Gas System Operator

0669R – Review of MN & GDW Arrangements

6th June 2019

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Recap of proposal

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Recap of proposal

- Aim was to develop a tool which is:

  - More dynamic and reflective of potential supplies

  - Mechanistic, providing more transparency to industry

  - More likely to trigger the optimum number of Margins Notices

- At Transmission Workgroup in May:

  - Recapped the proposed Interconnector methodology, dependent on analysis looking back over previous winters

  - Highlighted the challenges identified in developing the LNG methodology, and how we might resolve them

  - Agreed to present our final proposal for the new Margins Notice methodology at the June Transmission Workgroup, with a view to share the Mod and Legal Text at Transmission Workgroup in July.

Interconnector Methodology – Re-cap

- In April, we demonstrated a correlation between interconnector flow and hub price differentials

- Our proposal was to use average flow and price differential data to calculate the interconnectors figure for the Margins Notice on a daily basis as follows:

$$BBL\ Interconnector$$
$$= Min\left(Max\ BBL\ Technical\ Capability, Average\ Flow\ from\ last\ 2\ Days * \frac{D - 1\ NBP:TTF\ Differential}{NBP:TTF\ Average\ Differential\ from\ last\ 2\ Days}\right)$$

$$IUK\ Interconnector$$
$$= Min\left(Max\ IUK\ Technical\ Capability, Average\ Flow\ from\ last\ 2\ Days * \frac{D - 1\ NBP:ZEE\ Differential}{NBP:ZEE\ Average\ Differential\ from\ last\ 2\ Days}\right)$$

- Link to April's slides: https://www.gasgovernance.co.uk/0669/150419

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LNG Methodology

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Proposed LNG Methodology

$$LNG = Min\left(Expected\ Cold\ Weather\ Capability, \frac{Usable\ Stock}{2}\right)$$

- For the Expected Cold Weather Capability we've used the 95th percentile of winter period LNG flow data from the last 3 years

- Usable Stock is divided by 2 to reflect the existing storage methodology.

$$Usable\ Stock = Stock\ Level - Minimum\ Storage\ Tank\ level$$

- For the Minimum Storage Tank Level we have taken the minimum storage tank levels seen over the past 3 years at each LNG terminal, then added the Boil Off Rate for each for 18 days

- 18 days is our proposed assumption of the amount of time required for a boat to complete its voyage and unload at a UK terminal

