# 2021 GSOO

## Draft 2021 Gas Powered Generation (GPG) Forecasts

January 2021 FRG Meeting

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# Background and Purpose

- The purpose of today's presentation is to share and discuss the draft 2021 GPG forecast, which is a key input of the 2021 GSOO
- Today's agenda includes:
  - Modelling inputs and methodology
  - Outlook and key drivers
  - Sources of risks and variability
  - Discussion

-- DRAFT --

# 2021 GSOO uses updated input assumptions and a bidding model calibrated against recent history

## Inputs

- ISP 2020 scenarios and development plans
- Generation Information November publication
- Updated gas price forecasts
- ESOO 2020 demand forecasts

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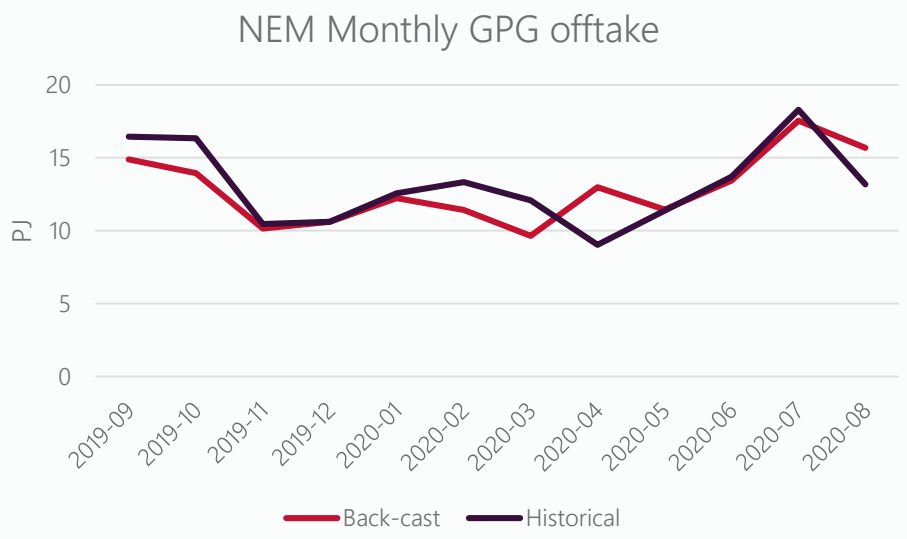
## Methodology

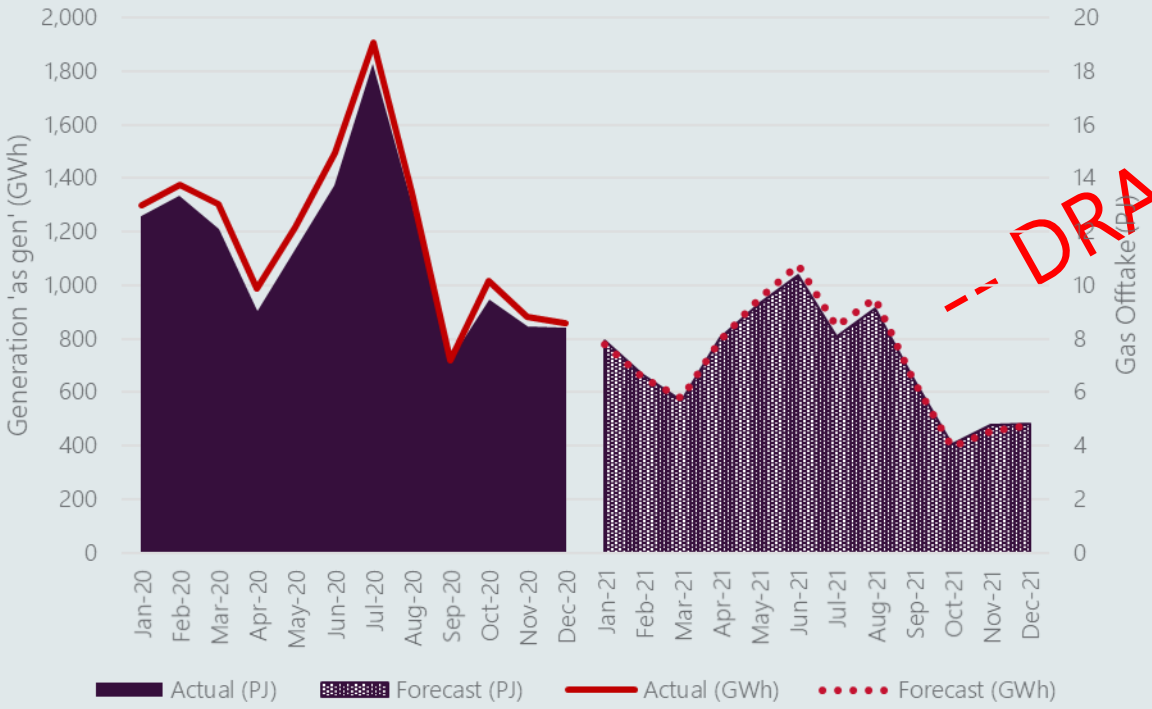
- Bidding model is calibrated against historical behaviour



# Declining average GPG volumes across the NEM are due to increased distributed and grid-scale VRE

GPG generation (GWh) and fuel offtake (PJ)

