



public interest
ADVOCACY CENTRE

Tranche two regulations to support the Electricity Infrastructure Roadmap

31 May 2021

About the Public Interest Advocacy Centre

The Public Interest Advocacy Centre (PIAC) is an independent, non-profit legal centre based in Sydney.

Established in 1982, PIAC tackles barriers to justice and fairness experienced by people who are vulnerable or facing disadvantage. We ensure basic rights are enjoyed across the community through legal assistance and strategic litigation, public policy development, communication and training.

Energy and Water Consumers' Advocacy Program

The Energy and Water Consumers' Advocacy Program (EWCAP) represents the interests of low-income and other residential consumers of electricity, gas and water in New South Wales. The program develops policy and advocates in the interests of low-income and other residential consumers in the NSW energy and water markets. PIAC receives input from a community-based reference group whose members include:

- NSW Council of Social Service;
- Combined Pensioners and Superannuants Association of NSW;
- Ethnic Communities Council NSW;
- Salvation Army;
- Physical Disability Council NSW;
- Anglicare;
- Good Shepherd Microfinance;
- Financial Rights Legal Centre;
- Affiliated Residential Park Residents Association NSW;
- Tenants Union;
- The Sydney Alliance; and
- Mission Australia.

Contact

Anna Livsey
Public Interest Advocacy Centre
Level 5, 175 Liverpool St
Sydney NSW 2000

T: +61 2 8898 6520
E: alivsey@piac.asn.au

Craig Memery
Public Interest Advocacy Centre
Level 5, 175 Liverpool St
Sydney NSW 2000

T: +61 2 8898 6522
E: cmemery@piac.asn.au

Website: www.piac.asn.au



Public Interest Advocacy Centre



@PIACnews

The Public Interest Advocacy Centre office is located on the land of the Gadigal of the Eora Nation.

Contents

- Introduction 1**
- Stakeholder questions 1**
 - Energy Security Target 1
 - Question 1: Derating factors 1
 - Question 2: Energy Security Target Monitor’s report 1
 - Electricity Infrastructure Investment Safeguard 2
 - Question 3: Requirements for carrying out competitive tenders of Long Term Energy Service agreements..... 2
 - Question 4: Matters the Consumer Trustee must take into account..... 2
 - Question 5: Long duration over firming infrastructure 2
 - Classification of REZ network infrastructure 3
 - Question 6: Other considerations for classifying REZ network infrastructure..... 4
 - Question 7: Types of network infrastructure subject to economic regulation 5

Introduction

PIAC welcomes the opportunity to respond to the NSW Department of Planning, Industry and Environment's (the Department) consultation on Tranche 2 regulations for the Electricity Infrastructure Roadmap (the Roadmap). PIAC strongly supports the objectives of the Roadmap and most of the measures set out to achieve them.

We respond to the specific stakeholder questions and provide further detail on our approach to cost and risk sharing for Renewable Energy Zone infrastructure.

Stakeholder questions

Energy Security Target

Question 1: Derating factors

Should the Energy Security Target Monitor define the method to determine the derating factor or should the method be defined in the regulations? If not by derating factors, how else should the regulations address the probabilistic nature of semi-scheduled generators in the context of the deterministic Energy Security Target?

PIAC considers the method for determining the derating factor should not be defined in the regulations. Rather, the regulations should contain principles to guide the Energy Security Target Monitor (the Monitor) in creating a method for determining the derating factor. Opting for principles rather than defining the method allows more flexibility for the Monitor as the energy system and conditions change. This can help ensure quicker adjustment if the method is producing inaccurate factors or is otherwise proving inappropriate.

The principles for a method should consider the diversity of different generators, even within the same class, and how temperature conditions manifest across the jurisdiction. Not all generators have the same temperature constraints, and temperatures/weather conditions affect different parts of the state differently.

PIAC considers derating factors are necessary although imperfect metrics for calculating maximum demand. Allowing the method of determining derating factors to change as necessary should reduce the risk of inaccurately predicting the capacity of semi-scheduled generators for the Energy Security Target.

Question 2: Energy Security Target Monitor's report

Should the regulations prescribe any other matters for inclusion in the Energy Security Target Monitor's report? If so, what are they?

