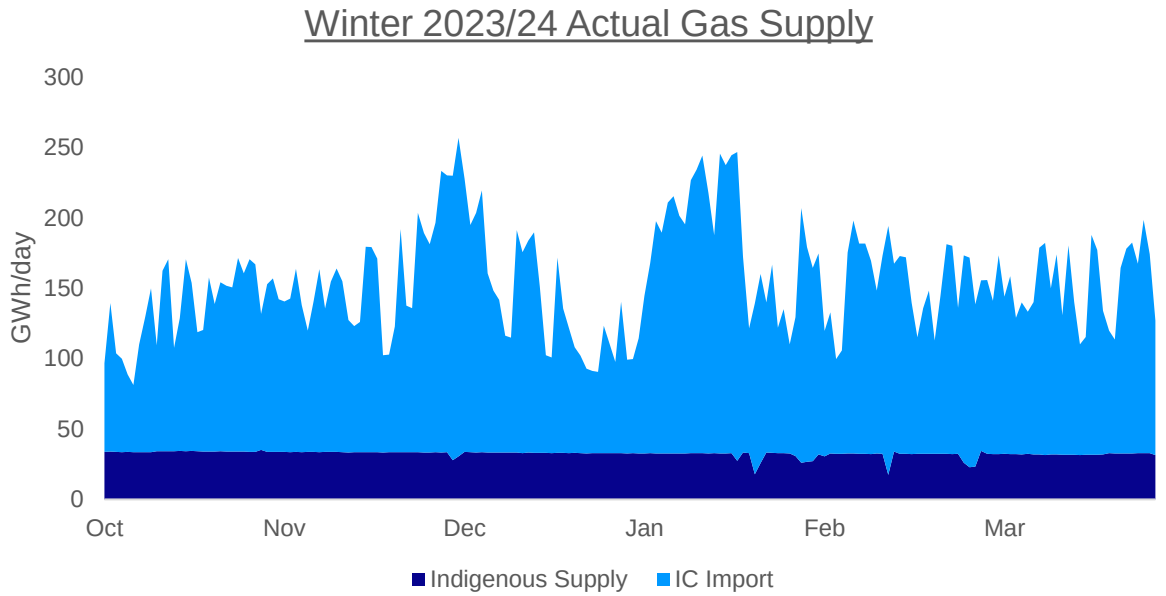
11. Presentation on GNIs Winter Outlook

Gas Networks Ireland

Laura Ryan – Senior Future Networks Engineer

Winter 2023/24 Review





Winter 23/24 comparison to Winter 22/23:

