

21 October 2021

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Additional Information Relating to the Protection of the Environment Operations Amendment (Clean Air) Bill 2021

Following Delta's appearance at the hearings with Portfolio Committee 7 – Planning and Environment on Friday 15 October, the company formally submits the following materials to the Committee¹.

As set out in our opening remarks, and contrary to statements made in various submissions to the Committee and the Second Reading Speech for the Protection of the Environment Operations Amendment (Clean Air) Bill 2021, the Central Coast region has the best air quality in the Greater Metropolitan Region according to information published by the NSW Government. The Bill is proposing to impose tighter regulation where NSW Government data and analysis shows there is no air quality issue requiring regulation. This Bill was unsuccessful in 2018 and power station emissions have further decreased since then, and will continue to do so as renewables penetration increases. Moreover, the EPA has recently reviewed the Environmental Protection Licences for all NSW coal-fired power stations, so there has been a contemporary review by the regulatory body in NSW with the professional expertise to properly assess the environment.

Advocates of introducing overseas standards in NSW fail to acknowledge the very different conditions prevailing in those countries in terms of their poorer air quality, caused by a heavier concentration of people and heavy industry in a relatively small area. Further, claims made in submissions that all health issues related to air quality are preventable through the phasing out of coal fired power generation have no foundation in the available data pertaining to air quality in NSW, and it is clear from this data that there are multiple emission sources of air pollution in the State with more significant ground level impacts. Delta therefore strongly asserts that the case for stricter limits on the emissions of NO_x, SO_x and particulates for NSW power stations does not exist.

In this context, Delta endorses material provided to the Committee by the Australian Energy Council, particularly the following:

- claims made in some submissions to this Inquiry referencing poor air quality and health impacts should not be afforded credibility because they have been professionally discredited. For example, there are two reports from Dr. Ben Ewald that contain concerning figures about child deaths or adverse health effects from emissions. To be given academic credibility the reports should be subject to an independent peer-review, but there is no evidence the usual academic discipline has been applied; and
- due to this the AEC commissioned EnRisks to peer review Dr. Ewald's 2018 report (*The Health Burden of Fine Particle Pollution From Electricity Generation*). This peer review found that the report did not use standard scientific practices (e.g. discussing uncertainties, considering other key health endpoints) and concluded that the approach adopted was 'flawed and misleading, not based on good science and will have resulted in a significant overestimation'.

¹ references for statements in this covering letter are included in other materials and are not duplicated here



These comments by the AEC reinforce Delta's views that the Committee should not simply accept claims about adverse health impacts on face value and, instead, should rely on published NSW Government reports that have applied professional rigour. Without independent scrutiny of such health claims, it is very difficult to see how the Committee could endorse legislation that will potentially have a serious negative impact on electricity prices and energy security.

Estimated Costs and Timing for Implementation of Pollution Controls

Delta has recently submitted a report prepared by Jacobs Group (Australia) Pty Ltd to the NSW EPA regarding the viability of installation and operation of pollution controls to reduce NOx and SOx emissions.

The estimated cost of NOx controls, namely Selective Catalytic Reduction, to meet the Clean Air Bill requirements is \$360 million in capital and operating costs. The estimated cost of SOx controls, being a wet Flue Gas Desulphurisation plant, is in the order of \$200 million to \$365 million in capital plus \$4 to \$8 million in operating expenditure annually.

Current air modelling conducted for Vales Point has demonstrated that the contribution from Vales Point is only a small part of measured levels in the local area, which are already within ambient air quality guidelines. As stated at the hearing, there is no basis for implementing such costly air pollution controls when air quality data, published by government agencies, is considered.

Notwithstanding this, Delta has prepared an indicative timeline that would be required to implement the pollution control requirements for NOx and SOx set out in the Clean Air Bill.

- design, 6 to 12 months;
- environmental impact statement preparation, 12 to 18 months inclusive of obtaining assessment requirements from the Department of Planning, Industry and Environment;
- approvals, 6 to 12 months including at least 30 days of public exhibition and preparation of a response to submissions;
- tender contracts, 6 to 12 months assuming there is a competent retrofit company in Australia; and
- construction and commissioning, 12 to 24 months.

As the committee may appreciate, given the substantial capital expenditure required, the program cannot be implemented as quickly as some might assume. At best, the project could be undertaken in a 4 year period, but most likely it would take 6 years or more. That is, if such works were to commence in 2022, they may not be completed until approximately 2028 – one year before the current scheduled closure date of Vales Point. Undertaking such significant capital expenditure now would not be considered a prudent commercial decision.

In addition, the current electricity market forecast income is not sufficient to enable a standard return on investment for these pollution controls. Such capital expenditure would require a substantial borrowing exercise to be undertaken. Delta is of the view that finance availability would be almost impossible, given there is very little borrowing capacity for coal related entities in the current financial markets and this is expected to diminish further over time, regardless of the merits of the application. The need to also take each unit out of service for an extended period while this work was undertaken would further damage the financial position of Vales Point.

