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# GAS IMPORT JETTY AND PIPELINE PROJECT

## PRESENTATION TO IAC

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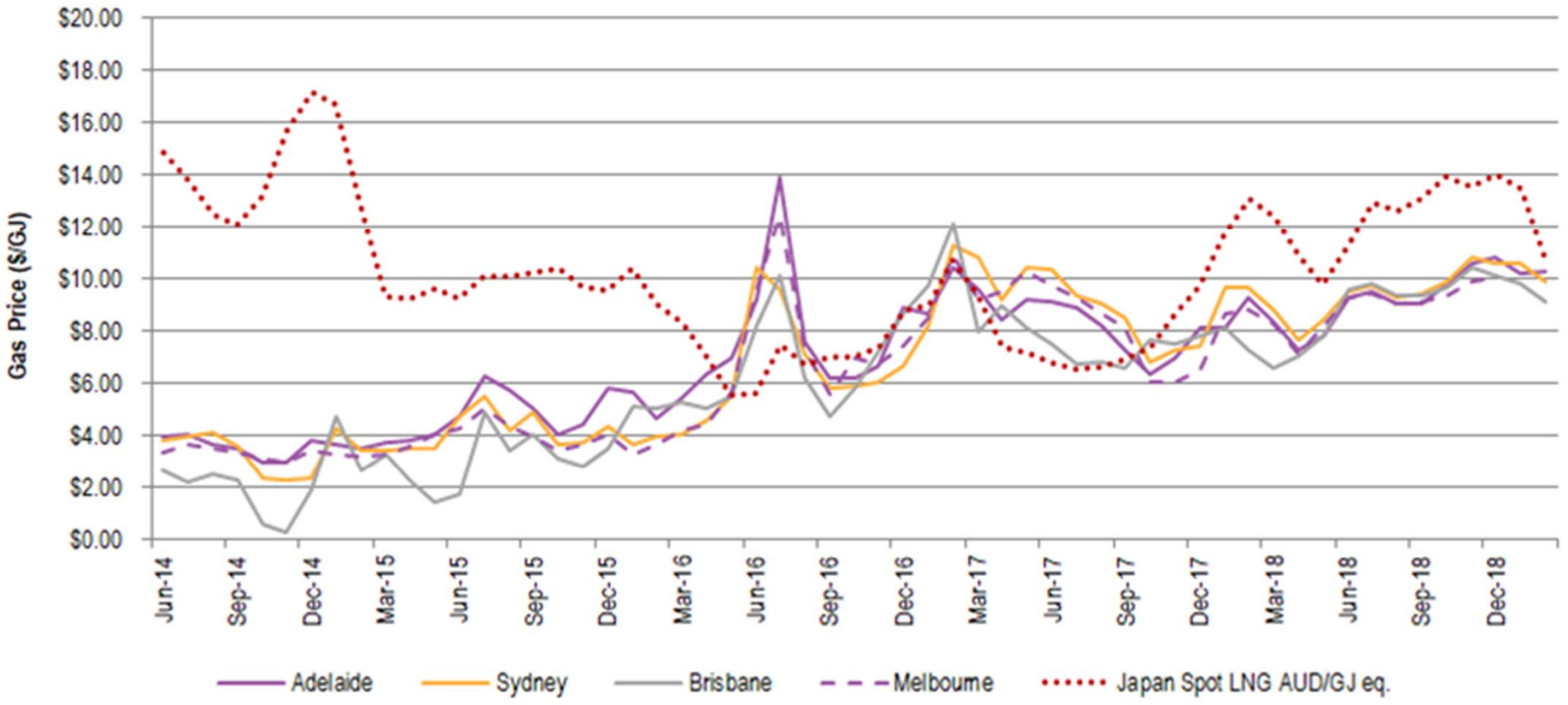
# RATIONALE FOR THE PROJECT (CH2 EES)

- Bass Strait fields are running out of gas
- Therefore alternative sources of supply are needed for Victorian consumption
- Gas is important for Victorian industry and households and will continue to have a small but key role in electricity generation
- Queensland gas is largely committed for export, pipeline capacity is constrained and this gas is expensive to transport
- When LNG exports began in 2015 gas prices went up sharply (reflecting world prices)
- New sources of supply are needed to bring prices down [lower than would be absent new supply]