Actual 2020 vs Forecast 2021

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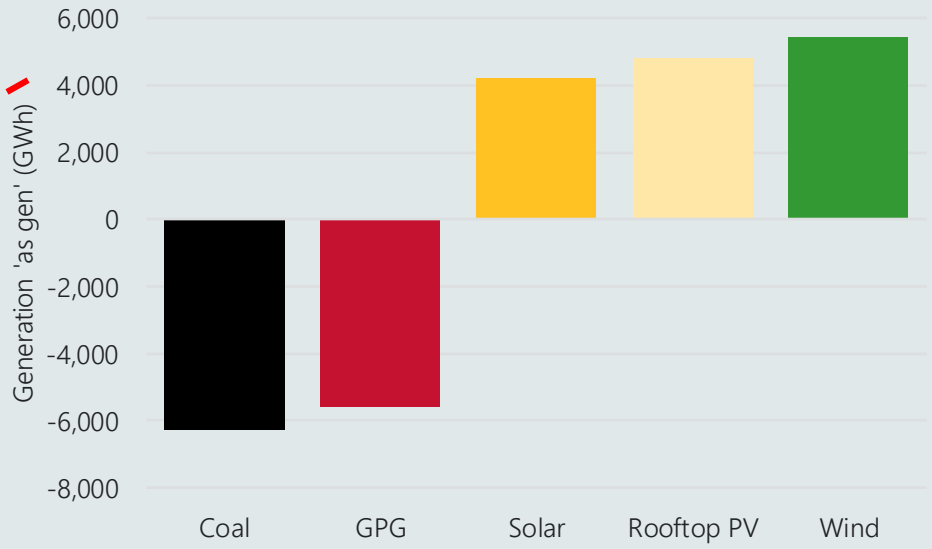
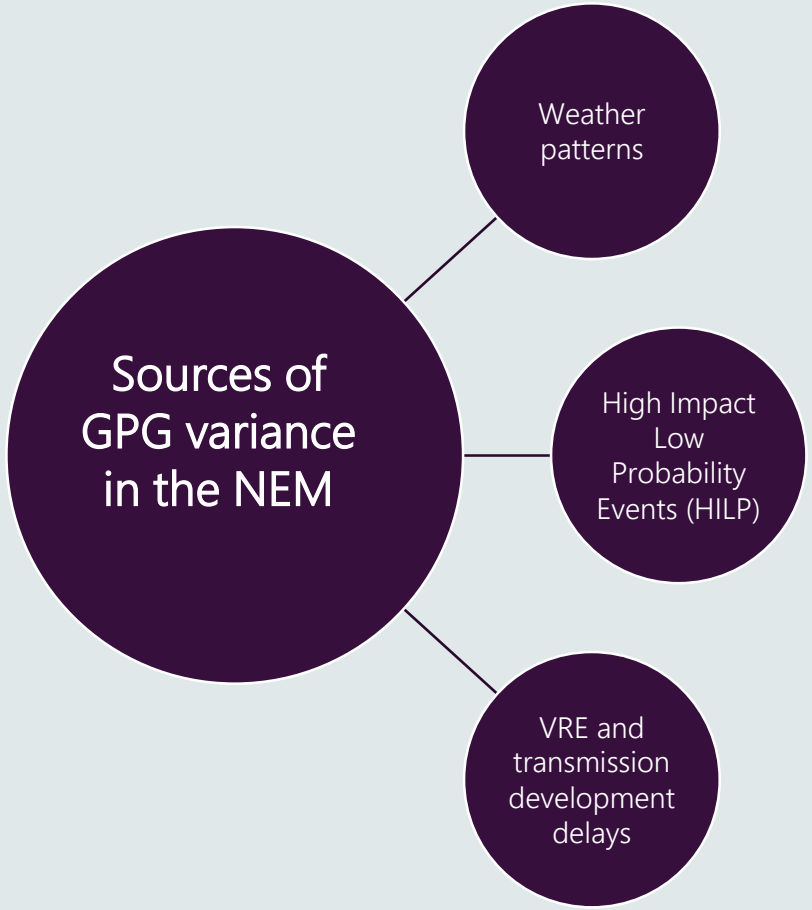
Changes in generation mix (GWh)