- Residential: -3.8%*
- I&C: +2.3%
- Power Generation: -9.0%
- Total: -5.0%

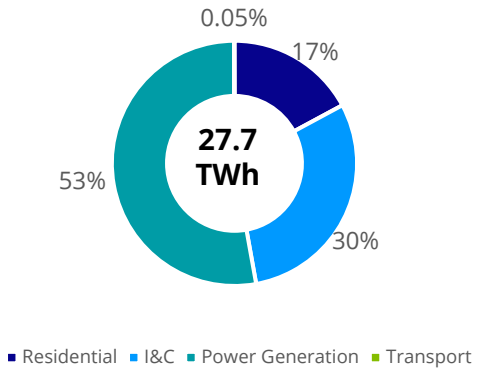
*Actual = Weather-corrected

Winter 2023/24 Demand vs. Winter 24/25 Forecast*

Winter 23/24

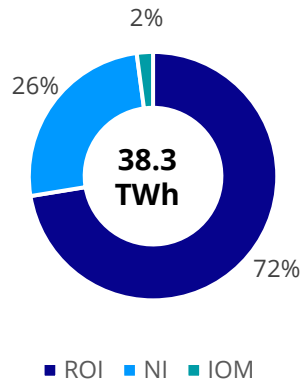
-5% vs. Winter 22/23

ROI Demand Winter 2023/24



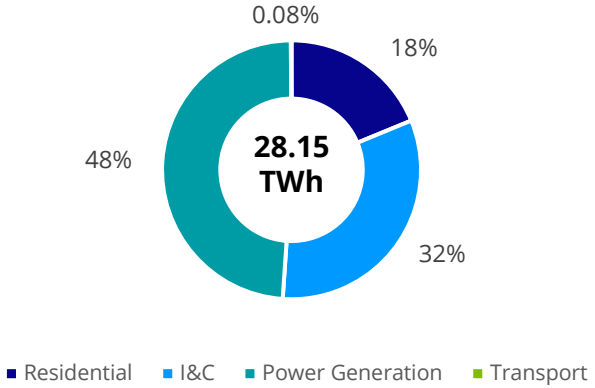
-3% vs. Winter 22/23

System Demand Winter 2023/24

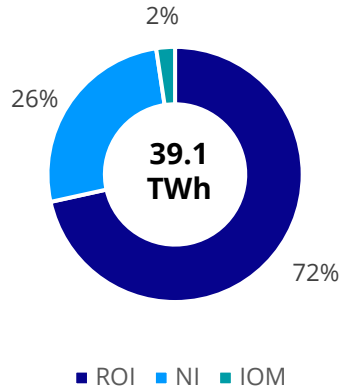


Winter 24/25

ROI Demand Winter (2024/25)



System Demand Winter (2024/25)

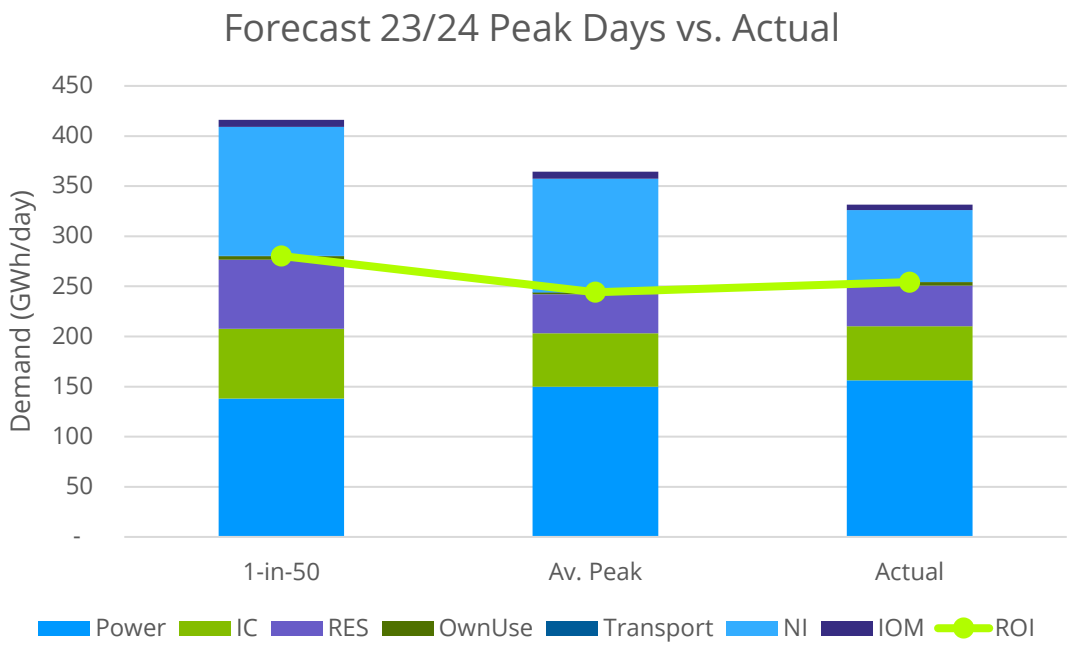


Key Messages

- Winter 24/25 demand is expected to increase slightly (+1.5%) compared to winter 23/24
  - Powergen demand is expected to decrease by 8%, due in large part to continued high electricity imports
  - I&C demand is expected to increase by 7%
  - Residential demand forecast (increase of 9.5%) correlates to more average winter conditions vs. the mild 23/24 winter
- The majority of both ROI and System demand is expected to be met by imports via Moffat (81% and 86% resp.)
- Corrib is expected to meet the balance of supply, providing 19% of ROI demand and 14% of System demand
- Biomethane is expected to contribute to 0.2% of ROI demand