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Applying methodologies to previous winters
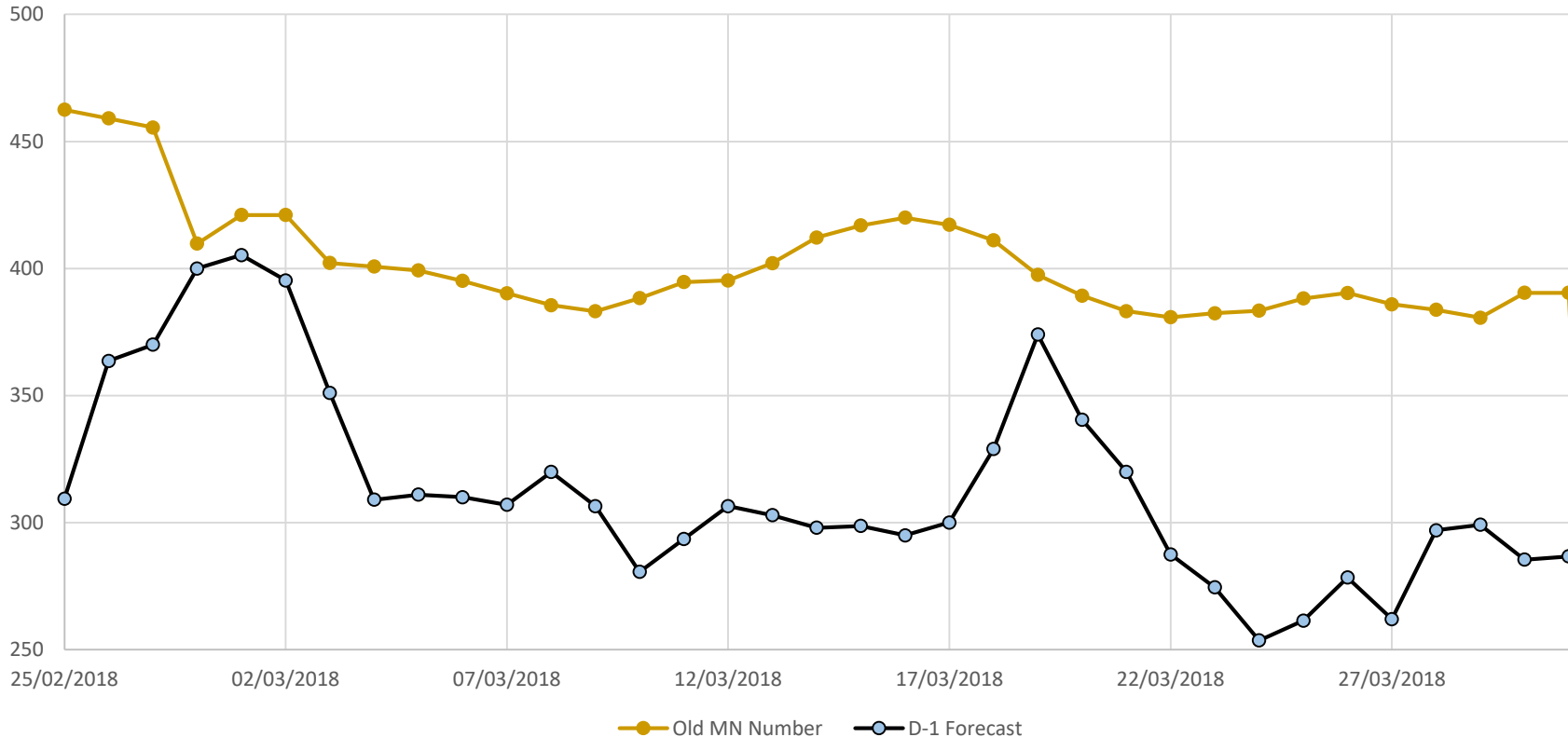
