



**TransGrid**

# TransGrid Advisory Council Deep Dive - HumeLink

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14 September 2021



## 1. Deep Dive attendees

<b>Date</b>	14 September, 2021
<b>Venue</b>	Via WebEx due to COVID lockdowns in NSW, VIC, ACT
<b>Time</b>	9.30am – 12.00pm
<b>Chairperson</b>	Craig Stellan, Executive Manager - Delivery

TransGrid attendees	<p><b>Brian Salter</b>, Acting CEO TransGrid  <b>Gerard Dover</b>, Board member  <b>Gordon Hay</b>, Board member  <b>Kasia Kulbacka</b>, Executive Manager - Network Planning &amp; Operations  <b>Eva Hanly</b>, Executive Manager – Strategy, Innovation and Technology  <b>Jeff Forrest</b>, Acting CFO  <b>Stephanie McDougall</b>, Head of Regulation  <b>Tim Edwards</b>, Project Director, HumeLink  <b>John Howland</b>, Manager Network Planning  <b>Cameron Hamilton</b>, Head of Government and Stakeholder Engagement  <b>Andrew Schille</b>, Project Director, Policy  <b>Neil Howes</b>, Manager, Policy &amp; Reform  <b>Bronwyn Rosser</b>, Industry and Stakeholder Engagement Advisor  <b>Catherine O’Neill</b>, Stakeholder Engagement Lead</p>
TransGrid Advisory Council attendees	<p><b>Andrew Richards</b>, Chief Executive Officer, Energy Users Association of Australia  <b>Anna Lipsey</b>, Energy + Water Consumers' Advocacy Program, PIAC  <b>Kim Woodbury</b>, COO, City of Sydney  <b>Tennant Reed</b>, Principal National Policy Advisor, Australian Industry Group  <b>Dev Tayal</b>, Business Development, Tesla  <b>Panos Priftakis</b>, Regulation Manager, Snowy Hydro  <b>Stacey Sleeman</b>, Chief Financial Officer, Tomago Aluminium  <b>Michael Ottaviano</b>, Partner, ERM Advisory  <b>Scott Young</b>, Executive Director, Commonwealth Bank of Australia  <b>Alex Wonhas</b>, Chief System Design and Engineering Officer, AEMO  <b>Christiaan Zuur</b>, Director Energy Transformation, Clean Energy Council  <b>Andrew Blakers</b>, ANU Centre for Sustainable Energy Systems  <b>Brian Spak</b>, Director, Energy Transformation, Energy Consumers Australia</p>
Presenter	<b>Ben Vanderwaal</b> , Partner, Power & Utilities, EY and members of EY team
Observers	<p><b>Slavko Jovanovski</b>, Director Networks, AER and members of AER capex team  <b>Members of AEMO</b> ISP development team  <b>Members of EY</b> Power &amp; Utilities team</p>
Apologies:	<p><b>Gavin Dufty</b>, Manager Policy and Research, St Vincent de Paul  <b>Lynne Gallagher</b>, Chief Executive Officer, Energy Consumers Australia  <b>Maria Cahir</b>, Business Development, Tesla  <b>Iain Maitland</b>, NSW Ethnic Communities Council  <b>Sam Fyfield</b>, General Manager – Grid &amp; SCADA, Goldwind  <b>Craig Memery</b>, Program Director, Energy + Water Consumers' Advocacy Program</p>

## 2. Meeting summary

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### 2.1 Welcome and Introductions

TransGrid's Acting CEO, Brian Salter welcomed all participants to the Deep Dive on HumeLink held in response to feedback that TAC members had not had sufficient chance to discuss the project.

The CEO noted recent criticism in the media about the cost of the project and reassured participants that TransGrid is committed to delivering the project that delivers the greatest net benefit for consumers. The Deep Dive is an opportunity for TAC members to understand the project need, its place in the ISP, and the competition benefits modelling that support the project.

Two other items for discussion at the meeting include the AEMC's Transmission Planning and Investment Review and the implications for financing major projects, and whether there is support for strategic acquisition of land and easements for future ISP projects.

### 2.2 HumeLink update

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TransGrid's HumeLink project director, Tim Edwards gave a presentation on HumeLink that provided an update on the Landowner Advocate Report and steps taken by TransGrid to improve its engagement on major projects. The presentation also covered the HumeLink PACR and the costs and uncertainty of the project.

#### Discussion:

- > **The Landowner Advocate Report** - Commissioned by TransGrid, the Landowner Advocate Report by Rod Stowe was regarded as a great initiative and members asked whether the findings from this report could be used across the industry to ensure best practice was implemented by other networks and renewables proponents. TransGrid agreed to share its findings with ENA.
- > **Costs of engagement** - It was noted that better engagement provided for a better social licence and a better project. Engagement costs are very small compared to the final cost of projects of this size, and in fact have the potential to avoid costs caused by project delays.
- > **Voltage** - Options considered in the PACR showed that at 500kV, higher temperature conductor was required which drove up costs.
- > **Marginal loss factors** – In response to a question about MLF outcomes, TransGrid advised that HumeLink would mean MLFs are less of an issue.
- > **Point of connection** - TAC members questioned why HumeLink was being connected to the Grid at Wagga Wagga. TransGrid explained that the HumeLink project was not just about connecting Snowy 2.0. It is about allowing renewables to flow west to SA and back, south to Victoria and north to Sydney, thereby creating a very strong backbone for the Grid.
- > **Cost estimates** - Advocates raised concerns about the veracity of project cost estimates at the time they receive regulatory approval. The new CPA process in the Rules was discussed and it was noted that the first tranche of funding sought for any project was small and was used to improve the cost estimates. Where project costs exceed the costs outlined in the PACR, the proponent seeks confirmation of the project via AEMO's feedback loop that the project remains on the optimal development path at that higher cost before submitting the final Contingent Project Application. It was noted that the Actionable ISP process has been designed to address issues of cost uncertainty and to ensure benefits can be reviewed when project cost estimates rise.