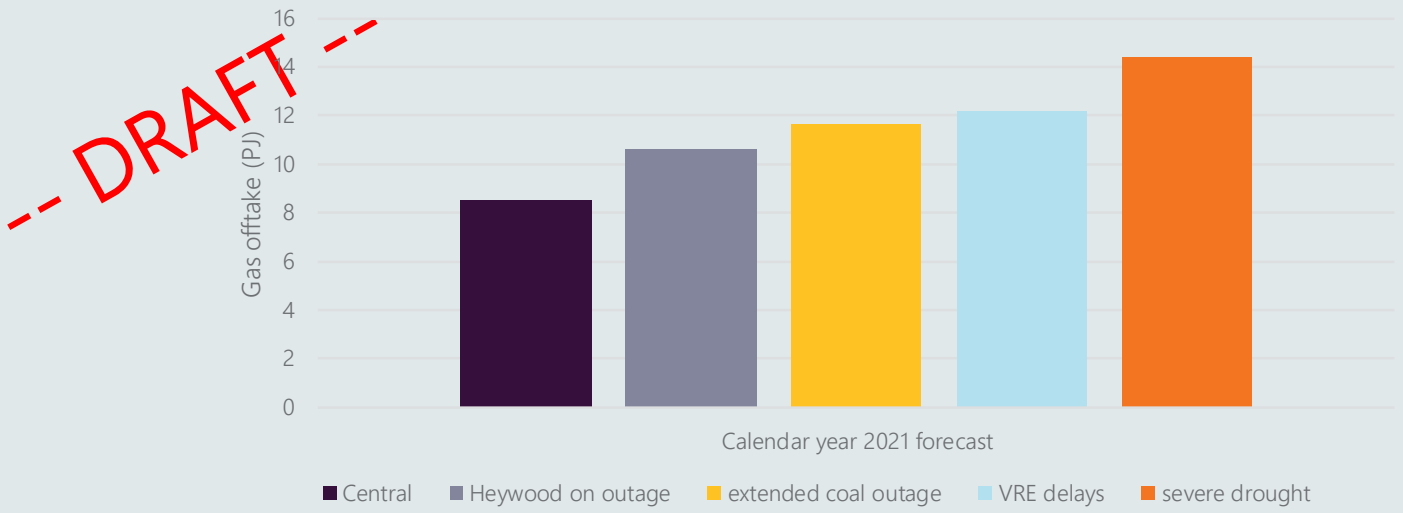
Actual 2020 vs Forecast 2021



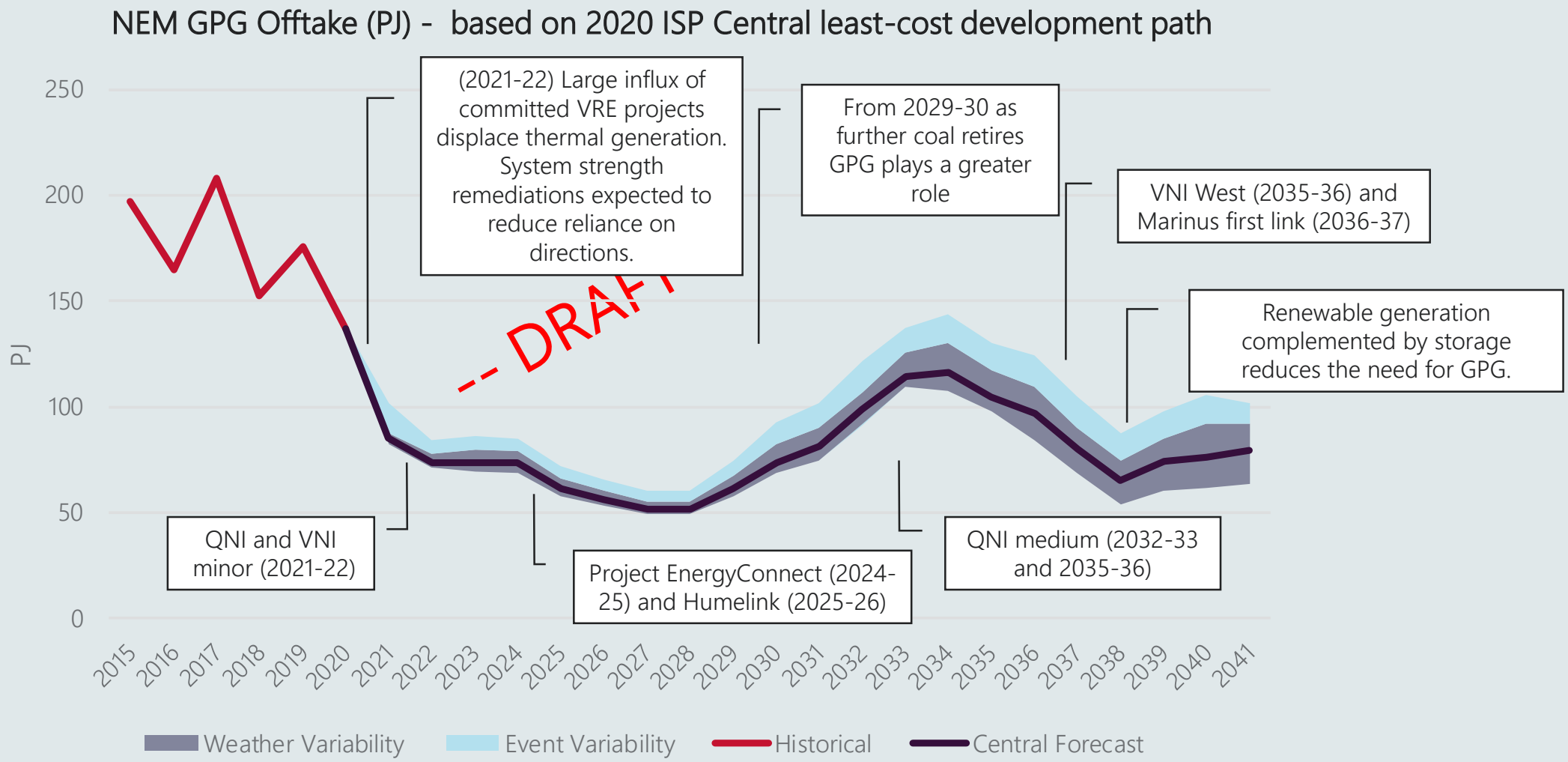
# Weather variability, power system events and development delays are key GPG drivers