# GAS PRICES




*SOURCE: ACIL ALLEN ANALYSIS OF AEMO AND ACCC DATA*

# BASIS OF THE MODELLING AND CAVEATS

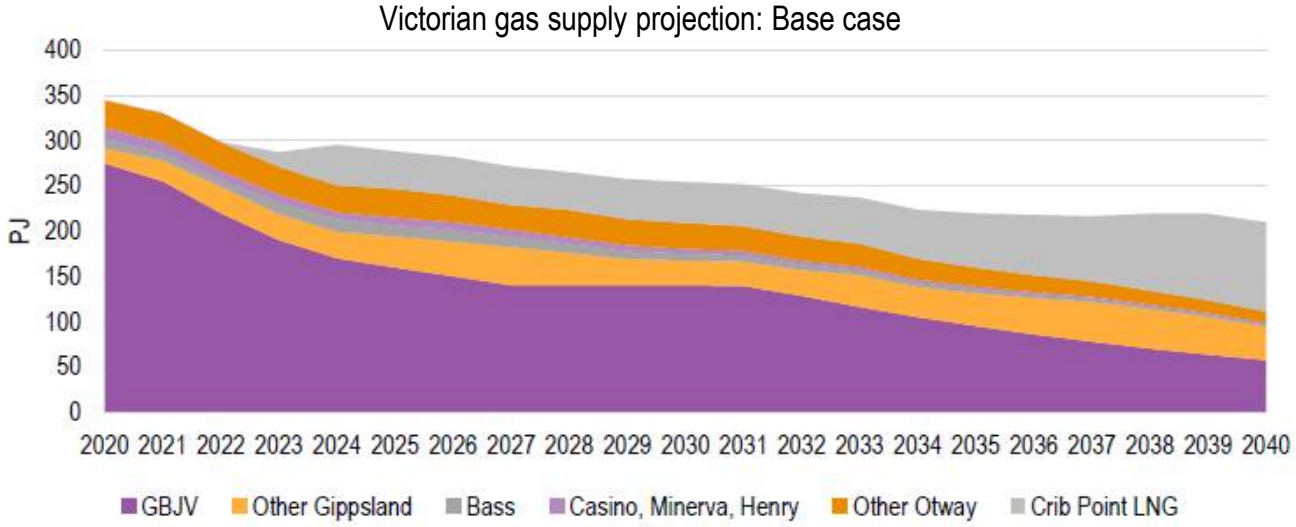
- The modelling draws upon ACIL Allen's in-house gas Reference case scenario for the Australian wholesale gas market and includes a range of supply and demand assumptions drawn from various publicly available sources
- Modelling is necessarily a simplification of the real world and utilises fundamental economic concepts to make projections of the gas market's evolution in Eastern Australia. Future market outcomes are necessarily uncertain.
- The results are not intended to represent accurate predictions about market outcomes or utilisation of the Project as the modelling does not consider commercial factors such as ownership structures or contractual positions of individual parties.
- The modelling includes a portion of as-yet undeveloped reserves and resources which are somewhat speculative.
  - This contrasts with other planning exercises, such as the Gas Statement of Opportunities report, which typically only includes currently developed or known supply sources for the purposes of highlighting the scale and timing for new supply and transmission investment to ensure forecast demand is met.

# SENSITIVITIES

- One of the key sensitivities is the cost at which LNG can be imported into Victoria relative to prevailing domestic prices. This will be dependent upon Asia-Pacific LNG spot prices throughout the year relative to LNG contract prices. It is likely that LNG spot cargoes would be acquired for less than annual average LNG contract prices as:
  - LNG spot prices (which are determined by market supply-demand dynamics) are generally less than long-term contract prices which have a strong oil linkage
  - cargoes could be acquired during the northern hemisphere summer when aggregate gas demand and prices are seasonally lower.
- While the Base case assumes an import cost of A$9.50/GJ, the modelling has also examined a High and Low import cost sensitivity around this value.
- The modelling also looks at the impact of the Narrabri gas project in NSW not proceeding and a scenario in which an alternative import terminal is developed at Port Kembla in NSW rather than Crib Point.

