

## Project EnergyConnect - Heat Rate Consultation

On 24 July 2020 ElectraNet issued a stakeholder update on our updated cost benefit analysis, and specifically invited submissions on the application of variable heat rates to thermal generators in our updated market modelling. A summary of the key issues raised in submissions and how we are responding follows.

What we heard	How we are responding
<b>Public Interest Advocacy Centre (PIAC)</b>	
PIAC did not comment on the question of generator heat rates.	Noted.
PIAC expects a significant positive net economic benefit to justify the scale of the investment and considers it prudent to determine whether there has been a material change in circumstances that would lead to a change in preferred option.	<p>Determining whether there has been a material change of circumstances is the purpose of the updated cost benefit analysis that ElectraNet is undertaking, based on the latest information on costs and benefits.</p> <p>Under the National Electricity Rules, a “material change in circumstances” occurs when changes in project costs and / or benefits would result in a change in the preferred option and thereby potentially require reapplication of the RIT-T.</p> <p>We will be sharing the results of our updated cost benefit assessment at the stakeholder webinar on 20 August 2020 and providing full details on our website.</p>
PIAC is concerned that Project EnergyConnect will primarily benefit South Australia while the majority of the costs would be borne in NSW, and this may be exacerbated by growing SA system security requirements.	<p>AEMO’s 2020 ISP shows that the project will deliver benefits across the National Electricity Market. Reduced usage of gas within South Australia will increase the available gas for all users on the east coast of Australia.</p> <p>TransGrid intends to provide updated information on the specific benefits of the project to NSW customers.</p>
<b>Energy Users Association of Australia (EUAA)</b>	
The EUAA has no specific comments on the question of generator heat rates.	Noted.
The EUAA is concerned over the uncertain benefits of the project given rising capital costs and is seeking a consolidated view including the risk of further cost increases.	<p>We are investigating whether there has been a material change in circumstances based on the latest information on costs and benefits and will be sharing the results with stakeholders as above.</p> <p>Both ElectraNet and TransGrid are committed to delivering Project EnergyConnect (PEC) at the lowest possible cost to customers and have been working through competitive procurement processes with construction contractors to firm up capital cost estimates that will form the basis of applications to seek contingent project funding from the AER. These cost estimates are expected to be available by September 2020.</p>
The recent EnergyQuest report on future gas prices should be released.	We will be publishing a summary of the EnergyQuest report that was used to validate AEMO’s gas price outlook.

What we heard	How we are responding
<p>AEMO should publish its analysis on the requirement for 2 synchronous generators to be online in SA in the absence of a new interconnector before the contingent project application proceeds.</p>	<p>The latest information on the system security issues facing South Australia is contained in an AEMO report prepared for the South Australian Government<sup>1</sup>. These include voltage disturbance constraints and fast frequency response requirements, each of which are alleviated by PEC and have been modelled in the updated analysis. The need for 2 synchronous generators is presented in AEMO's 2020 ISP appendix 7.<sup>2</sup> ElectraNet will be sharing these outcomes at the stakeholder webinar on 20 August and providing further details on its website.</p>
<p>The EUAA queries whether a material change in circumstances has occurred under the Rules and urges transparent and open engagement to give confidence to consumers on the economic case for the project and to ensure the AER is fully informed before a contingent project application is considered.</p>	<p>We are investigating whether there has been a material change of circumstances based on the latest information on costs and benefits and will be sharing the results with stakeholders as above.</p> <p>We will also be seeking confirmation from the AER of the economic case for the project based on its detailed review of the updated cost benefit modelling before a contingent project application is submitted.</p>
<p>The proponents and governments should consider ways consumers can be relieved of part of the costs and risks of the project, particularly given the majority of the benefits accrue to SA but costs fall to NSW.</p>	<p>AEMO's 2020 ISP shows that the project will deliver benefits across the National Electricity Market, including the increased availability of gas as noted above.</p> <p>TransGrid intends to provide updated information on the specific benefits of the project to NSW customers, as above.</p>
<b>Reach Solar</b>	
<p>Reach supports the heat rate curves proposed.</p>	<p>Noted.</p>
<p>Other material cost components have not been considered which increase the operating cost of gas and coal fired plants.</p>	<p>We note that the operating cost assumptions modelled remain conservative (for example excluding generator start costs) and are therefore likely to underestimate the benefits of avoided thermal generation costs.</p>
<p>The proposed path of the interconnector through Dinawan does not address network constraints around Darlington Point.</p>	<p>TransGrid has separately initiated a RIT-T process to address these network constraints<sup>3</sup>. The refinement of the interconnector path through Dinawan is required to optimise the line route and secure the required transmission line easements while minimising overall project costs. This refinement does not materially affect the level of net benefits that were modelled in the RIT-T.</p>