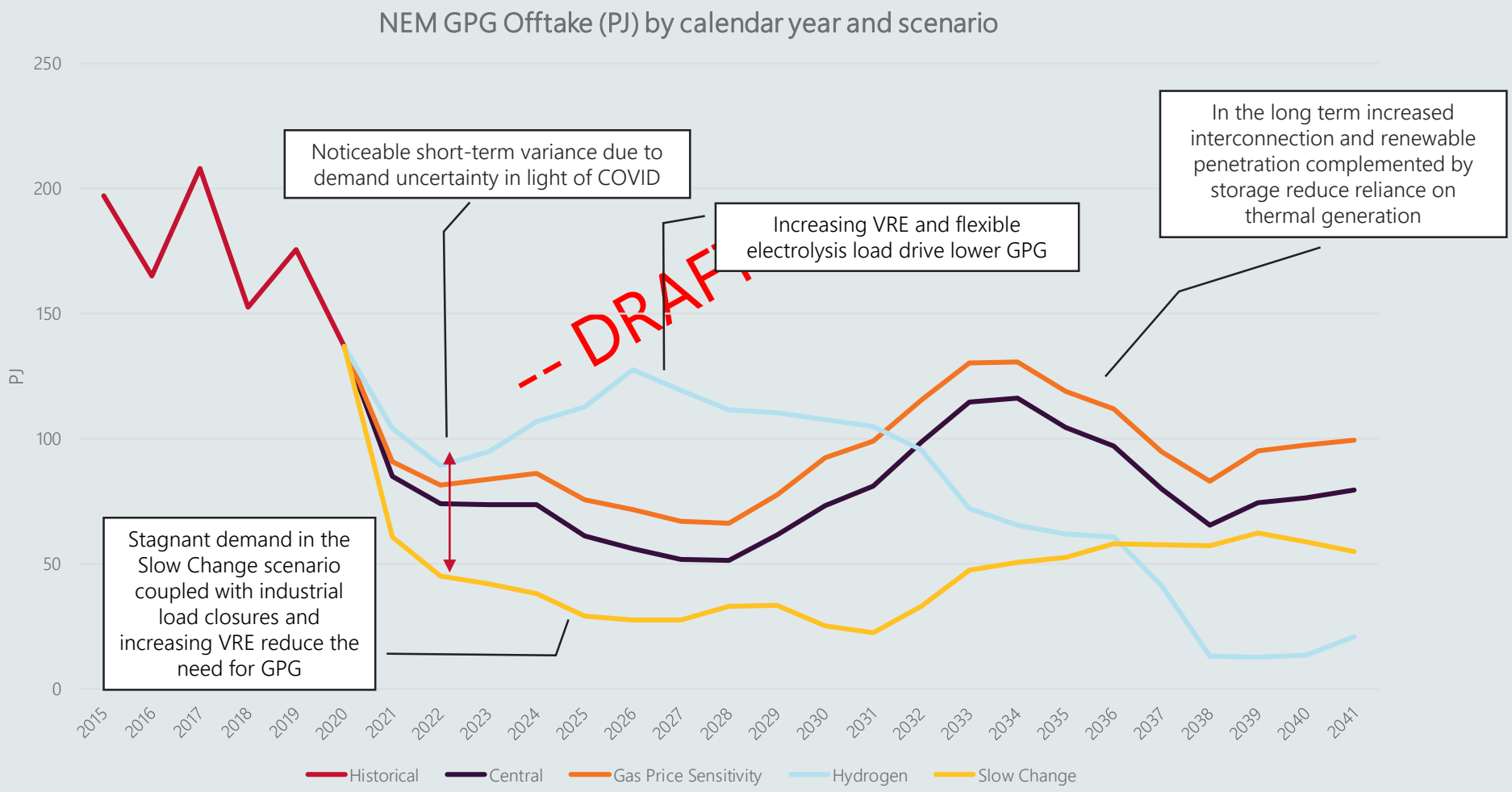

Example: Projected impact of each independent event on Victoria GPG volumes



# GPG declines over time but continues to be a critical source of flexibility and system security services



# GPG sensitivity to supply-demand balance drives significant variability between scenarios



# Stakeholder discussion

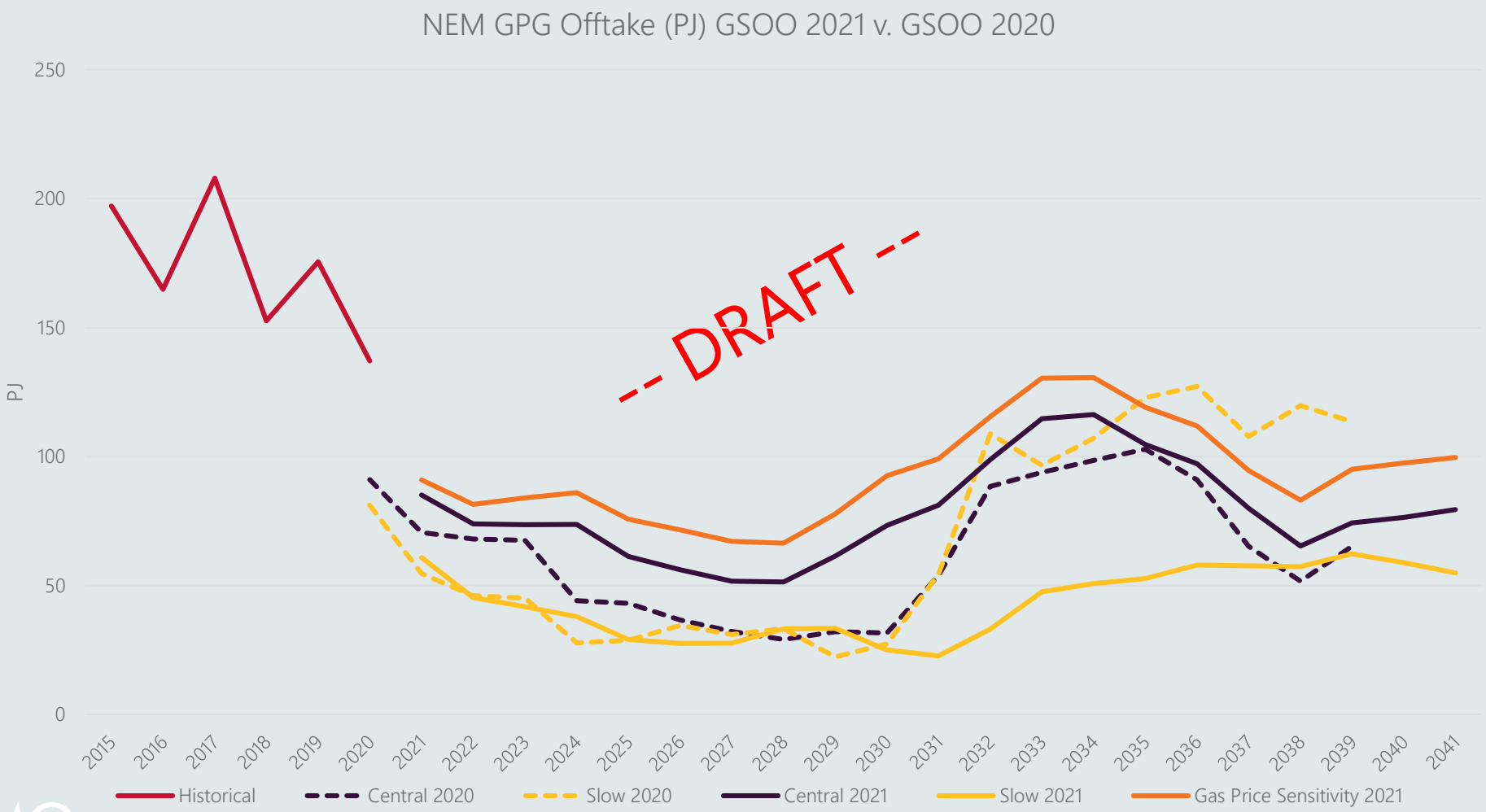
Do you think these forecast trends are reasonable?

