2 November 2017

Chantelle Bramley
Executive General Manager - Strategy and Economic Analysis
Australian Energy Market Commission
PO Box A2449
Sydney South NSW 1235

Dear Ms Bramley,

Comments on modelling assumptions for the National Energy Guarantee

The Public Interest Advocacy Centre (PIAC) is an independent, non-profit legal centre based in New South Wales. Established in 1982, PIAC tackles systemic issues that have a significant impact upon disadvantaged and marginalised people. We ensure basic rights are enjoyed across the community through litigation, public policy development, communication and training. The Energy + Water Consumers' Advocacy Program represents the interests of low-income and other residential consumers, developing policy and advocating in energy and water markets.

PIAC welcomes the opportunity to provide comment on the assumptions for modelling the National Energy Guarantee (NEG).

PIAC's overall comments on the NEG

PIAC has examined the available information regarding the NEG and considers that the emissions component has merit. With minor modifications – such as removing international carbon offsets – it can be adopted in a manner that will support the longer term certainty needed for investors.

However, PIAC has reservations regarding the effectiveness of the reliability component of the NEG and doubts the need for it, given the mechanisms currently available in the NEM and reforms already underway. PIAC is concerned that the reliability component of the NEG may impose unnecessary risks on market participants, particularly new entrants and smaller retailers, resulting in higher than efficient costs for consumers without providing benefits beyond those achievable under current arrangements.

Policy uncertainty premium

Of primary concern in the modelling assumptions is the proposed inclusion of a 3% policy uncertainty premium on capital costs under the base case. This appear to be arbitrary, and disregards the additional potential risk posed by the reliability component.

Firstly, the proposed 3% premium is a substantial increase on the cost of capital, which is typically around the 8% mark. Including such a premium will have a disproportionately large impact on the final modelling outcomes and may disproportionately relegate other effects.

Secondly, PIAC questions whether it is appropriate to use a policy uncertainty premium at all. Investment in the NEM has experienced many years of policy uncertainty already which has been well documented in formal stakeholder submissions as well as in the media. The resulting uncertainty would already have been incorporated into the cost of capital available to businesses in Australia.

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A lack of emissions and energy policy is a symptom rather than the cause of this uncertainty – for instance, the carbon price was enacted into policy only to be removed shortly thereafter and the Renewable Energy Target, despite being federal policy for many years, has been subject to considerable policy uncertainty. It would be naïve to think implementing the NEG will remove this uncertainty altogether.

In any case, while the NEG would likely improve policy certainty to investors in non-variable generation sources (renewable and non-renewable), whether any further confidence is provided to variable solar and wind investors will be entirely dependent on the final design and the actual emissions and reliability settings in a given jurisdiction, as well as clarity over the governance of these.

Finally, in PIAC's view the reliability component of the NEG appears to present new uncertainty to investors. This is not captured in the setting of a policy uncertainty premium to zero.

Given that the final design of the NEG is a long way from being finalised, it is premature to put a value on policy uncertainty.

Recommendation 1

PIAC recommends the AEMC not use any policy uncertainty premium in its modelling.

System security and reliability reforms

PIAC notes that there are a number of mechanisms either currently available in the NEM or that have either recently been introduced or committed that seek to achieve similar system security and reliability outcomes as the NEG. These include:

- the Reliability Emergency Reserve Trader (RERT) provisions;
- obligations on transmission businesses to procure a minimum level of inertia;
- a market for inertia above this minimum level;
- new frequency ancillary services markets;
- a market for emissions reductions; and,
- markets for demand response to be in place by the summer of 2018-19.[1]

These will, importantly, send financial signals for investment in the services that are valued in the system, and are expected to address the same system security and reliability issues that the NEG is intended to address.

There is no mention of these in the AEMC's proposed modelling assumptions. PIAC considers it imperative that these mechanisms and their impact on reliability, system security and cost be considered in the modelling, to allow the modelling to quantify any benefits and costs the NEG provides in addition to those which will be achieved without the NEG.

