Gas System Operator

# Margins Notice Forecast

nationalgrid

# Existing 5 Day View Methodology

## Non Storage/LNG Supplies (NSS)

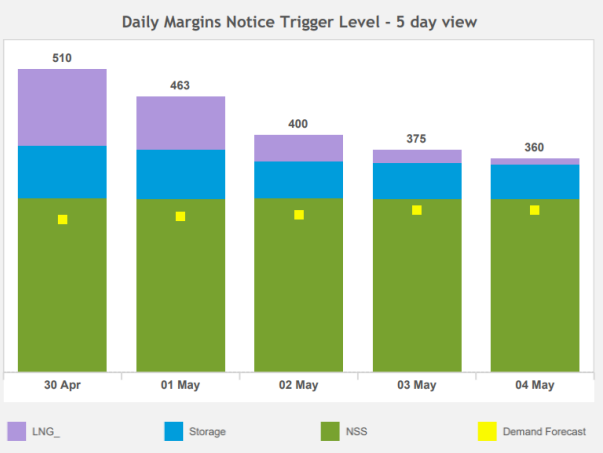
- Determined by National Grid based on best available information of maximum upstream asset capability for terminals and interconnectors.
- Reviewed regularly throughout the winter.

## Storage

- Uses the relationship between stock level and deliverability (decay) curve provided by the site operators.
- Assumes max deliverability for each site based on its deliverability curve and reduces the stock value by this amount for the following days calculation (up to D-5).

## LNG

- Assumes LNG will deliver at 95$^{th}$ percentile of their flows over the last 3 winters (cold weather capability).
- Min tank level is determined by lowest stock we've seen plus 18 days worth of boil off flow (assumed typical boat transit time).
- Applies cold weather capability everyday unless stock level drops below min tank level in which case limited to available volume and then just boil off for subsequent days (up to D-5).



# 5 Day View Limitations & New Margins Notice Forecast

## Existing 5 day view

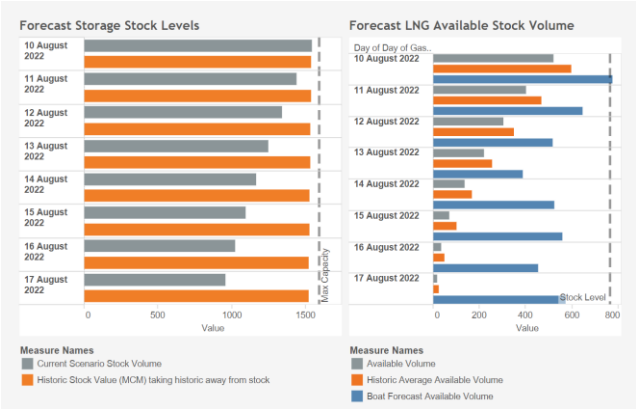
- The 5 day view often shows a significant reduction in supply availability because it assumes storage facilities withdraw gas at their maximum rates based on prevailing stock level
- This is often not reflective of actual storage behaviour unless it coincides with a period of high demand
- Actual Margins Notice trigger levels therefore tend to remain more constant than the 5 day view suggests

## Margins Notice Forecast

- Intended to provide a more realistic view of what the trigger level might be on any day out to D-7
- Based on week ahead demand forecast and different storage and LNG assumptions
- Our intention is to publish it every day on National Grid Prevailing View between 1 October and 30 March

# New Margins Notice Forecast Methodology

Proposed changes in **RED** from D-5 methodology




## Non Storage/LNG Supplies (NSS)

- As per existing methodology, determined by National Grid and reviewed through winter.

## Storage

- Uses the relationship between stock level and deliverability (decay) curve provided by the site operators.
- Assumes max deliverability for each site based on its deliverability curve but reduces the stock value by **the 7 day historical average withdrawal** for the following day's calculation (up to **D-7**).

## LNG

- Assumes LNG will deliver at **average of last 7 days actual flow.**
- Minimum tank level is determined by lowest historical stock observed at each terminal plus **X** days worth of boil off flow (**X based on number of days until next cargo through National Grid LNG cargo monitoring**).
- Applies **average of last 7 days actual flow into the NTS** every day unless stock level drops below min tank level in which case limited to available volume and then boil off for subsequent days (**up to D-7**).

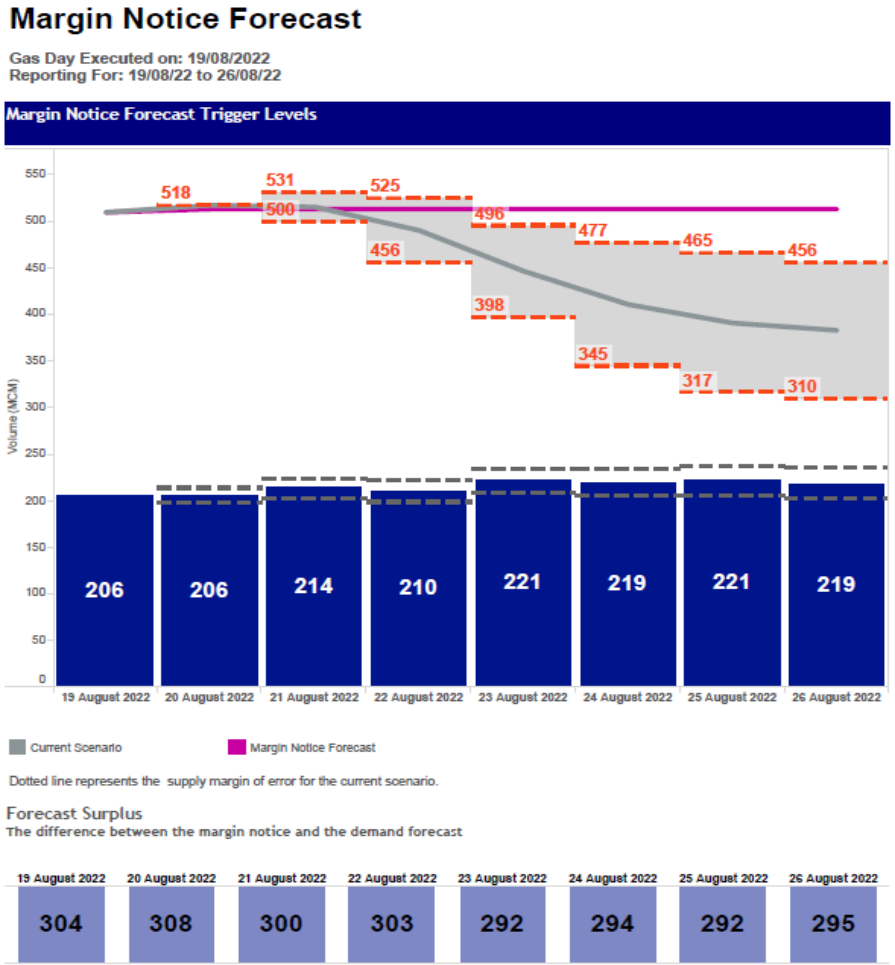
# Confidence Bands

## Demand Forecast

- Confidence bands will be placed around demand forecasts based on the historic average error (in mcm) for each forecast day (D-1 to D-7)

## Margins Notice Max Available Supply Forecast

- Confidence bands will be placed around the max supply forecast based on historic error (in % terms) between final margins notice on D-1 and earlier forecasts of this (D-2 to D-7)



nationalgrid