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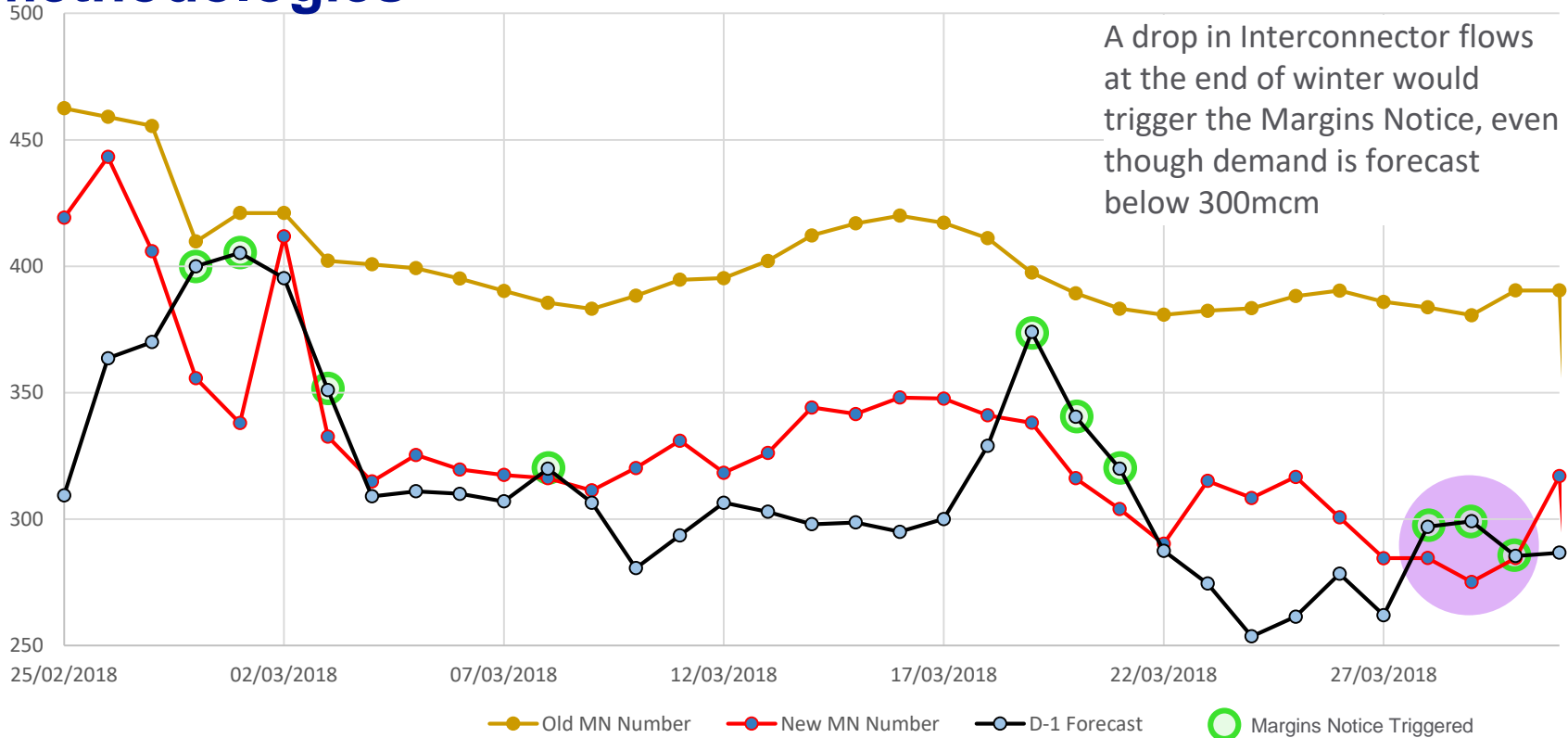
Trigger frequency with new methodologies