Are there any others material risks for GPG that we have not taken into consideration?

What other considerations should we include in the future?

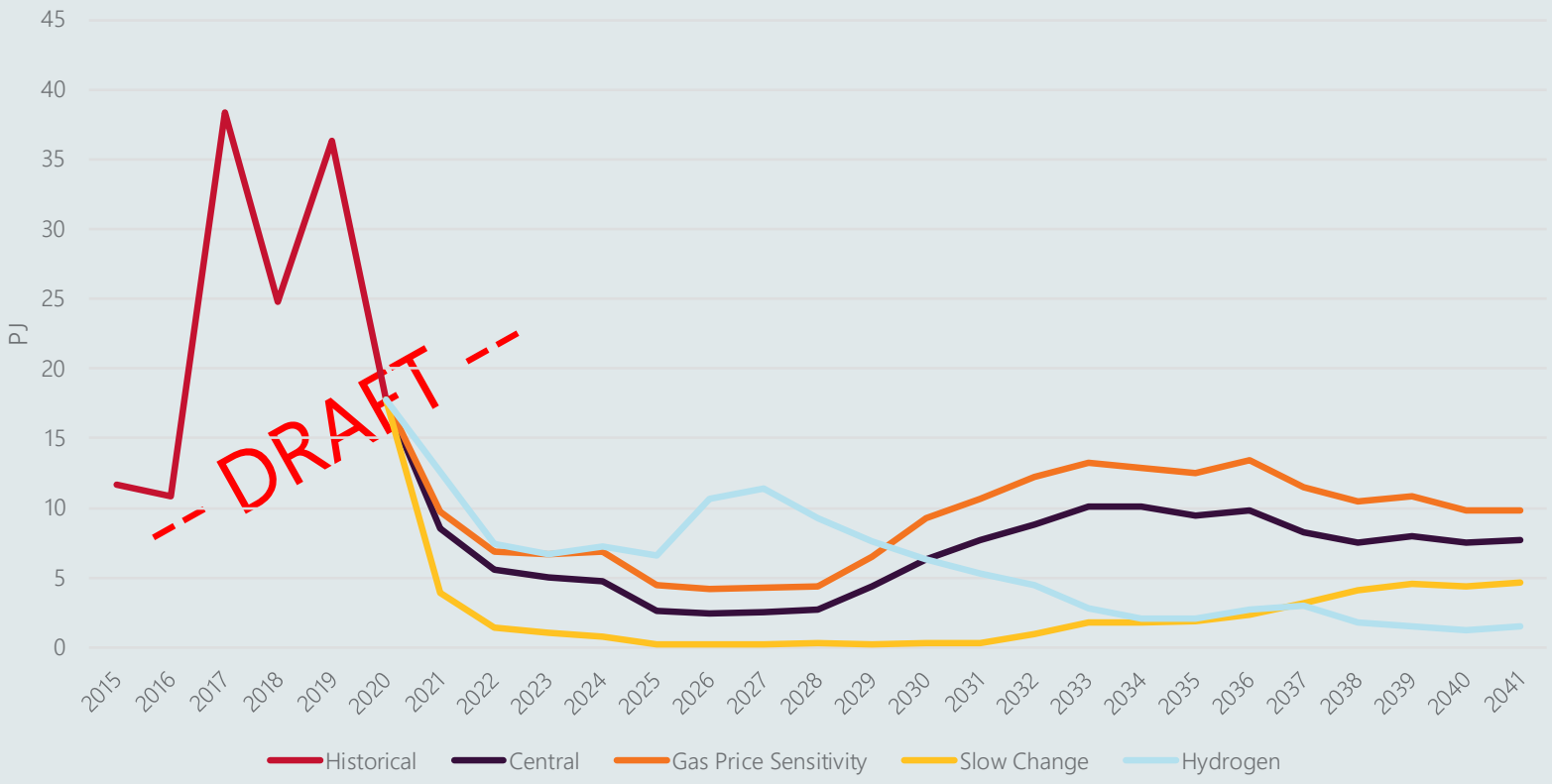
# Appendix

# 2021 GSOO trends similar to last year but reflect new demand projections and updated assumptions



# Victoria outlook

Significant decline due to strong renewables penetration. GPG volumes correlated to demand projections and retirement schedule