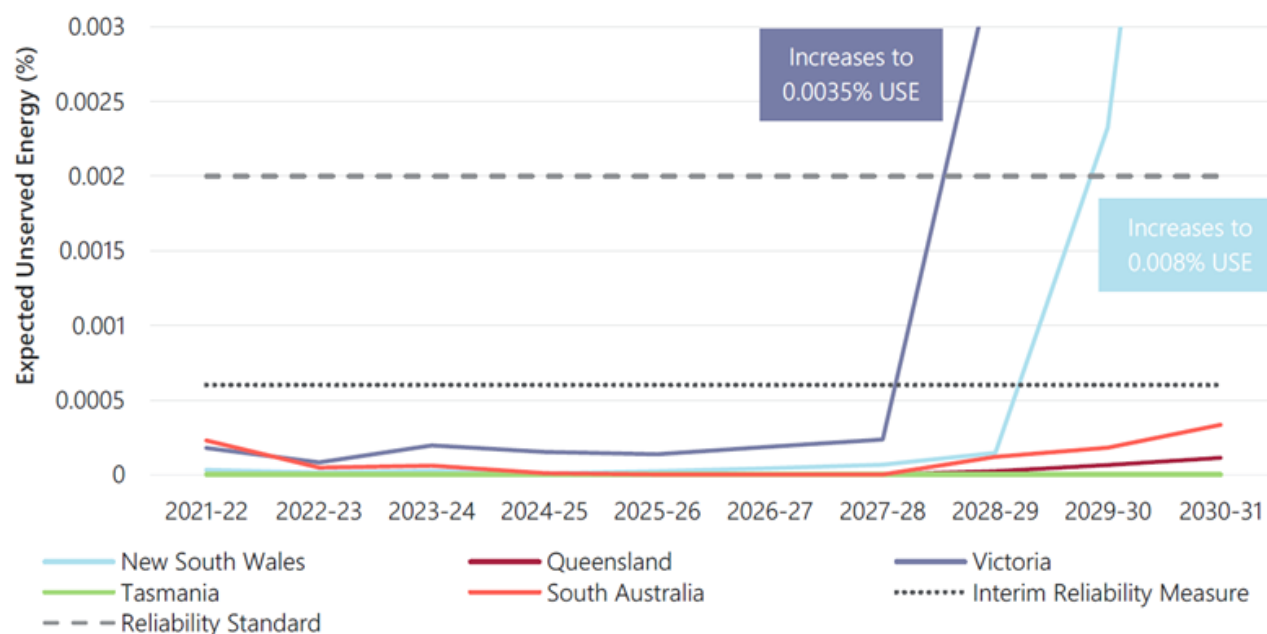


Energy Security

Comments were made during the Committee hearing that adoption of the requirements set out in the Bill could lead to the early closure of coal fired generators in the State. Delta therefore believes it important that it refer the Committee to the Australian Energy Market Operator's (AEMO) recently published *2021 Electricity Statement of Opportunities (ESOO)*.

The purpose of the ESOO is to provide technical and market data that informs the decision-making processes of market participants, new investors, and jurisdictional bodies as they assess opportunities in the National Electricity Market. It incorporates a reliability assessment against the reliability standard, including AEMO's reliability forecasts.

Figure 1 Expected unserved energy, 2021-22 to 2030-31, Central outlook



In the ESOO the closure of Vales Point, as presently planned for 2029, will result in critical shortages of dispatchable power generation in the State, with the reliability standard materially breached. As indicated by Origin Energy's statement to the Committee, the adoption of the air standards would close Eraring power station. Delta would note that other NSW coal fired stations similarly would be unlikely to continue operation in that context. Therefore, the cumulative impact of the Bill would be to close multiple stations in a disorderly manner, with untenable implications for NSW energy security and costs.

Conclusion

The requirement for additional air pollution controls is not justified, and various claims about adverse health impacts from coal fired generation are not supported by published and professionally produced data from government agencies. Imposition of such additional controls would present an unnecessary financial burden on all NSW coal fired generators when these operations are already under intense market pressure. It is also considered extremely unlikely that debt financing could be secured to cover the costs involved.



The passing of the Clean Air Bill would therefore cause businesses to immediately review asset viabilities, which could trigger a decision for early closure of plants. It is highly likely the same outcome would occur at all coal fired power stations at the same time. Post the Liddell closure, the early closure of even one more major plant, let alone all coal fired power stations in NSW, would present an immediate energy crisis in NSW at a time when the industry is already under very significant financial strain because of the transition towards higher levels of renewables in the National Electricity Market. Such an outcome is unwarranted given the good air quality present in NSW, as well as the fact that other sources, such as cars and wood heaters, are higher pollutant contributors than all the existing coal fired power stations combined.

Delta therefore encourages the Committee to reject the proposed Clean Air Bill as it lacks justification and would potentially create very serious consequences for the State in terms of energy security, with higher electricity prices for business and households.

~~Greg~~ Everett
Chief Executive