- We established how many times the Margins Notice would have been triggered using the combined methodologies, and then just the LNG methodology, and just the Interconnector methodology

- Over the past 4 winters, the Margins Notice would only have been triggered in February and/or March 2018

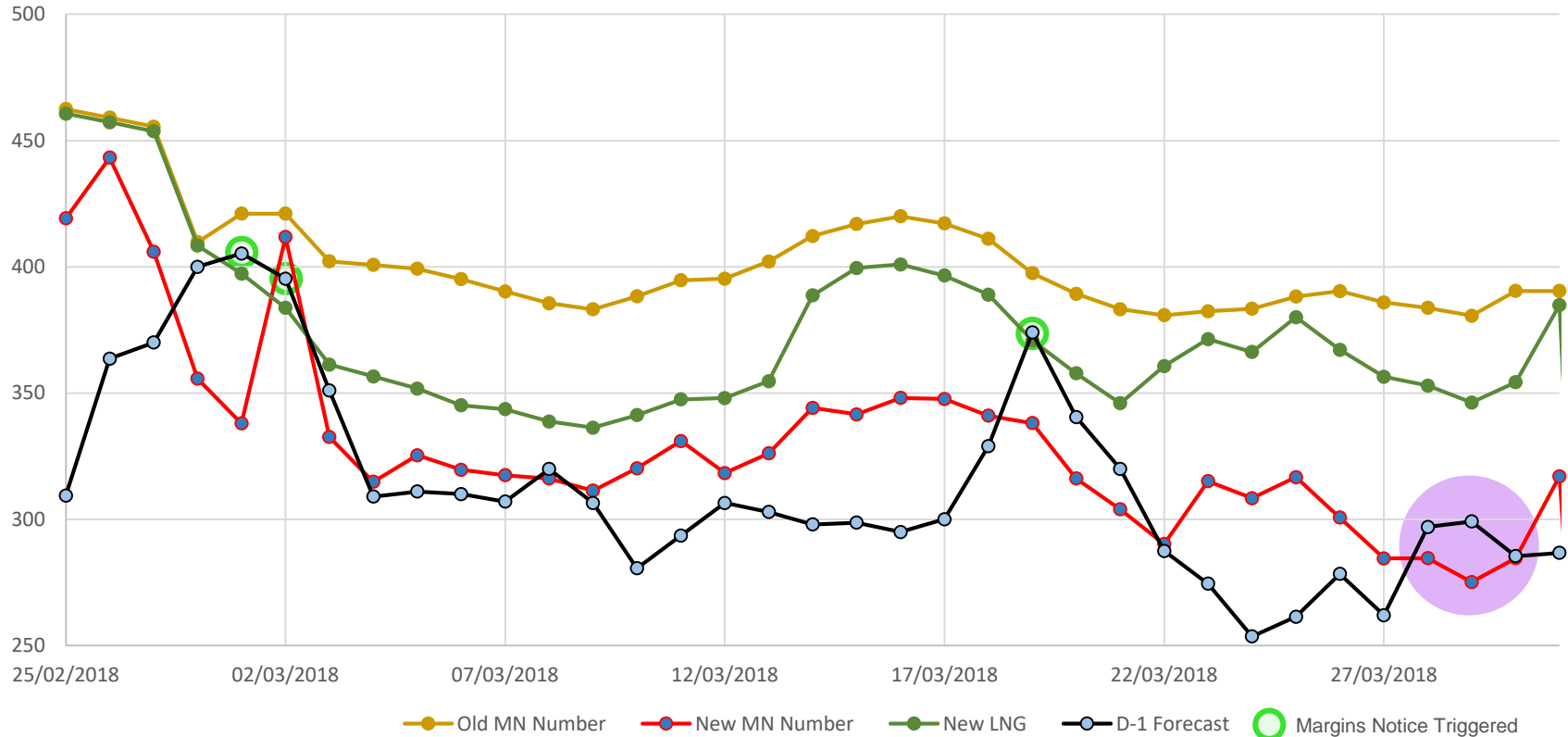| Row Labels	2015 Combined Methodology	2015 LNG Methodology	2015 I/C Methodology	2016 Combined Methodology	2016 LNG Methodology	2016 I/C Methodology	2017 Combined Methodology	2017 LNG Methodology	2017 I/C Methodology	2018 Combined Methodology	2018 LNG Methodology	2018 I/C Methodology	2019 Combined Methodology	2019 LNG Methodology	2019 I/C Methodology
Jan				0	0	0	0	0	0	0	0	0	0	0	0
Feb				0	0	0	0	0	0	1	0	1	0	0	0
Mar				0	0	0	0	0	0	9	3	2	0	0	0
Oct	0	0	0	0	0	0	0	0	0	0	0	0			
Nov	0	0	0	0	0	0	0	0	0	0	0	0			
Dec	0	0	0	0	0	0	0	0	0	0	0	0			
Grand Total	0	0	0	0	0	0	0	0	0	10	3	3	0	0	0

March 2018 – Current Margins Notice and D-1 Forecast

March 2018 – New LNG and Interconnector combined methodologies

A drop in Interconnector flows at the end of winter would trigger the Margins Notice, even though demand is forecast below 300mcm