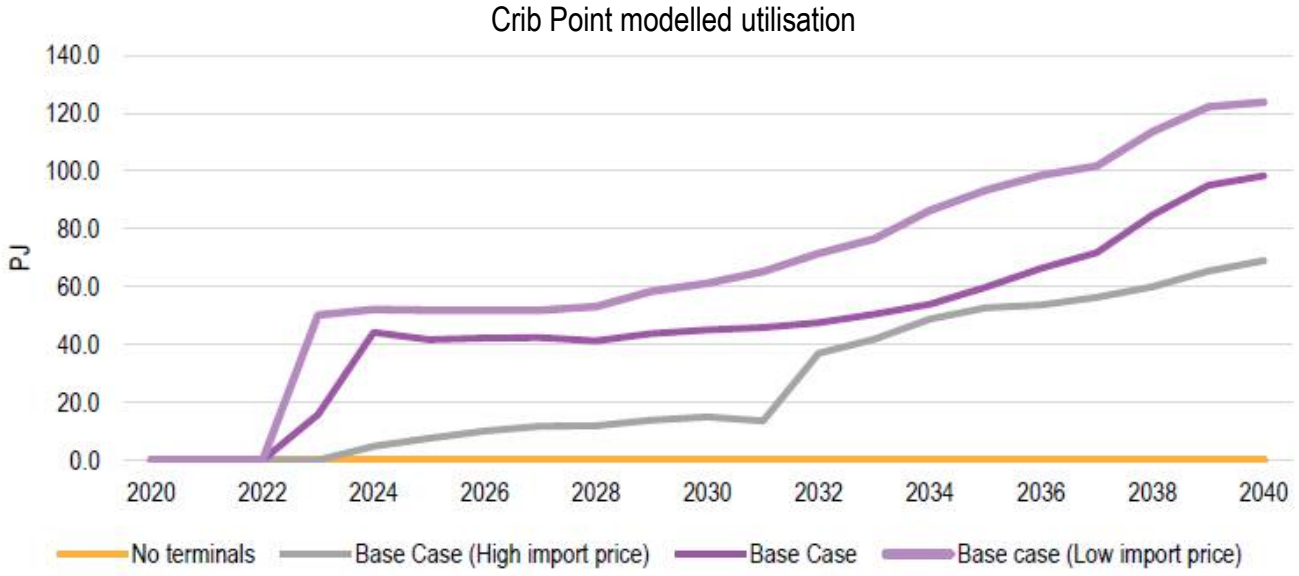
# VICTORIAN GAS SUPPLY (INCLUDING CRIB POINT)

- Legacy conventional gas fields are now in decline and production is expected to steadily fall over the coming decade. Falling rates of supply are expected to be most evident in the winter months as peak day deliverability declines.
- The Crib Point LNG import facility will provide a material addition to Victorian gas supply to stem this decline, resulting in Victoria continuing to be a net exporter of gas to other States



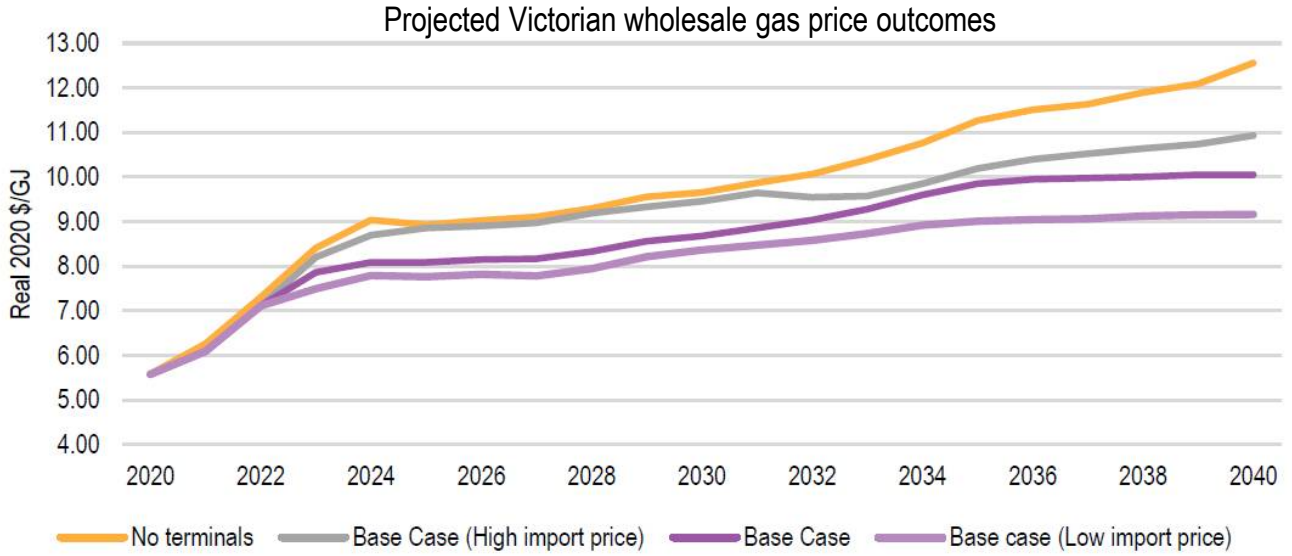
# PROJECT UTILISATION

- The Base case (which includes Crib Point) sees annual volumes of around 40 PJ/a, increasing over time as the domestic supply-demand balance tightens and Victoria's reliance on imported gas increases.
- The High and Low import price sensitivities highlight that the utilisation of the facility will be dependent on the relative LNG import prices.



