

1 Progress Update

In the Joint Office Shrinkage Forum meeting of 22nd March 2023 and acknowledging the excessive time period between the next call scheduled for 20th September, there was an action tabled for the GDNs to provide an update on the progress of the Own Use Gas Validation Project, to the Joint Office and interested 3rd party stakeholders. This paper will look to address this action.

Since the last Forum meeting, the GDNs have signed commercial contracts with DNV to carry out the OUG Model validation workload and have engaged with Newcastle University Mathematics and Statistics Department to independently review the project findings, both on a periodic basis and the final results and report.

The initial tranche of analysis was split into two phases:

- Stage 1:
 - Assess current data landscape
 - Re-assess Pre-Heater population
 - Re-validate the OUG Model with new GDN data but maintaining original assumptions
- Stage 2:
 - Refresh the OUG Model with updated information to supersede old assumptions

The DN's have provided DNV with pre-heater meter readings where available, along with all available telemetered flow, pressure, and temperature data for those stations. This hourly data for each site stretches back over a 3-year period and represents a significant data gathering exercise. DN's have also provided station schematics to facilitate an accurate understanding of each station configuration, and where possible, individual pre-heater set point temperatures.

To complete Stage 1, DNV will run the original model 'as is' and compare the results against the available actual pre-heater meter reads to gauge level of potential change from original assumptions. This will be followed by a data validation exercise to ensure key findings are captured and any inaccurate or rogue data points are identified. Initial Stage 1 results are expected within the coming weeks.

2 Next Steps

In Stage 2, DNV will look to progress to an initial hourly data refresh of the OUG pre-heater model, incorporating the processing of data, quality checks and feedback, with the intention of updating the model calculation processes and generating new factors. The timeline for the end of Stage 2 is scheduled for October 2023.