Legend: Old MN Number, New MN Number, D-1 Forecast, Margins Notice Triggered

March 2018 – New LNG methodology only

March 2018 – New Interconnector methodology only

Legend: Old MN Number, New MN Number, New LNG, New Int, D-1 Forecast, Margins Notice Triggered
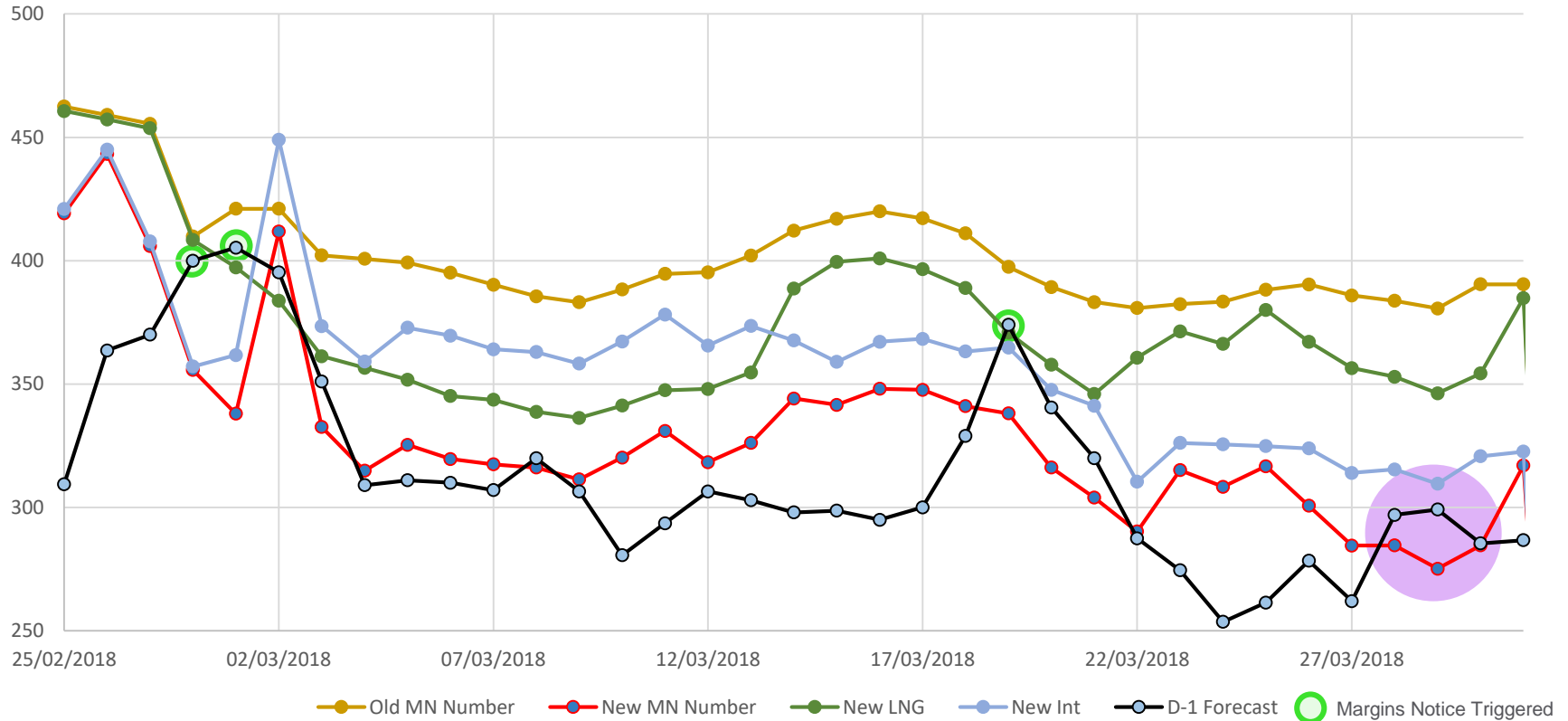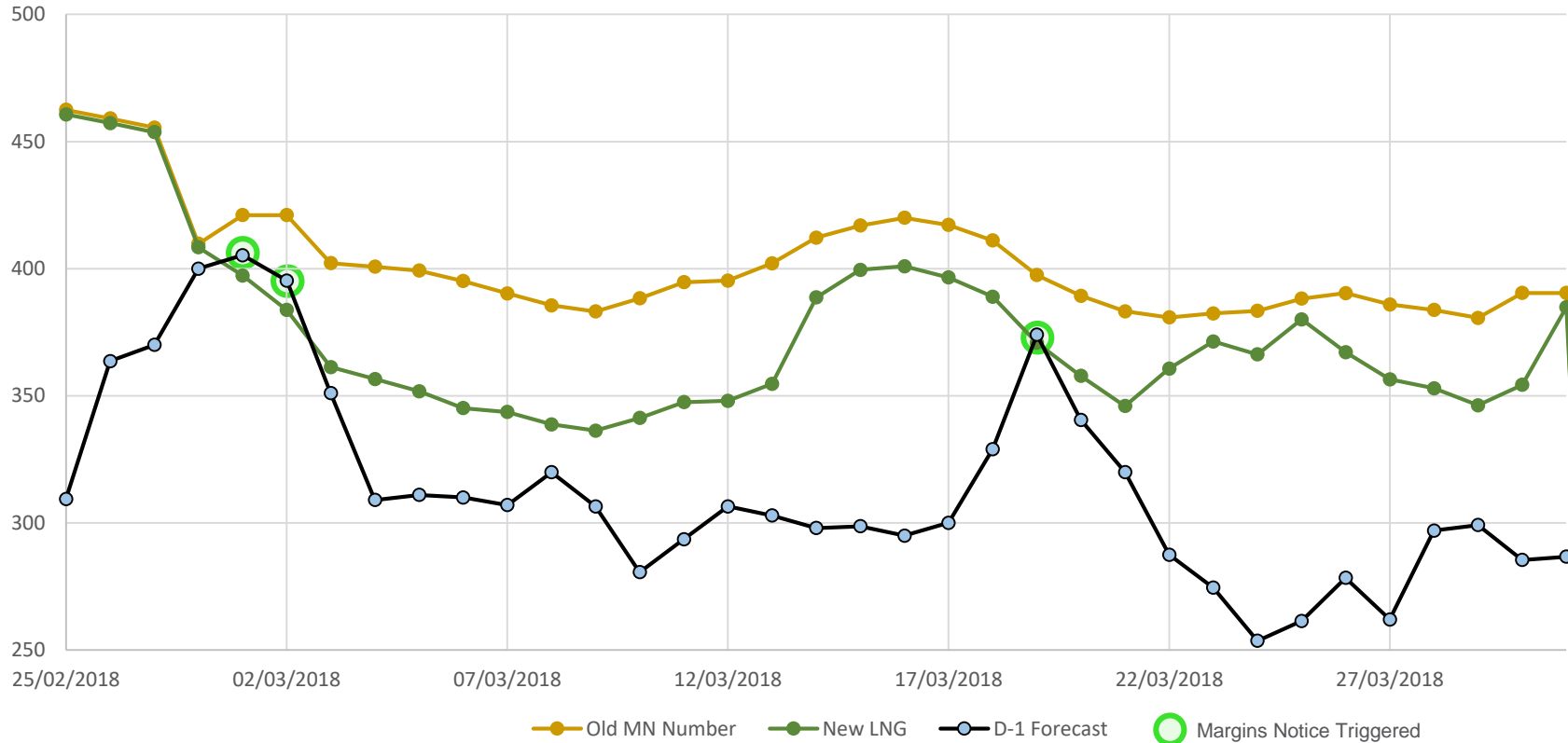
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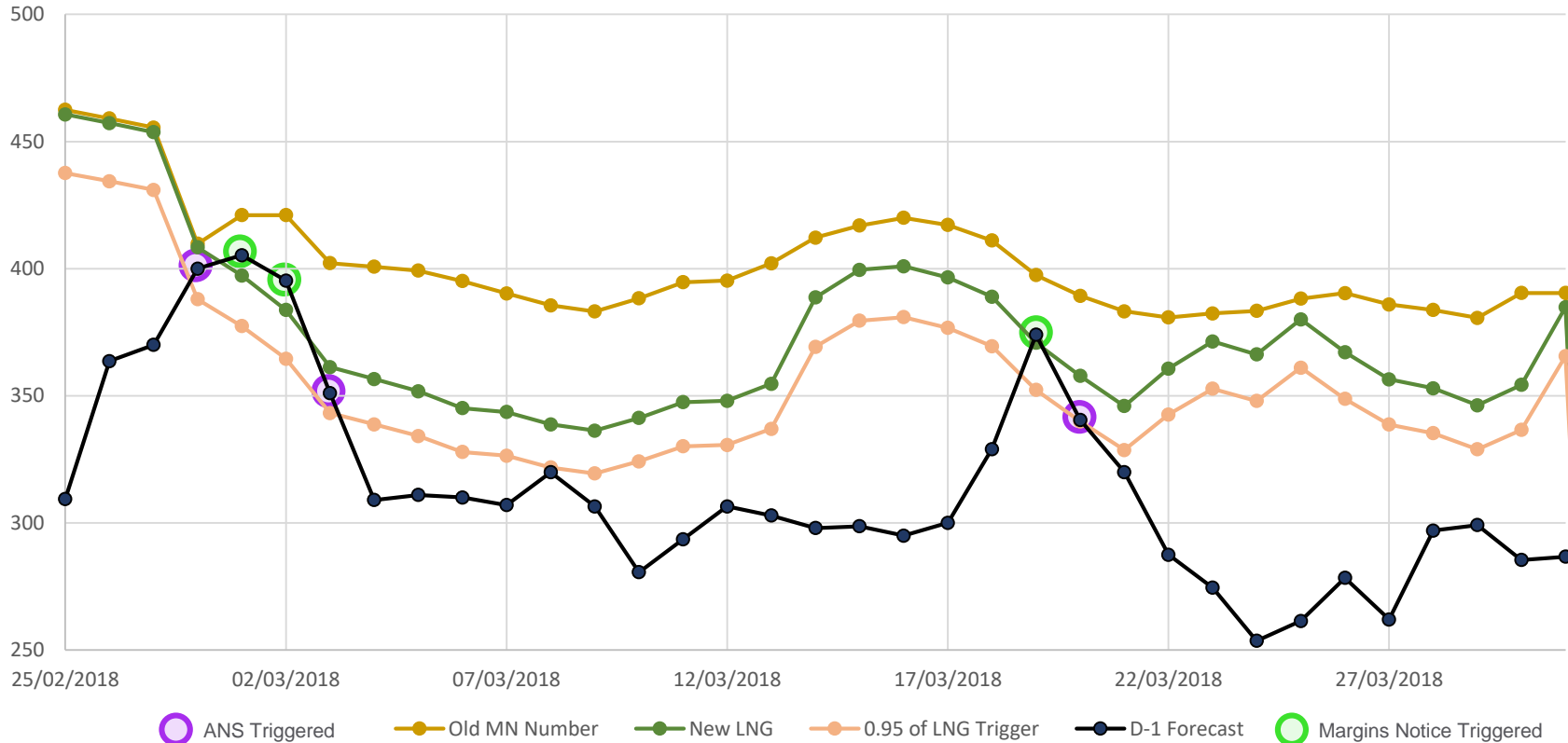
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Our preferred option

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Our preferred option: Change LNG methodology only

Our preferred option: With ANS trigger level

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Next Steps

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Next Steps

- Agree recommendations with the Workgroup

- Close 0669R, Workgroup Report to Panel

- Raise a new mod to implement recommendations, with pre-modification discussion at July Transmission Workgroup

- Implement internal and website changes by 1st October 2019

- Review performance over 2019/20 winter and share findings at Operational Forum and Transmission Workgroup in Spring 2020.

New mod to include:

- New LNG methodology for a daily process

- NSS figure to include UKCS, Norway and Interconnectors, with a monthly review and additional reviews where pertinent information is highlighted to us

- Additional ANS notifications when we reach a certain percentage of the Margins Notice trigger

- Amending Margins Notice to be a winter only process to avoid misleading information over the summer.