PIAC considers the matters prescribed by the regulations for inclusion are appropriate and we do not have any additional suggestions. We support the Department's position that the Monitor should maintain their discretion to include other information if it considers it relevant.

Electricity Infrastructure Investment Safeguard

Question 3: Requirements for carrying out competitive tenders of Long Term Energy Service agreements

To what extent are the requirements for carrying out competitive tenders of Long Term Energy Service Agreements appropriate? Are there any other requirements that should be considered?

PIAC is generally supportive of the proposed principles for carrying out competitive tenders, however we note there is not an explicit principle around the long-term interest of consumers or consideration of cost and risk allocation. While the principle around considering the 'long-term financial value' of offers to consumers partly addresses this, we consider a broader principle of the 'long term interest of consumers' better covers the various financial and non-financial factors that affect consumer outcomes. We also recommend including a principle of ensuring the offers' costs are recovered from those who benefit from them and the risks are borne by those best-placed to manage them.

Question 4: Matters the Consumer Trustee must take into account

Do you agree with the matters the Consumer Trustee must take into account when preparing the Infrastructure Investment Objectives Report? Are there any other matters that should be taken into account?

PIAC agrees with the matters the Consumer Trustee must consider when preparing the Infrastructure Investment Objectives Report. In addition to what is proposed, we recommend including more explicit consideration of the long-term interest of consumers, risk and cost allocation, and climate change impacts. Like above, we consider cost or financial impact too narrow. A broader consideration of consumer interest is likely to enable better outcomes. We also consider the Report should take into account how preferred scenarios allocate risk and minimise risk for consumers. As noted above, PIAC considers risk should be borne by those best-placed to manage it.

To incorporate climate change impacts, resilience against expected impacts of climate change could be included as a criteria for scenario assessment.

Question 5: Long duration over firming infrastructure

In what circumstances should the Consumer Trustee prefer long duration storage over firming infrastructure to meet the reliability standard?

The Consumer Trustee should prefer long duration storage over firming infrastructure according to how either resource meets the Infrastructure Investment objectives as well as the additional objectives and principles concerning the long-term interests of consumers, resilience to climate change impacts, and appropriate risk and cost allocation. As the energy system changes rapidly, solutions which are able to adapt and be flexible to changing market, system, environmental and social conditions will likely best meet these objectives and provide the most benefit to NSW consumers.

The Department identifies long duration storage will primarily be pumped hydro, which often has high upfront costs and is vulnerable to the impact of climate change on water availability, the falling cost of batteries, and the increasing decentralisation of the energy system.

The Department identifies firming infrastructure will often be gas generation, which has a range of risks, including becoming less competitive as battery costs fall and gas prices likely rise in coming years, and if government enact policies that favour renewable energy sources.

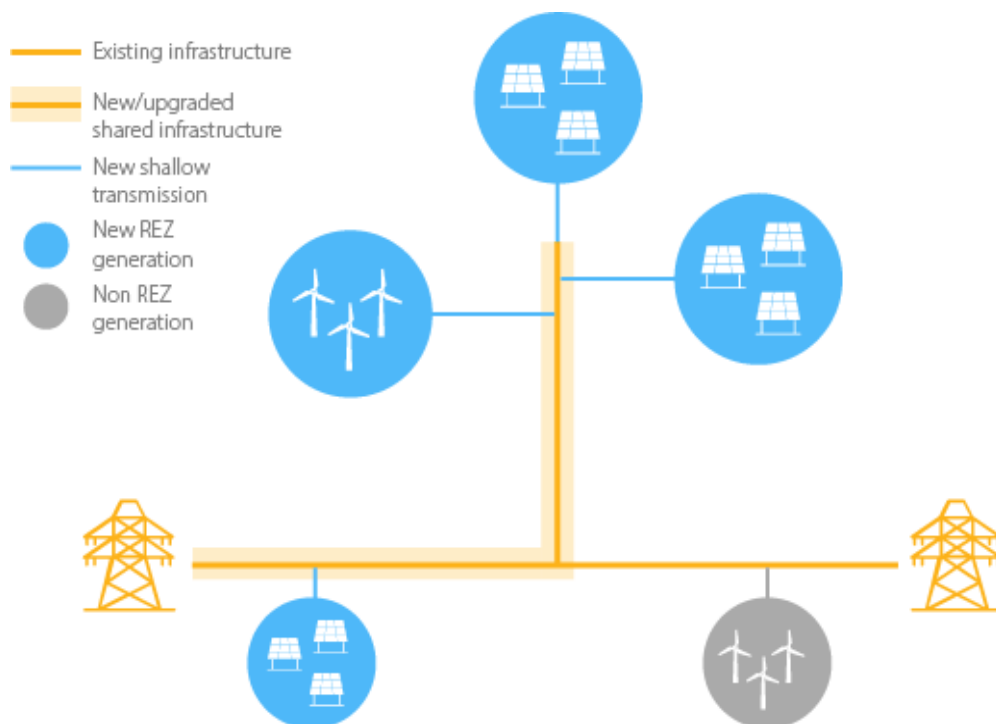
PIAC notes while investment in new gas generation in NSW is unlikely to be economic or needed, changes in the generation and storage mix may threaten the viability of existing plant and/or make gas generation much more expensive. With more reliance on Variable Renewable Energy (VRE), and increasing capacity being linked to the charge states of storage, the system may become more dependent on more gas capacity than today but for less frequent periods and using less overall gas volume. This may require gas generators to charge higher prices to recoup costs across fewer events. It may also require government intervention to ensure gas supplies are available during peaks, which may add further costs to providing dispatchable power this way. Relying on gas for dispatchable generation is likely uneconomical and short-sighted.

