DESC TWG

Post Nexus Algorithm Performance Initial Proposals

16th September 2015

Post Nexus Algorithm Performance: Background

- At the DESC meeting on 8th July 2015 discussions took place regarding NDM algorithm performance post Nexus implementation

- For clarification, the purpose of NDM Algorithm Performance is to assess the accuracy of the estimated allocations derived by the formula

- A new action was created (DE0701) requesting DESC members to consider future or additional strands on Algorithm Performance

- DESC decided to pass this action onto the Technical Workgroup for consideration

- The following slides set out an initial proposal of the future strands and the views of DESC TWG members are invited

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Post Nexus Algorithm Performance: Considerations

- Post Nexus measures should consider the following:

  - The new (option E) demand formula

    $SPD_t = ((AQ/365) \times ALP_t \times (1 + (DAF_t \times WCF_t)))$

    where:

    $DAF = WVCE_t / SNDE_t$

    $WCF_t = CWV_t - SNCWV_t$

    Further detail on the above parameters can be found in the 'NDM Demand Estimation Methodology' document

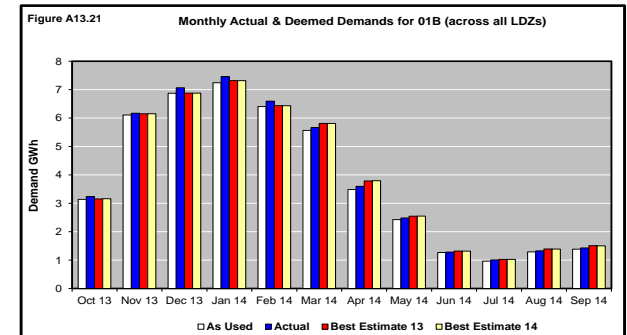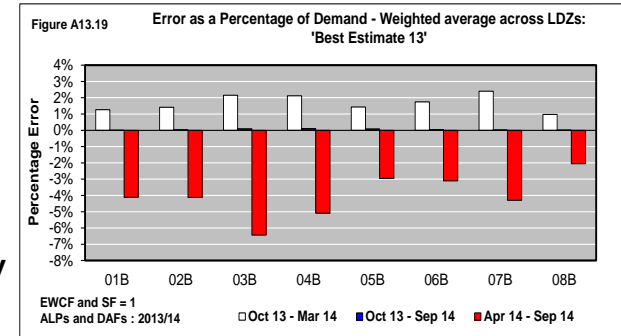 - Avoid any overlap with the work of the 'AUGE' or the 'Performance Assurance Workgroup'

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Post Nexus Algorithm Performance: Proposed Strand 1 - NDM Sample Analysis

- **What:**
  - NDM Sample Analysis

- **How:**
  - By comparing actual daily demands for supply points in the NDM sample with estimates of their daily demands (as per the NDM profiling formula) across a range of EUCs (as per current BEGY analysis)

- **When:**
  - Upon completion of the gas year

Figure A13.19 — Error as a Percentage of Demand - Weighted average across LDZs: 'Best Estimate 13'

EWCF and SF = 1
ALPs and DAFs : 2013/14
☐ Oct 13 - Mar 14   ■ Oct 13 - Sep 14   ■ Apr 14 - Sep 14

Figure A13.21 — Monthly Actual & Deemed Demands for 01B (across all LDZs)

☐ As Used   ■ Actual   ■ Best Estimate 13   ☐ Best Estimate 14

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Post Nexus Algorithm Performance: Proposed Strand 2 – UG Levels

- **What:**
  - Unidentified Gas Levels

- **How:**
  - Monitor UG as a % of each LDZ total allocation at D+5 closeout (could be achieved by measuring the absolute value)

- **When:**
  - Could be monitored frequently throughout the current gas year to provide a live assessment

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Post Nexus Algorithm Performance: Proposed Strand 3 – Reconciliation Analysis

- What:
  - Reconciliation Analysis

- How:
  - Monitor total Reconciliation levels by EUC (class 3 & 4 sites only)

- When:
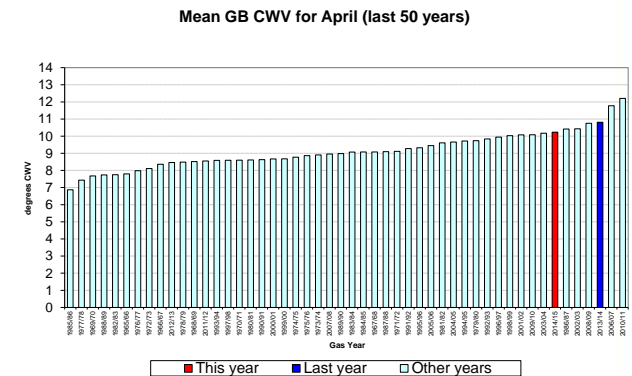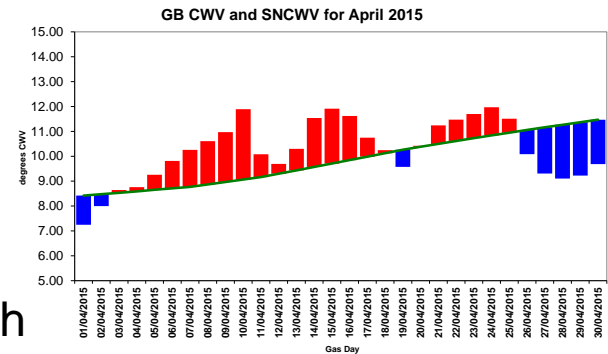 - Upon completion of the gas year (rolling 12 month assessment)

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Post Nexus Algorithm Performance: Proposed Strand 4 – SNCWV Analysis

- **What:**
  - SNCWV Analysis

- **How:**
  - Comparison of CWV against SNCWV for each LDZ (could include daily and 'several year average' comparisons)

- **When:**
  - Daily / weekly assessment reported upon completion of the gas year

GB CWV and SNCWV for April 2015

Mean GB CWV for April (last 50 years)

■ This year ■ Last year □ Other years

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Post Nexus Algorithm Performance: Next steps

- Thoughts from TWG members welcome

  – Are members happy with the proposed strands of 'post Nexus' Algorithm Performance?

  – Are there any other areas or methods which could be considered?

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