<sup>1</sup> AEMO, *Minimum operational demand thresholds in South Australia*, May 2020 available at: [https://www.aemo.com.au/-/media/Files/Electricity/NEM/Planning\\_and\\_Forecasting/SA\\_Advisory/2020/Minimum-Operational-Demand-Thresholds-in-South-Australia-Review](https://www.aemo.com.au/-/media/Files/Electricity/NEM/Planning_and_Forecasting/SA_Advisory/2020/Minimum-Operational-Demand-Thresholds-in-South-Australia-Review).

<sup>2</sup> AEMO, *2020 ISP Appendix 7: Future Power System Security*, 30 July 2020 available at: <https://www.aemo.com.au/-/media/files/major-publications/isp/2020/appendix--7.pdf?la=en>.

<sup>3</sup> TransGrid, *Improving stability in South-Western NSW: RIT-T – Project Specification Consultation Report*, 31 July 2020, available at: [https://www.transgrid.com.au/what-we-do/projects/regulatory-investment-tests/Documents/TransGrid%20PSCR\\_Stabilising%20SW%20NSW.pdf](https://www.transgrid.com.au/what-we-do/projects/regulatory-investment-tests/Documents/TransGrid%20PSCR_Stabilising%20SW%20NSW.pdf).

What we heard	How we are responding
Given the current increases in transmission costs, the competitive tender process of ElectraNet and TransGrid is the most efficient way of ascertaining the market price for the delivery of PEC.	Noted.
<b>ERM Power</b>	
ERM Power did not comment on the question of generator heat rates.	Noted.
The significant change in cost estimates and benefits constitute a material change in circumstances and the RIT-T should be reapplied for AER consideration and approval.	<p>We are investigating whether there has been a material change of circumstances based on the latest information on costs and benefits and will be sharing the results with stakeholders as above.</p> <p>We will also be seeking confirmation from the AER of economic case for the project based on its detailed review of the updated cost benefit modelling as above.</p>
<b>Major Energy Users (MEU)</b>	
MEU suggests retaining the previous fixed heat rates and not trying to finesse them, to ensure a more conservative outcome.	In the absence of minimum capacity factors we propose to use the variable heat rates as a more accurate representation of the operation of SA gas plant, consistent with the assumptions adopted in the 2020 ISP 2020 and the expert advice from Aurecon.
The material difference between the capital costs at which the AER approved the RIT-T of \$1.53bn and 2020 ISP value of \$1.99bn imply that a new RIT-T is warranted.	We are investigating whether there has been a material change in circumstances based on the latest information on costs and benefits and will be sharing the results with stakeholders as above.
Given the concerns about the benefits of the project, consumers look to the AER to verify that the benefits calculated by ElectraNet and TransGrid are reasonable.	We will be seeking confirmation from the AER of the economic case for the project based on its detailed review of the updated cost benefit modelling as above.
<b>Energy Australia</b>	
Energy Australia notes some differences in the heat rates for two of its peaking generators from those assumed, with Hallett having a slightly higher heat rate and Jeeralang having a lower heat rate than assumed in the 2020 ISP.	We will explore the materiality of these differences and make any appropriate adjustments in the final modelling.

17 August 2020