# PRICE IMPACTS

- The Project will put downward pressure on Victorian prices (represented by the price of wholesale gas at the Melbourne city-gate) over the projection period
  - The lower the import cost, the greater the utilisation of LNG imports and the more downward pressure is exerted on domestic prices



# MODELLING RESULTS SUMMARY

- Victorian gas production falls from 344 PJ in 2020 to 111 PJ in 2040, absent the Project
- With the Project total Victorian production is 210 PJ in 2040 (including 98 PJ from the Project)
- Gas consumption in Victoria falls from 213 PJ in 2020 to 184 PJ in 2040 with the Project, and to 154 PJ without it.
- On average from 2020 to 2040, prices will be lower by $1.09/GJ (in real 2020 prices) with the Project than they will be without it.
- Prices are lower because it is cheaper to make the gas at Crib Point than to transport it to Victoria, and because world spot gas prices are relatively low in the northern hemisphere summer.

# BENEFITS OF THE PROJECT

- The economic benefits of the Project are
  - Lower gas prices for gas users than would occur in its absence
    - Benefits of $2.3 billion to $3.1 billion
  - Enablement of a key input to the manufacturing sector
  - Enhanced gas security, particularly in the winter peak
  - Increased competition in the wholesale market for gas in Victoria

# RESPONSE TO SUBMISSIONS

- Many submissions argue that prospective excess of demand over supply can and should be resolved by reducing demand (consumption) through energy efficiencies rather than increasing supply
- However
  - Demand projections by AEMO and others already take account of energy efficiencies
  - This argument overstates willingness and ability of consumers to make investments in energy efficiencies
  - This argument does not account for phenomenon of energy consumers responding to energy efficiencies by using more energy (the “rebound” effect)

# RENEWABLES IN ELECTRICITY

- Many submissions argue that the Project is undesirable and unnecessary because renewable sources ought to and are replacing gas as fuel for generating electricity
- While it is true that renewables are increasing their share of electricity generation in Victoria
  - The share of gas is already low
  - Gas will retain an important role during winter peak periods when demand for electricity is high and renewable electricity output, which is intermittent, happens to be low.

# PORT KEMBLA (1/2)

- Some submissions state that Australian Industrial Energy's proposed re-gasification unit at Port Kembla is an alternative to the Project.
- If Port Kembla goes ahead, this does not undermine the rationale for the Project. They are not one-for-one substitutes. But from Victoria's point of view, Port Kembla is not as attractive as the Project as a source of gas supply:
  - It might not happen

# PORT KEMBLA (2/2)

- The Project does not face the same hurdles, because AGL does not to need find long term customers for the Project's gas
- Upgrades to the EGP will enable the transportation of over 200 TJ per day from Port Kembla to the Victorian market. However, Victorian peak demand is around 1100 TJ per day, and the fall in Victorian peak production capacity (in 2024) will be about 580 TJ per day. Port Kembla will therefore not be able to replace the shortfall in supply during the winter peak.
- The price of gas sourced from Port Kembla will be more expensive than from the Project, due to transmission costs.

# COMMENT ON BRUCE ROBERTSON'S REPORT

| Mr Robertson's argument | Comment |
|---|---|
| Eastern Australian gas consumers pay high prices for gas. | Prices have increased since LNG exports commenced, and the Project will make prices lower than would be in its absence. |
| Gas usage in electricity generation is declining. | This is true, but the gas for the Project will be used mainly for other purposes. |
| Proposed gas terminals, including the Project, are the result of high prices and failed energy policies [which] "**means it is now economic to import gas into Australia**". | I agree that the Project's economics are advantageous. |
| There exists potential for consumers to reduce their demand for gas e.g. with heat pumps. | This potential is already accounted for in demand forecasts by AEMO and others. |
| The problem of lack of supply relative to demand in eastern Australia can be fixed with appropriate policies. | Until and unless such policies are implemented by the Commonwealth Government and/or state governments where gas production takes place, this alternative is entirely hypothetical. |
| Batteries can replace gas for the purpose of supplying peak electricity demand. | Batteries are currently uneconomic as a replacement for gas-fired peaking generation. This could change in the 2030s, but fuel and technology costs are difficult to accurately forecast. |