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Anna Collyer  
Chair  
Energy Security Board  
[info@esb.org.au](mailto:info@esb.org.au)

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Dear Anna,

### **AGL Response to Project Initiation Paper on Congestion Management Model**

AGL Energy (AGL) welcomes the opportunity to comment on the Energy Security Board (ESB) transmission access reform project initiation paper.

AGL is a leading integrated essential service provider, with a proud 184-year history of innovation and a passionate belief in progress – human and technological. We deliver 4.2 million gas, electricity, and telecommunications services to our residential, small, and large business, and wholesale customers across Australia. We operate Australia's largest electricity generation portfolio, with an operated generation capacity of 11,208 MW, which accounts for approximately 20% of the total generation capacity within Australia's National Electricity Market.

AGL continues to be concerned by the proposed Congestion Management Model (CMM) since it is likely to make investment outside the REZ unviable and therefore effectively makes the location decisions for new generation investment in the NEM subject to consent from a central planner.

AGL is not convinced that a change to the current open access regime is needed. While new connecting generators in the NEM over the last decade have often faced network constraints, improved access to system information due to the Transparency of new projects rule change, combined with the Integrated System Plan and Renewable Energy Zones are likely to significantly improve this problem and therefore it is not clear that a new access regime is necessary. We suggest that the ESB may better meet its congestion objectives through a combination of the NSW proposed physical connection model and the Edify Congestion Relief Model and we therefore suggest the ESB fully explore these mechanisms alongside its consideration of the CMM.

### **The congestion management model**

The CMM is designed to create a disincentive for new investments in locations which will unacceptably impact congestion. There are a number of problems with this design.

First, projects considered to unacceptably impact congestion (i.e. those projects that will be outside the REZ) will become unviable under CMM because without access to rebates they will effectively be exposed to the locational marginal price. This means that even if investors consider the expected level of congestion for their project to be low, they will be unable to raise financing because accurately forecasting locational prices is not possible. Forecasting regional prices is possible because expected network and generation investment can be considered in aggregate and only very large investments (or exits) are likely to significantly vary prices. This contrasts with



locational prices which require assessment of local conditions and may vary significantly based on the investment (or exit) decisions of both large and small projects. It appears that the CMM design is not intended to block all new investment which may occur outside the REZ, just to provide a disincentive for those that face significant congestion, however we consider that it will effectively block all new investment outside a REZ. Reasons for new investment outside a REZ may be to utilise an existing generation or load site, to locate near a resource (e.g. offshore wind or biomass), or for an innovative reason not yet contemplated.

Second, under the CMM whether a location will lead to an acceptable increase in congestion, or not, is determined by a central planner. This would mean the highly complex determination of which areas may or may not have acceptable levels of congestion would be made by persons not operating in a competitive investment environment (i.e. the representatives of the network operator, not actual investors). We consider this an inferior design to the current open access regime, and most other access models, under which location decisions are made by the 1000s of minds of developers who have direct investment experience and will be privy to market intel not apparent to the network operator.

Third, by reducing congestion through a market intervention, the CMM may actually undermine allocative efficiency in the NEM. In a free market, participants will enter and exit based on market forces, and fluctuations of the supply-demand balance are normal. Congestion represents oversupply conditions and can occur as a result of a new player entering a market because they have determined that they can more efficiently supply the market. The consequence of persistent oversupply conditions is that the less efficient participant will exit the market, and in this way oversupply conditions will actually improve the efficiency of the market. In this respect, congestion can actually be positive and blocking such investment with the hope that the investment will instead be built in an area with less congestion, when it may in fact not be built at all, could be detrimental for the NEM. The CMM therefore has the potential to protect market participants which are located outside the REZ from competition and may actually entrench inefficient incumbents.

### **Edify congestion relief model**

AGL suggest that the ESB also consider the Congestion Relief Model (CRM) proposed by Edify in their submission to the ESB Post 2025 Market Design options paper. Under the CRM model congestion relief buyers pay congestion relief sellers (e.g. batteries, pumped hydro, synchronous condensers, thermal units, and demand response providers) through the spot market in the event that a node has a binding constraint. The benefit of the CRM is that it provides a market signal which incentivises the supply of congestion relief with a price determined by market forces, and that it sources supply from a voluntary participant rather than resolving congestion through a mandatory mechanism. The CRM will however create significant complexity, especially for traders, since each dispatchable generator or load will need to submit a separate congestion relief bid on each transmission line, regardless of whether they are located by that line or not. This will be particularly complex since all dispatchable generators or loads impact the congestion on each line at different levels. Nevertheless, we suggest that the CRM may be a better mechanism than the CMM to meet the ESB's objective of establishing a framework that rewards storage and demand side resources for locating where they are needed most. We therefore suggest the ESB fully consider the viability of this model, including how the CRM could operate to ensure that it creates a market which values congestion relief to a level strong enough to drive investment behaviour.



## **NSW Central-West Orana access model**

AGL also considers that the proposed NSW Central-West Orana physical connection access model is superior to the CMM, and we suggest the ESB consider this model as an alternative to the CMM. Under this model access rights are awarded up to an aggregate maximum capacity cap with all rights expiring 15 years from the commissioning of the first substation on the REZ scheme network. Generators are awarded access rights for a fee up to a specified capacity limit for four time periods (day, night, dawn, and dusk) and the REZ administrator determines the aggregate maximum capacity profile for connections in a REZ. We suggest the ESB explore whether a modified version of this model may be appropriate for the NEM as this model is simpler than the CMM and may better allow for some level of investments in non-REZ locations. This model also has the advantage that it works seamlessly with exits, as an exit would mean that the headroom below the capacity cap would simply increase.

## **Grandfathering**

Regardless of which access model is developed by the ESB, AGL considers it crucial that the rights of existing generators and generation sites in the NEM are not diminished. Existing generators should not have to compete or pay for the access that they currently receive since the locational decisions of these generators is fixed and well-established. New generators at existing generation sites should also be able to fully utilise existing network access since the zoned land and network connection at these sites is already developed. In particular we note that the existing sites of thermal generators scheduled to close should not have to compete or pay for the access which they already enjoy. Otherwise, the owners of these established sites would see the value and utility of their land reduced immediately upon closing their thermal generators, and this may create an incentive to delay closure which would reduce the likelihood that these well-connected sites would be efficiently used going forward. Under the CMM this may involve designating such sites as part of the REZ or including them through some other mechanism.

If you have any queries about this submission, please contact Anton King on (03) 8633 6102 or [aking6@agl.com.au](mailto:aking6@agl.com.au).

Yours sincerely,

**Chris Streets**

Senior Manager Wholesale Markets Regulation