Recommendation 2

PIAC recommends that the AEMC include the impact on system security and reliability outcomes from the rule changes and other reforms which are currently available or committed.

Wholesale market efficiency and outcomes

PIAC considers that the NEG is likely to favour large, incumbent market participants and promote vertical integration. This position is shared by other stakeholders and analysts.

1 *COAG Energy Council Meeting Communique*, 14 July 2017.

Therefore, PIAC has strong concerns that the reliability component of the NEG may further concentrate market power in the NEM wholesale market and other related markets such as the derivatives markets. Given that one of the key outputs of the modelling is likely to be wholesale prices, PIAC considers that the modelling must allow for the impact of concentration of market power on the efficiency of wholesale market outcomes.

Recommendation 3

PIAC recommends the AEMC consider the likely negative impact on the efficiency of wholesale market outcomes from the introduction of the NEG.

Snowy 2.0

PIAC questions the inclusion of the Snowy 2.0 project given it is currently still undergoing a feasibility analysis. The assumed timing of 2024 appears unrealistic at this stage.

PIAC also recommends further information be provided on the assumed costs for its generation, the round-trip efficiency of energy consumed and produced, and the availability of generation from Snowy 2.0 given its sensitivity to water availability and environmental restrictions.

Recommendation 4

PIAC recommends that the AEMC undertakes sensitivity analysis on Snowy 2.0. Failing that, the AEMC should provide clarity of the cost, efficiency, timing and availability assumptions for Snowy 2.0.

Retirements

PIAC considers that the proposed retirement of Bayswater in 2034/35 is too far into the future to accurately model, given the changing nature of the NEM. PIAC therefore suggests that sensitivity analysis may be more appropriate. Further, PIAC seeks to ensure that the cost-based retirements of existing generation include any additional costs that market participants may incur under the NEG.

Recommendation 5

PIAC recommends that sensitivity analysis may be appropriate to model the impacts of generator retirement levels and timing.

Renewable Energy schemes

PIAC notes that the AEMC has not made reference to the other state-based renewable energy targets and schemes which are currently available or are being developed. PIAC considers that these will drive significant new investment in addition to the federal Renewable Energy Target and the NEG, and should be included in the modelling.

Recommendation 6

PIAC recommends that the AEMC include state-based renewable energy targets and schemes in its analysis in addition to the Renewable Energy Target and the NEG.

Technology costs

While the proposed costs appear reasonable to PIAC, we note that the assumed costs for solar thermal may be high given that the planned Aurora Solar Energy Project in Port Augusta is reported to sell its output at $78/MWh.

PIAC notes however that there are no costs quoted for other generation sources and alternatives, such as demand management, storage and (as noted above) for Snowy 2.0.

Recommendation 7

PIAC recommends that the AEMC provide detail on the cost assumptions for other sources of generation such as demand management, storage and for Snowy 2.0.

Recommendation 8

PIAC recommends that the AEMC considers its technology cost assumptions in light of recent generation projects such as the Aurora Solar Energy Project in Port Augusta.

Reliability obligation

PIAC notes that there is currently no clear understanding of the level of contract obligations that may be required under the reliability component of the NEG. The obligation may not be binding in most years and most jurisdictions, but retailers would be required to consider the risk of it binding in the future in considering their contract positions, as would generator investors in considering their investment decisions. Therefore, it may be more appropriate to model a number of scenarios. For instance, the scenarios, based on forecast breaches of the Reliability Standard, could include:

- Low – based on low demand forecasts and the reliability obligation does not bind;
- Medium –based on medium demand forecasts where the reliability obligation binds from time to time and/or only in limited jurisdictions; and
- High – based on high demand forecasts and the reliability obligation binds regularly and/or in numerous jurisdictions,

Recommendation 9

PIAC recommends that conduct sensitivity analysis for the impact of the reliability obligation as described above.

Continued engagement

PIAC would welcome the opportunity to meet with the ESB, AEMC and other stakeholders to discuss these issues in more depth.

Yours sincerely,

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