#### Actions:

1. TransGrid agreed to share the outcomes from the Landowner Advocate Report with ENA.

## 2.3 Integrated System Plan (ISP) projects

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Alex Wonhas from AEMO, also a TAC member, made a presentation on the upcoming ISP and its objectives. Alex noted that the NEM was going through the fastest energy transition of any electricity market in the world, and that NSW was transitioning faster than any other jurisdiction in the NEM.

### Discussion:

- > **Project caps** – Project caps are seen as a good initiative by advocates but questions were raised as to why a project cap was not issued for HumeLink. The pros and cons of decision rules were discussed including the potential for them to act as a market signal that could drive final price. It was acknowledged that the ISP is a national plan and cannot make as detailed cost assessment for projects as the local TNSP is able to.
- > **Staging of project development** – will be considered as part of TransGrid's RIT-T. AEMO continues to focus on how to design investment rules that match the risk profiles of consumers.
- > **Total cost of energy transition** – advocates acknowledged the complexity of the ISP process but were concerned about the total cost of the energy transition including the cost of transmission initiatives (ISP and NSW Roadmap), the costs of grid strength projects and the offsetting costs of wholesale energy costs as well as the potential for net benefits to be double or triple counted as a result of calculating net benefits of each project separately.
- > **Multiple frameworks** – AEMO acknowledged that there was still work to be done to fully understand how the NSW framework would interact with the Rules and how they will work together for the benefit of consumers.
- > **ISP scenario modelling** – AEMO confirmed that its scenario testing considers the grid with and without HumeLink, but considered Snowy 2.0 a committed project in all scenarios due to Commonwealth Government policy.

## 2.4 HumeLink PACR modelling approach

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Ben Vanderwaal, a Partner in EY's Power and Utilities branch, presented EY's approach to modelling the electricity sector to evaluate the gross market benefits of HumeLink. EY has been commissioned by TransGrid to calculate the gross market benefits of HumeLink network augmentation for the four 2020 ISP scenarios. AEMO is proposing to introduce a consultation process on the methodology for calculating competition benefits.

### Discussion:

- > **ISP scenarios** - EY confirmed that all four ISP scenarios (central, fast change, step change and slow change) were modelled with and without HumeLink and the results were weighted by the weights applied in the 2020 ISP and updated for the assumptions in the 2022 IASR. It was noted that the RIT-T requires a net benefit in *most* scenarios.
- > **Demand response** - Two meanings of demand response were noted e.g. demand response in terms of elasticity of demand to changes in the price of electricity, and demand response as a generic term for traditional DER and demand management initiatives. EY acknowledged that the language in the report would need to make clear how the term was being used.
- > **Speed of transition** - Some members of the TAC suggested that the focus on detailed scenario modelling was missing the fundamental issue - that Australia is only 10% of the way to its goal of net-zero emissions and that achievement of this goal requires five times the amount of transmission capacity as currently exists, leading to the proposition that transmission investment would be fully utilised by solar and wind as soon as it is commissioned. [Webex chat: TAC members noted the asymmetry between investing too late versus acting pre-emptively. Others considered that this did not mean that good governance and independent assessment should be sacrificed in the rush to invest].
- > **Market power** - EY acknowledged that the strategic bidding scenarios available to Snowy, who also owns Kurri Kurri, were an important consideration in the modelling.

## 2.5 AEMC Transmission Planning & Investment Review

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Eva Hanly, TransGrid's Executive Manager – Strategy, Innovation and Technology provided an overview and Jeff Forrest, TransGrid's Acting CFO provided a presentation demonstrating that regulated cash flows do not support the AER's benchmark credit metrics using its assumed gearing, creating a mismatch between the gearing assumed by the AER and the ability for TNSPs to obtain funding for investments in reality.

### Discussion:

- > **Funding diversity** - TAC members noted the need for funding diversity, and the fact that TNSPs could not only depend on bank finance.
- > **Role of CEFC** - Members noted that the scale of Clean Energy Finance Corporation's funding was not sufficient to bridge the funding gap for the pipeline of transmission projects, and noted Federal Labor's \$20b plan 'Rewiring the Nation' is more likely to be of sufficient scale.
- > **Alternative mechanisms to finance projects** - The TAC discussed the option of BOOT (Built, Own, Operate, Transfer) schemes as a mechanism to address the financeability issue, and the ability to change ownership of the project from time of development to operation. It was noted that in the real world where large single bets were being placed (ie. investment in a single large project), it was important to de-risk investments in their development phase.
- > **Potential for price spike** - TransGrid noted work is underway to identify a way to address the price spike that consumers would bear in the option proposed in TransGrid's proposed rule change.

## 2.6 Strategic Land Acquisition

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Kasia Kulbacka, TransGrid's Executive Manager - Network Planning and Operations provided a presentation highlighting the potential benefits to consumers of TransGrid strategically procuring land for future ISP projects before they become an actionable ISP project.

### Discussion:

- > **Support for strategic land/easement acquisition** - The TAC was generally supportive of acquiring land and easements in advance of when a project is needed in circumstances where there is limited uncertainty that the rate of cost growth for land is higher than interest rates and where the costs can be recouped (eg sold and removed from the RAB) if not required in future.
- > **Costs and risks of not procuring land/easements in time** - It was noted that the costs of failing to procure easements in time could lead to underground construction at cost of 8-10 times higher than overhead construction. It was noted that easements are still required for underground construction.

### Actions:

2. TransGrid to consider options for securing land acquisition and easements in its upcoming reset.

## 3. Meeting close

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