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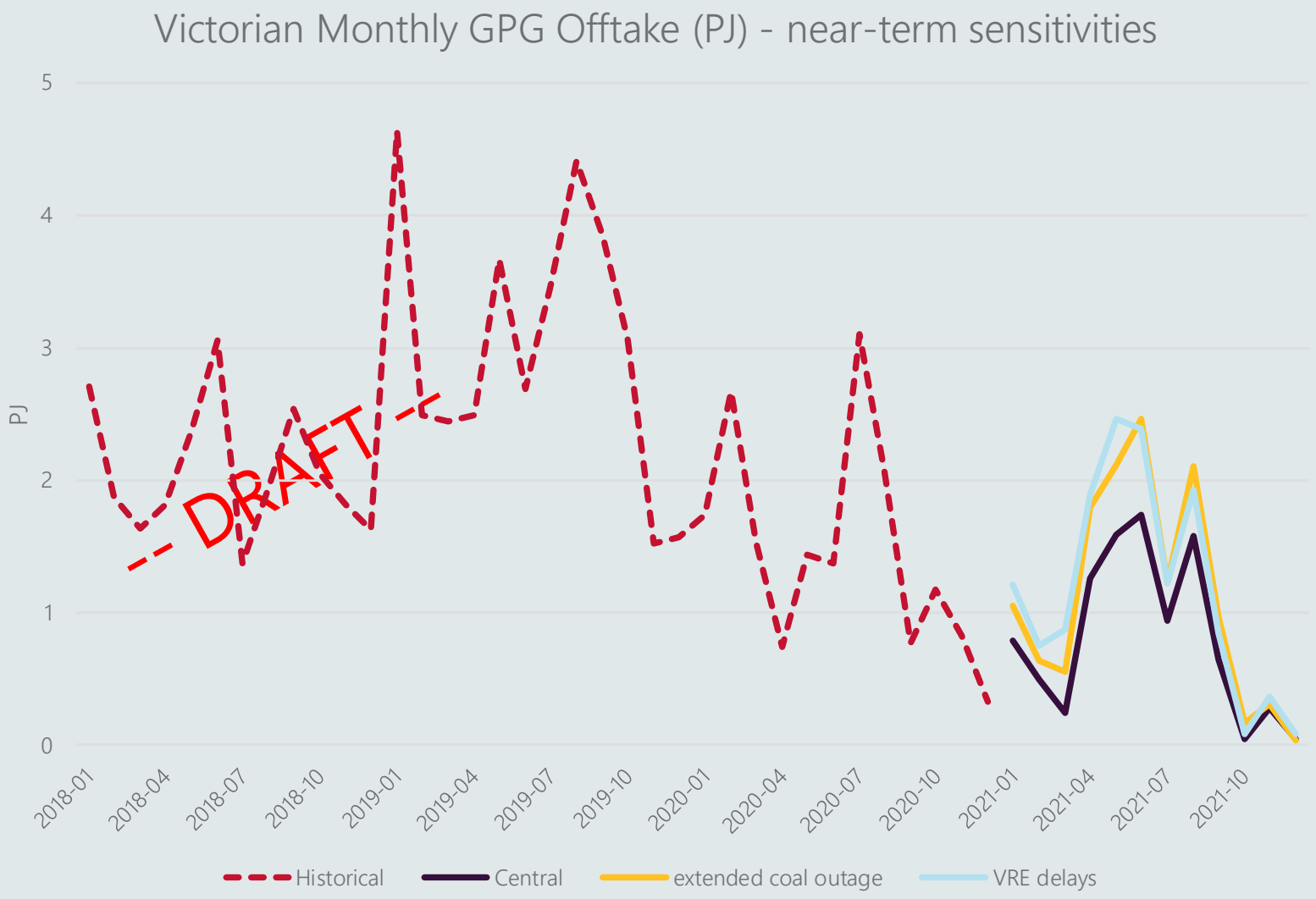
# Victoria short-term outlook

In the Central scenario, GPG offtake forecast to drop. However, power system events could see it rise nearer to levels seen in recent history

