

Ms Paula Conboy  
Chair  
Australian Energy Regulator  
Level 35, The Tower  
360 Elizabeth Street  
MELBOURNE VIC 3001

Dear Ms Conboy

I am writing in relation to the Australian Energy Regulator's (AER) draft decision on TransGrid's revenue proposal, and specifically the Powering Sydney's Future (PSF) project.

The security and reliability of Sydney's energy supply is of utmost importance, given its contribution to both the NSW and Australian economies.

As you may be aware, the NSW Department of Planning and Environment (the Department) provides regular detailed information on residential housing activity and provides a robust housing supply forecast for Sydney. The Department also provides the NSW Government's population projections.

This information is used to inform strategic infrastructure planning and service delivery, as well as inform decisions on future land use across NSW. It is the data which all NSW Government agencies use in their long term strategic planning. Importantly, it also provides detailed analysis by region and local government area.

The Department's information can provide useful input to support decision-making around the PSF project, especially given the significant uncertainty regarding future energy demand and population growth in NSW.

The Australian Energy Market Operator (AEMO) forecasts energy demand to remain flat across the 25-year period from 2011 to 2036,<sup>1</sup> despite a projected population increase across the National Electricity Market of approximately 30 per cent. This projection may mask important regional differences, such as the impact of population growth on Inner Sydney's energy demand.

Based on the Department's analysis of ABS data,<sup>2</sup> the Department forecasts a population increase of 72 per cent in Inner Sydney (Sydney LGA) across the 25-year

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<sup>1</sup> AEMO National Electricity Forecasting Report 2016.

<sup>2</sup> Source: NSW Department of Planning and Environment, 2016 New South Wales State and Local Government Area Household Projections and Implied Dwelling Requirements 2016 to 2036, NSW Government, Sydney. The DPE's population and

period from 2011 to 2036.<sup>3</sup> This significant population increase will have a direct impact on the level of energy demand in the area.

The Sydney Local Government Area (LGA) is one of the largest and fastest growing LGAs in Australia. After Parramatta, Sydney LGA will contribute more new homes (dwellings) than any other LGA in Sydney. Between 2017 and 2022, more than 17,000 new homes will be built in the Sydney LGA.<sup>4</sup>

Demographic projections for Sydney's Eastern District area<sup>5</sup> by the Greater Sydney Commission (GSC) also support this growth forecast for Central Sydney. These projections also include:

- 325,000 more people by 2036
- 46,550 new dwellings 2016-2021
- 160,000 new dwellings 2016-2036.

As you may be aware from your work with TransGrid, Sydney also has several large-scale infrastructure projects in the development pipeline or underway which will be large energy users. WestConnex motorway tunnel is underway and will contribute a forecast load of 38MVA by 2021. The Light Rail and Sydney Metro infrastructure projects will also contribute a significant load increase, totalling an estimated 69MW around 2021.

Into the future, the NSW Government's State Infrastructure Strategy identifies priority infrastructure projects including: Southwest Metro, Southeast light rail extension to Maroubra Junction, Light rail to The Bay Precinct, Parramatta Light Rail Stage 2, Port Botany Rail Line duplication. These infrastructure projects will serve to meet the demands of Sydney's growing population. Though the net energy impact of these future projects is difficult to quantify, they will place further pressure on Sydney's energy supply.

Secure energy supply to Central Sydney is also crucial to NSW and the wider Australian economy. The City of Sydney's gross regional product represents over a fifth of NSW's gross state product. More than \$108 billion annually is generated within the City of Sydney Local Government Area (LGA) (2013-14 figures) representing over 7 per cent of Australia's economy.<sup>6</sup>

The Sydney LGA remains the pre-eminent business district in Sydney, providing over 470,000 jobs.<sup>7</sup> Therefore, the economic risks of a potential transmission cable failure in

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demographic forecasts are based on Australian Bureau of Statistics 2016 Census Dwelling Counts and the 2016 Estimated Residential Population.

<sup>3</sup> Source: NSW DPE <http://www.planning.nsw.gov.au/Research-and-Demography/Sydney-housing-supply-forecast/Forecast-data>

<sup>4</sup> Source: NSW DPE, <http://www.planning.nsw.gov.au/Research-and-Demography/Sydney-housing-supply-forecast/Top-five-local-government-areas>

<sup>5</sup> The GSC's Eastern City covers the following council areas: Bayside, Burwood, Canada Bay, City of Sydney, Inner West, Randwick, Strathfield, Waverley and Woollahra.

<sup>6</sup> Source: The City of Sydney, <http://www.cityofsydney.nsw.gov.au/vision/towards-2030/business-and-economy>

<sup>7</sup> Source: The City of Sydney, *ibid*.

the central Sydney area are significant. While the Department recognises that it remains difficult to know the actual measure of this harm, the economic importance of Sydney CBD should not be understated.

The NSW Government acknowledges the important role of the AER in promoting the efficient investment in electricity networks and in supporting the long term interests of consumers. As the PSF project will likely have significant cost implications for consumers, it is important that the need for the network investment is firmly established.

We know that what happens in our city centre affects the economic prosperity of NSW and the wider Australian economy. That is why it is crucial we address some of the challenges that Sydney faces as a growing city.

Should you have any further questions in relation to this matter, please contact Katharine Hole, Executive Director, Energy Strategy and Policy Branch, at the Department on (02) 8229 2848.

Yours sincerely



**Amanda Chadwick**  
A/Deputy Secretary 11.1.18  
Energy, Water and Portfolio Strategy