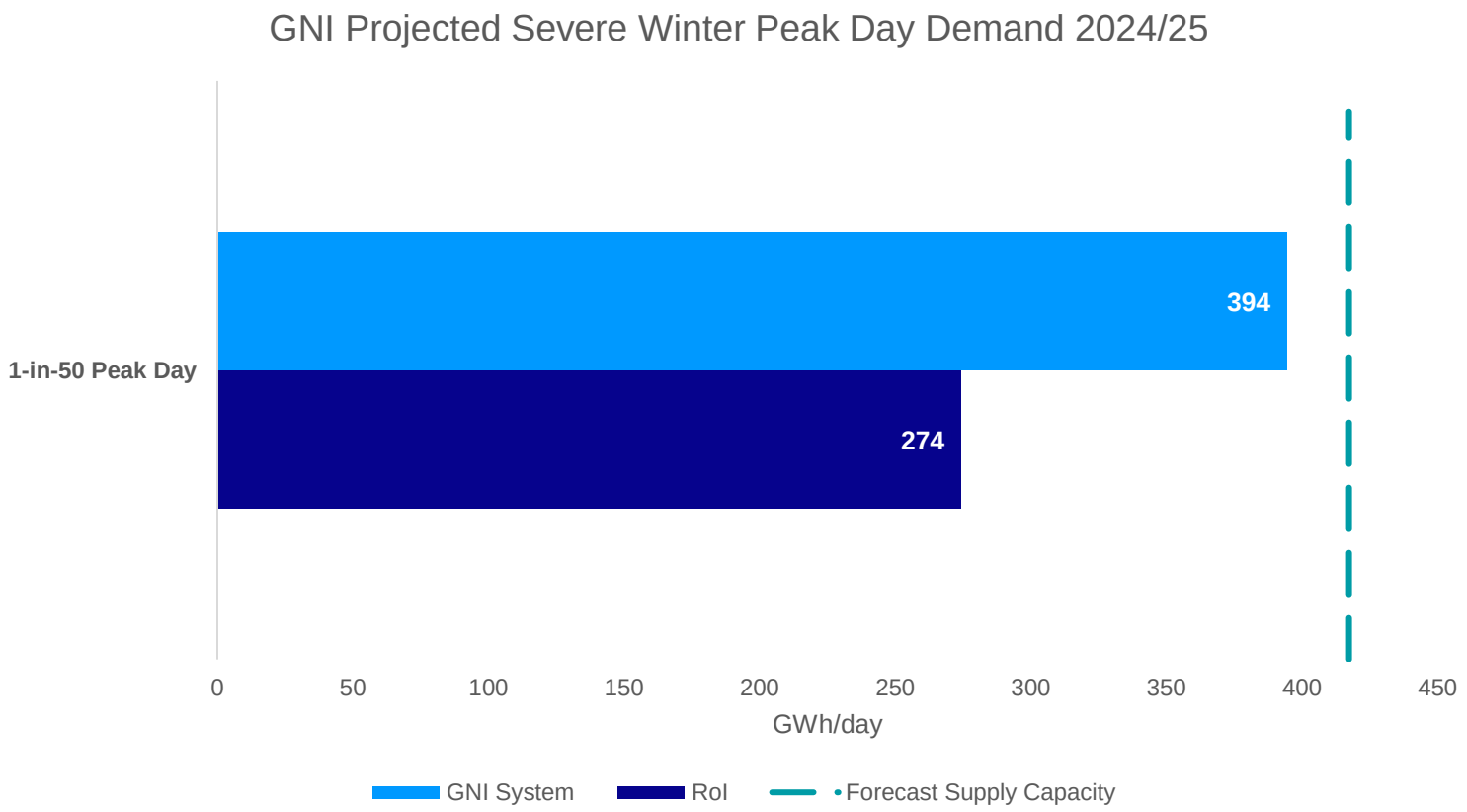
* Projections are provisional, pending publication of GNI Winter Outlook 24/25

Winter 2023/24 Peak Day



Demand (GWh/d)	1-in-50	Av. Peak	Actual
ROI	280	244	254
IOM	7	7	5
NI	129	113	72*
System	416	364	332
System Supply (GWh/d)	1-in-50	Av. Peak	Actual
Corrib	32.4	32.4	30.4
Biomethane	0.3	0.3	0.15
Moffat	383.4	364.3	303.5

Winter 2024/25 Projected Supply Position*



	Supply Capacity (GWh/day)
Corrib	30.0
Biomethane	0.4
Moffat	386.9
Total Supply Capacity	417.3

There is currently no anticipated disruption to supply for winter 24/25

* Projections are provisional, pending publication of GNI Winter Outlook 24/25

Upstream Security of Supply – GB and EU

- National Gas's Winter Outlook forecasts the following for winter 24/25:
  - No disruption to gas supply to Ireland is anticipated
  - High exports previously seen to the EU are not currently anticipated
- ENTSOG have yet to publish their Winter Outlook
  - Results shared so far indicate no curtailment of supply to Ireland
  - Demand curtailment is not expected in western Europe in any scenario
- EU gas storage levels have already surpassed the 1st November target of 90% storage filled for the winter ahead
  - Gas storage is key for security of energy supply in Europe as it can cover up to one-third of the EU's gas demand in winter
- EU Member States are encouraged to continue reducing their gas consumption until 31 March 2025, by at least 15% compared to their average gas consumption in the period from 1 April 2017 to 31 March 2022