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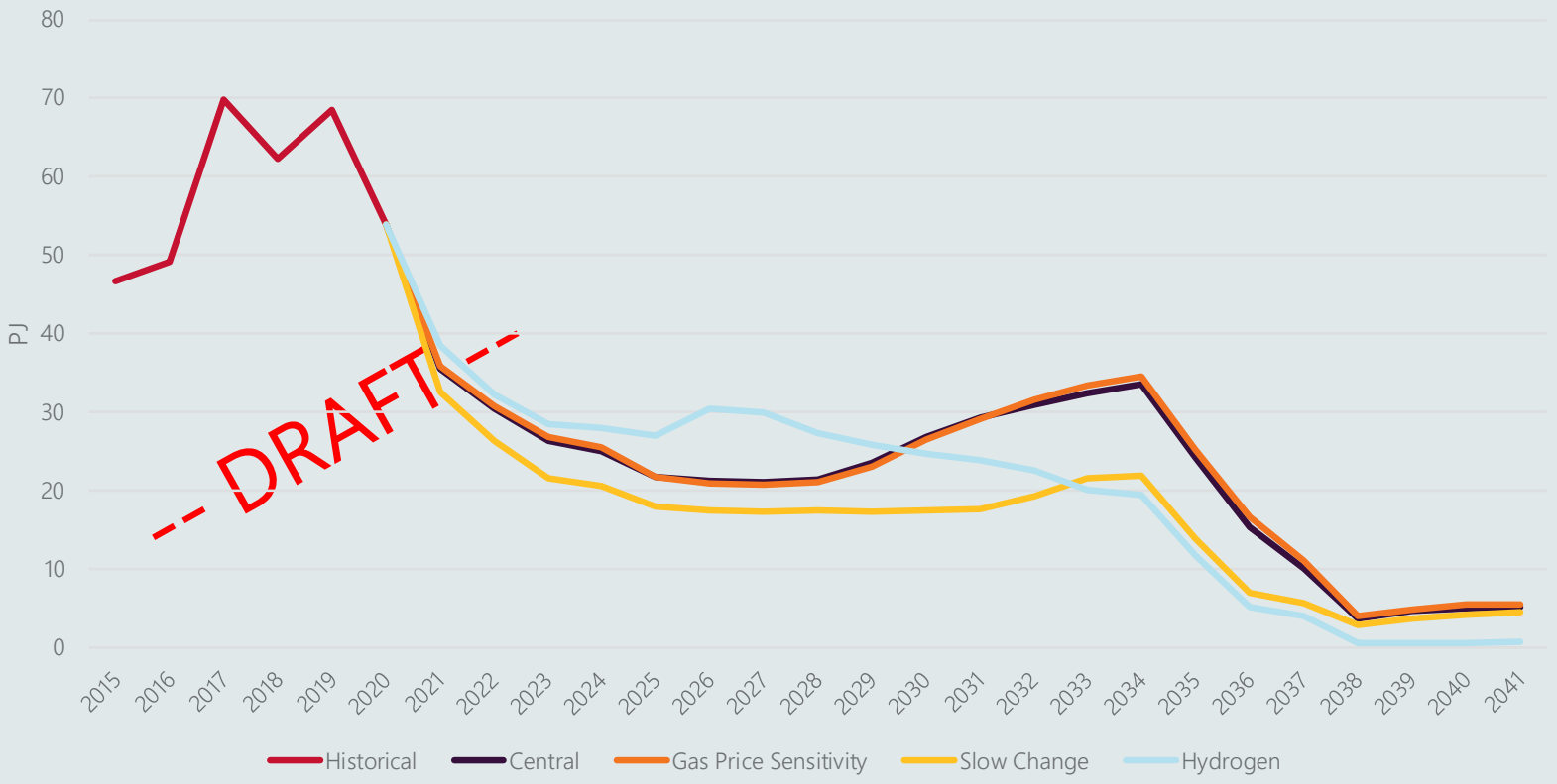
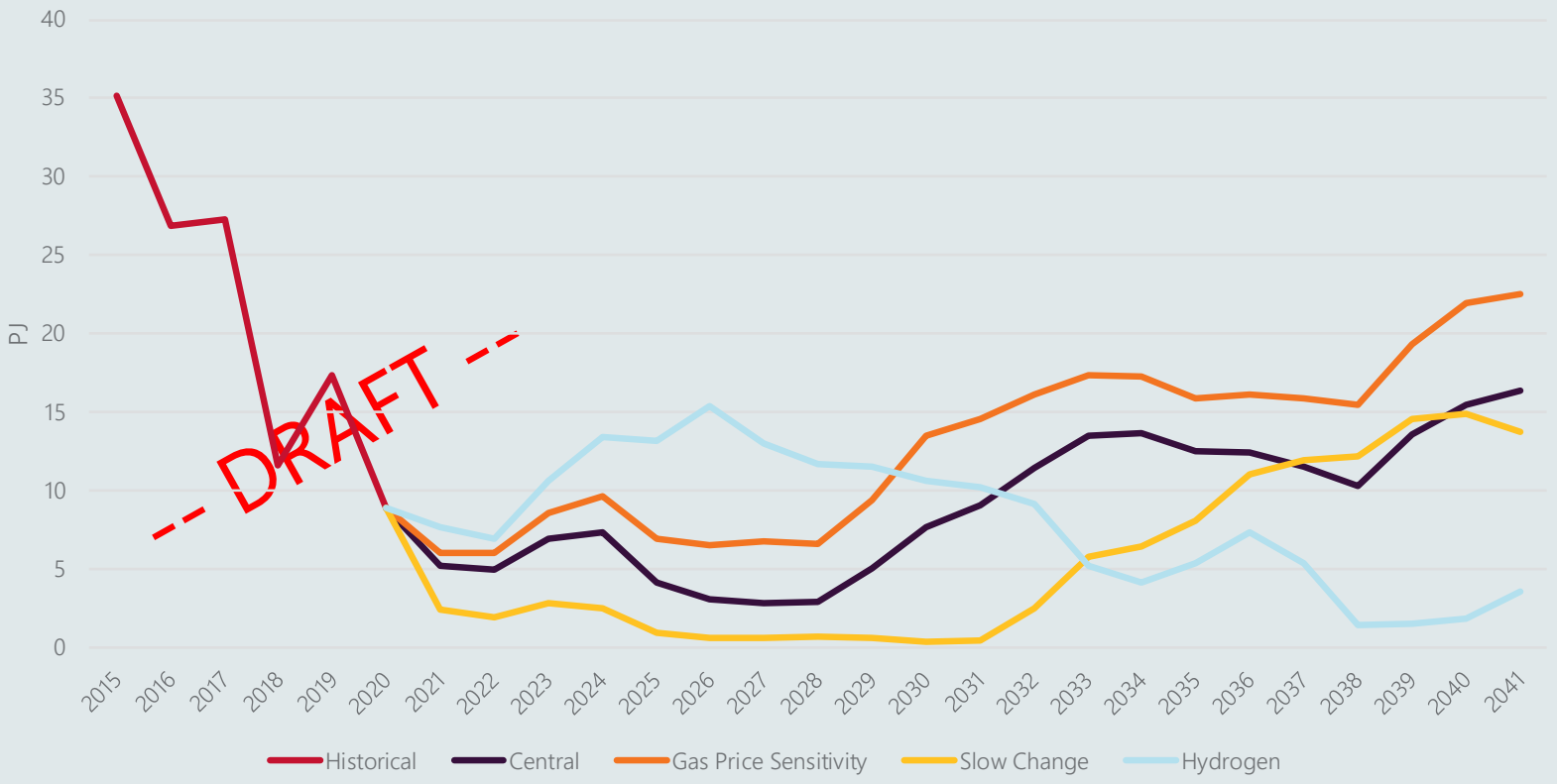
# South Australia outlook