PIAC considers renewable sources and storage, such as batteries, pumped hydro and Distributed Energy Resources (DER) such as demand response, are the most cost effective and reliable means of meeting NSW's dispatchable capacity and firming requirements. PIAC considers in the longer term all NSW's dispatchable capacity can be met in this way using firmed renewable sources, while Gas Powered Generation will continue to have a minor but important role for some years meeting infrequent peak events. This role will diminish as batteries and other sources of dispatchable peak capacity become available.

Classification of REZ network infrastructure

PIAC has developed an approach to cost and risk sharing of REZs that aims to ensure the costs of shared REZ infrastructure are recovered from the beneficiaries, which are primarily connecting generators, and the risks are not borne entirely by consumers. The approach allows costs of shared infrastructure, including augmentations to the existing network, to be recovered from connecting generators, rather than just consumers and for shared infrastructure to be financed by a contestable investor rather than just through a TNSP (see Figure 1).

Figure 1: REZ infrastructure classification under PIAC approach



A contestable investor could be government, the TNSP or some other entity. The PIAC approach seeks to allocate costs more fairly, while providing a means for REZ infrastructure to progress through the regulatory process more quickly by lowering the consumer benefit projects must provide. More details on PIAC's approach to REZ financing can be found from page 18 in our submission to the Central-West Orana REZ access scheme issues paper.¹

Question 6: Other considerations for classifying REZ network infrastructure

Are there any other considerations that should be taken into account in classifying REZ network infrastructure in regulations, including the need for, and scope of, sub-classifications?

In line with our proposed approach to REZ cost and risk sharing, PIAC considers there is a need for a sub-classification for shared REZ network infrastructure that has a regulated component recovered from consumers and contestable component recovered from generators. This reflects the principle that costs should be recovered from beneficiaries and risks should sit with those best-placed to manage them. This sub-classification should include shared network infrastructure within the REZ and augmentations to the existing network to service a prescribed REZ.

¹ <https://piac.asn.au/wp-content/uploads/2021/05/21.05.07-PIAC-sub-to-CWO-REZ-access-scheme-issues-paper.pdf>

Question 7: Types of network infrastructure subject to economic regulation

What types of network infrastructure could be subject to economic regulation under Part 5 of the EII Act?

PIAC considers all shared REZ network infrastructure should come under the EII Act, however arrangements should allow for portions of it to be financed contestably and for costs to be recovered from generators where they are beneficiaries, in line with the PIAC approach outlined above. PIAC considers existing network infrastructure that has been augmented as a result of a direction or authorisation under part 5 of the EII should also be included in regulation and should be able to be financed contestably with costs recovered from generators, to the extent they benefit from the augmentation.

PIAC considers shallow connection assets that serve individual generators should not come under the EII Act and should be recovered from connecting generators.