

Mr Gerard McIlroy
Mutual Energy Limited,
Fourth Floor,
The Arena Building,
85 Ormeau Road,
Belfast,
BT7 1SH

Ref: NET/G/RML/212

22 May 2020

Dear Gerard,

Re: Operation of Carrickfergus Internal Connection Point

This letter summarises the output from our collective work to review the operating arrangements at the Carrickfergus Above Ground Installation (AGI) and our proposed next steps. We are grateful to both MEL and GNI (UK) for their continued cooperation on this project.

Background

The NI gas transmission network is managed as a single commercial network, with a single network code with one transportation and management system. However, for historical reasons the Carrickfergus AGI, which links the MEL and GNI (UK) networks, is currently operated in volumetric flow and pressure control, reinforcing the separation between the two parts of the network. In our Forward Work Plan for 2019/20, we included a project to review these operating arrangements, and in particular to consider the potential costs and benefits that would be associated with changing operation of the Carrickfergus AGI to free flow.

The project set out to establish if free flow would have a positive impact on linepack, reduce pressure swings, enhance the ability of NI to operate a wider range of pressures, potentially reduce the need for balancing transactions and enhance the overall efficiency of the NI transmission network.

GNI (UK) and MEL together proposed to carry out an assessment, which would include hydraulic modelling, survey of station control logic, operational strategy and impact assessment via hazard and operability study. We recruited a firm of consultants, AFRY Management Consulting, to provide technical expertise, to critically review and challenge the information provided and provide advice to UR.

The consultants found that there was a potentially simpler solution, which could provide most of the benefits of free flow at much lower cost. This new solution was entitled “regulator wide open” (RWO). The consultants advised that:

“The only change required is to provide an instruction to Carrickfergus to control to a flow rate that is too high for it to achieve under prevailing network pressures.”

Network analysis then demonstrated that this could improve the pressure profile across the NI transmission network, potentially reduce the number and frequency of balancing actions to save money to NI consumers. As this would not require a change to the control logic or equipment at the Carrickfergus site, we agreed with the consultants that it was not necessary to carry out any further analysis.

In their report, the consultants state:

“As such, we conclude that there is no reason to continue to operate Carrickfergus in flow control mode. Moreover, we consider that to do so would result in an inefficient outcome for NI consumers, and may be held as unreasonable.”

The consultants further state that, assuming no restrictions within the GNI (UK) safety case:

“there are no impediments to relying on the existing station control logic to control to a DP¹ of 2 bar under normal operation and there are no costs associated with doing so.”

¹ Abbreviation for differential pressure, which means pressure drop

Response to Comments on Consultants' Report

On 5 February, we provided GNI (UK) and MEL with the report from our consultants, to provide the opportunity to point out any factual inaccuracies in advance of finalising the report.

Thank you for your response. We welcome that both MEL and GNI (UK) are supportive of a move to a new operating protocol. We have considered the points you made, our consultants have amended their report and provided clarification within the report where that is helpful. The updated report is attached.

We recognise that you have identified additional potential benefits to move to free flow at Carrickfergus. These include reduced pressure requirements upstream at Twynholm AGI, increased linepack capability on the NI transmission system (more than is available with RWO) and reverse flow capability through the Carrickfergus AGI. As these are likely to incur capital expenditure, we intend to review as part of GT22.

Implementation

The consultants' report states that the current operational arrangements are acting to the detriment of consumers. We would expect that, as a reasonable and prudent operator, you would wish to change this as soon as practically possible. We expect that this will mean a change to operating procedures, at least to the Joint Balancing Procedure (JBP), and that GNI (UK) intends to review its safety case. Any costs associated with reviews and changes in procedures should be covered within your business-as-usual expenditure. Therefore, please coordinate with GNI (UK) and provide the following:

1. The estimated date that the operating procedures, including the JBP, will be amended to ensure that this is a permanent change, such that volumetric flow

control will not be used in the future, except under defined circumstances.
This should be completed no later than the end of 2020.

2. The date when the Carrickfergus AGI will begin to be operated as RWO. We accept that the current situation around Covid 19 may affect the timescale, but we would expect this could be implemented by end July 2020.

Please provide these two dates to us by 12th June 2020.

Free Flow Project

We recognise that free flow may offer additional benefits but both TSOs recognise that this would require further assessment, including assessment of costs. We intend to include a review of the free flow project in the approach document for the GT22 price control.

Thank you for your time and expertise which has brought the project to this stage. We have been encouraged by your willingness to explore the new option of RWO, which we anticipate will deliver benefits to the Northern Ireland gas consumer.

We intend to publish this letter and the consultants' report on our website.

Yours sincerely



Roisin McLaughlin
Head of Network Operations