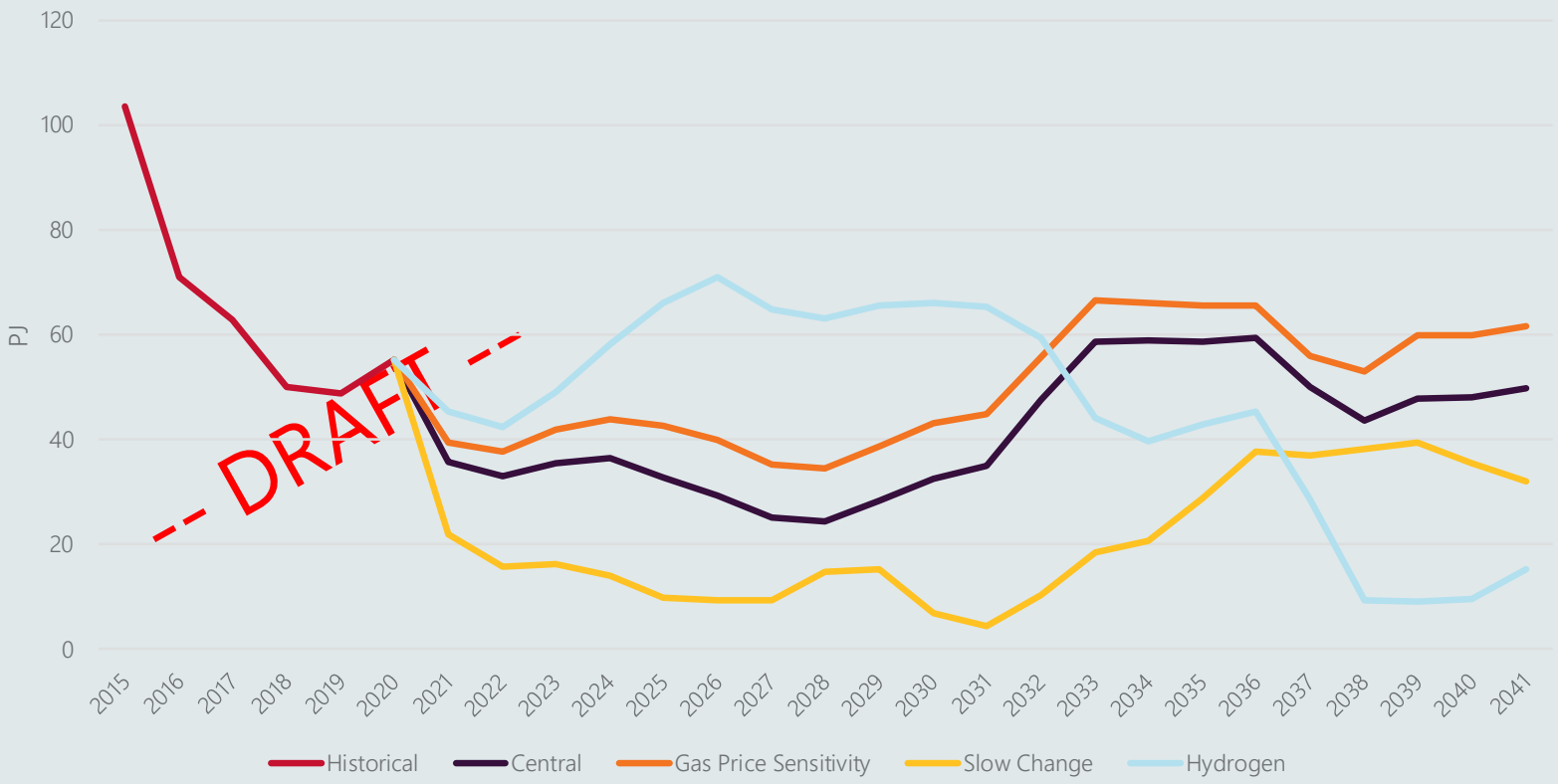
System strength remediations and Project EnergyConnect both reduce reliance on local GPG.



# New South Wales outlook

Slight uptick around Liddell retirement but Snowy 2.0 brings in 2GW of peaking/firming capacity soon after.
Coal retirements drives recovery of GPG from late 20s/early 30s



# Queensland outlook

Declining GPG in the short-term across all scenarios. Coal retirements drives recovery of GPG from late 20s/early 30s