12. Gas and Electricity interaction

Gas Networks Ireland

Jason Herbert – Electricity Association of Ireland

INCREASED OXYGEN LIMIT

- EAI members are using the specification of the code modification as projected gas quality i.e. maximum impact scenario.
- Some members have begun process with OEM, with results due by the end of summer. Other members are at an earlier stage of contacting OEM

Initial Feedback

- OEMs require more detail of fuel specifications. Clarity on timelines for this info would be appreciated.
- Monitoring of gas quality at various points of the grid of the gas characteristics as fuel spec changes is considered to be increasingly important.

Raising of Upper Wobbe Limit

- UK proposals to increase Wobbe limit to facilitate LNG.
- Ofgem Call for input due 29th February.

Low Wobbe Biomethane

- Will biomethane producers be blending LPG as gas quality changes?

Electricity Generation Efficiency Changes from Oxygen Content Increase

- Expected that increasing O2 will reduce unit efficiency
- Need for consideration of efficiency changes on electricity customers?

ELECTRICITY ASSOCIATION OF IRELAND

EAI Member	Gas Turbine	A111 - Increasing Oxygen Content to 0.5% - Status	A113 - Lowering Wobbe Index - Status	Timeline for Completion Assessment	Timeline for Completion of Works if Necessary
ESB	Aghada CCGT			Complete	None required
	Aghada CT11			Complete	None required
	Aghada CT12			Complete	None required
	Aghada CT14			Complete	None required
	Dublin Bay Power CCGT			October'24	TBC
	Poolbeg A			Complete	None required
	Poolbeg B			Complete	None required
	Poolbeg Flexgen			TBC	TBC
	Shellybanks Flexgen			TBC	TBC
	Corduff Flexgen			TBC	TBC
	Northwall TEG			TBC	TBC

ELECTRICITY ASSOCIATION OF IRELAND

EAI Member	Gas Turbine	A111 - Increasing Oxygen Content to 0.5% - Status	A113 - Lowering Wobbe Index - Status	Timeline for Completion Assessment
SSE	Great Island	OEM confirmed on a call that the changes in gas quality are within the range the machine can handle. Report to follow.		Q4 2024.
Tynagh Energy Ltd	Tynagh TYC			
BNM	Edenderry			
Energia	Huntstown 1	OEM confirmed that an increase of oxygen up to 0.5% would have no impact of the GT.	OEM have confimed that there is no issue with the lower Wobbe Index	
	Huntstown 2	OEM confirmed that an increase of oxygen up to 0.5% would have no impact of the GT.	OEM have confirmed that the lower Wobbe Index could cause some combustion issues on the GT. Upgrade required to mitigate the risk. Energia progressing with the upgrade, which will be carried out in two phases, the first in Oct 24 and the second in May 25.	

EAI Member	Gas Turbine	A111 - Increasing Oxygen Content to 0.5% - Status	A113 - Lowering Wobbe Index - Status	Timeline for Completion Assessment	Timeline for Completion of Works if Necessary
Aughinish Alumina	Sealrock	OEM has confirmed that they wouldn't have an issue with oxygen concentration up to 1% once it is mixed well within the NG and otherwise adheres to their specification for fuel gases fo combustion	Initial high level assessment by OEM is that can accomodate a wider Wobbe. However we haven't requested any study / feedback from OEM in relation to A113 - Lowering Wobbe Index.		
Bord Gais	Whitegate	Initial review by OEM suggests no impact on GT unit. However, the grid code review with the 3rd party has commenced. We await their formal response in relation to the fuel supply and management system.	Initial review by OEM suggests no impact on GT unit. However, this does not include the fuel supply and management system so 3rd party review being undertaken.	Q4 2024 - Q1 2025	
Bord Gais	Peaker Plant	Initial conversations with the OEM indicated no adverse impact. However, we await their formal written response.	Initial conversations with the engine manufacture indicated no adverse impact. However, we await their formal written response.	Q4 2024	

13. AOB Items/Next Meeting

Gas Networks Ireland

13. Next Meeting

- Next Meeting is a virtual meeting on the 4th of December.

13. Code Modification Forum Meetings in 2024

CMF Dates	Location
14 February	Virtual
24 April	Hybrid (Dublin)
13 June	Hybrid (Dublin)
4 September	Virtual
16 October	Hybrid (Cork)
4 December	Virtual

Next CMF Meeting

Thank you for your participation

Gas Networks Ireland