Answers to questions on notice Industry, Science, Energy and Resources portfolio

Inquiry name: Inquiry into the Coal-Fired Power Funding Prohibition Bill 2017

Hearing date: Wednesday, 6 November 2019

**Question No:** 

Hansard Page: 30

Question Date: Wednesday, 6 November 2019

**Question Type**: Spoken

Senator Hanson-Young asked:

**Question Text:** 

Mr Heferen, thank you. Vales Point is one of the 12 that are being looked at. How does this equate with new generation? Vales Point is listed for closure in 2028; is that correct?

#### Answer:

The proposal to upgrade the Vales Point Power Station through the Underwriting New Generation Investments (UNGI) program is still under consideration by Government. Delta Electricity has proposed a small upgrade for the Vales Point Power Station which is focused on improving energy efficiency but does not extend the life of the plant. As outlined in the December 2018 UNGI Call for Registrations of Interest<sup>1</sup>, support for small upgrades is available under the program.

The Australian Energy Market Operator lists the expected closure date of Vales Point Power Station as 2029.<sup>2</sup>

/media/Files/Electricity/NEM/Planning\_and\_Forecasting/Generation\_Information/Nov-2019/Generating-Unit-Expected-Closure-Year-08-November-2019.xlsb

<sup>&</sup>lt;sup>1</sup> https://www.environment.gov.au/energy/underwritingnewgeneration/registration-of-interest

https://www.aemo.com.au/-

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**Senator Hanson-Young asked:** 

**Question Text:** 

**Senator HANSON-YOUNG:** So the department has modelling that shows that keeping Vales Point open beyond 2028 is consistent with reducing carbon pollution to the levels required?

**Mr Heferen:** I might need to take on notice what our projections build in and whether an upgrade to coal-fired power station that in the short term would reduce emissions makes a material difference to our total output of CO2. My guess is that this would be not evening a rounding error—it would be so small.

### Answer:

The proposed upgrade to the Vales Point Power Station shortlisted under the Underwriting New Generation Investments program (UNGI) is not a life extension proposal.

The 2019 projections assumes Vales Point Power Station closes by 2029, consistent with AEMO's *Generating Unit Expected Closure Year* dataset, based on information submitted by generators and published on the Generator Information section of AEMO's website.<sup>3</sup>

<sup>&</sup>lt;sup>3</sup> https://www.aemo.com.au/-

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Senator Hanson-Young asked:

Question Text: How many meetings has the department had with Trevor St Baker about this

project?

### Answer:

The Department has not met with Mr St Baker regarding the Vales Point Power Station proposal under the Underwriting New Generation Investments program.

The Department has met with other representatives from Delta Electricity, in line with its engagement with all twelve shortlisted projects.

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**Question Type**: Spoken

Senator Hanson-Young asked:

Question Text: I'd like to know how many meetings the department's had with Trevor St

Baker about the underwriting program more generally.

#### Answer:

Mr St Baker, representing Sunset Power International / Delta Electricity, was an attendee at the Minister's roundtable consultation for the Underwriting New Generation Investments program, held on 7 November 2018, along with approximately 40 other invited guests.

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Question Date: 6 November 2019

**Question Type**: Spoken

Senator Hanson-Young asked:

Question Text: I'd like to know the last time the department or the minister's office met with

Trevor St Baker, if you could please take that on notice.

#### Answer:

Regarding the last time the Department met with Mr St Baker in the context of the Underwriting New Generation Investments program:

 Mr St Baker, representing Sunset Power International / Delta Electricity, was an attendee at the Minister's roundtable consultation for the Underwriting New Generation Investments program, held on 7 November 2018, along with approximately 40 other invited guests.

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Question Date: 6 November 2019

Question Type: Spoken

Senator Van asked:

**Question Text:** Aside from coal, peaking gas and pumped hydro you mentioned batteries. What quantum of battery storage would be required to support the NEM as it currently stands? You might want to take that one on notice.

### Answer:

According to the Australian Energy Market Operator (AEMO)<sup>4</sup>:

- 160 MW / 160 MWh of large-scale battery capacity is currently in service in the National Electricity Market (NEM)
- 87 MW / 150 MWh of new large-scale battery capacity is currently under construction.

AEMO's Draft 2020 Intergrated System Plan found that 5–21 GW of new dispatchable capacity will be required by 2040.<sup>5</sup>

- AEMO expects this dispatchable capacity to be a mix of new gas fired power stations, utility-scale pumped hydro or battery storage, distributed batteries and demand side participation.
- If the dispatchable capacity required out to 2040 was exclusively new battery storage. then based on CSIRO 2017<sup>6</sup> costs for a battery with 2hr duration, the total cost would be up to \$31.5 billion.

The requirement for dispatchable capacity will be filled by a range of technologies, depending on market needs.

<sup>&</sup>lt;sup>4</sup> AEMO Website Generation Information Page - <a href="https://www.aemo.com.au/-">https://www.aemo.com.au/-</a> /media/Files/Electricity/NEM/Planning and Forecasting/Generation Information/Nov-2019/GenerationInformationPage 20191114.xlsx

<sup>&</sup>lt;sup>5</sup> AEMO's Draft 2020 Intergrated System Plan (pg.45) - <a href="https://www.aemo.com.au/-/media/Files/Electricity/NEM/Planning">https://www.aemo.com.au/-/media/Files/Electricity/NEM/Planning</a> and Forecasting/ISP/2019/Draft-2020-Integrated-System-Plan.pdf

<sup>&</sup>lt;sup>6</sup> CSIRO 2017 cost estmates are ~\$1,500 / per kW for Battery storage with 2 hrs duration <a href="https://publications.csiro.au/rpr/download?pid=csiro:EP189502&dsid=DS1">https://publications.csiro.au/rpr/download?pid=csiro:EP189502&dsid=DS1</a> (see page 6).