The Australia Institute
Research that matters.

Underwriting New Generation Investments

Submission

The program presents a number of risks that could jeopardise rather than improve the reliability and affordability of electricity, with the key risk concerning the legislative authority required to carry out the suite of approaches.

Matt Grudnoff
Richie Merzian
November 2018

ABOUT THE AUSTRALIA INSTITUTE

The Australia Institute is an independent public policy think tank based in Canberra. It is funded by donations from philanthropic trusts and individuals and commissioned research. We barrack for ideas, not political parties or candidates. Since its launch in 1994, the Institute has carried out highly influential research on a broad range of economic, social and environmental issues.

OUR PHILOSOPHY

As we begin the 21st century, new dilemmas confront our society and our planet. Unprecedented levels of consumption co-exist with extreme poverty. Through new technology we are more connected than we have ever been, yet civic engagement is declining. Environmental neglect continues despite heightened ecological awareness. A better balance is urgently needed.

The Australia Institute's directors, staff and supporters represent a broad range of views and priorities. What unites us is a belief that through a combination of research and creativity we can promote new solutions and ways of thinking.

OUR PURPOSE – 'RESEARCH THAT MATTERS'

The Institute publishes research that contributes to a more just, sustainable and peaceful society. Our goal is to gather, interpret and communicate evidence in order to both diagnose the problems we face and propose new solutions to tackle them.

The Institute is wholly independent and not affiliated with any other organisation. Donations to its Research Fund are tax deductible for the donor. Anyone wishing to donate can do so via the website at https://www.tai.org.au or by calling the Institute on 02 6130 0530. Our secure and user-friendly website allows donors to make either one-off or regular monthly donations and we encourage everyone who can to donate in this way as it assists our research in the most significant manner.

Level 1, Endeavour House, 1 Franklin St
Canberra, ACT 2601
Tel: (02) 61300530
Email: mail@tai.org.au
Website: www.tai.org.au

INTRODUCTION

Thank you for the opportunity to make a submission to the underwriting new generation investments.

THE PROBLEM

The Australia Institute has considerable concerns about the proposed program to underwrite new generation investments. In particular, the proposal seems to confuse two separate issues. The first is that the reliability standard in the NEM is met. This is highlighted in the consultation paper by reference to AEMO's latest Electricity Statement of Opportunities that the NEM will need an additional 1160 MW of firming capability in the next decade.[1]

The second is the desire to reduce electricity prices by introducing more competition into the electricity generation market which was highlighted in the ACCC's recent Retail Electricity Pricing Inquiry.[2]

It is not clear that these two separate issues need to be linked or that linking them would provide the least cost solution. It certainly isn't the solution with the least risk to taxpayers as it has the Government take on considerable commercial risk in a rapidly transitioning market.

The Government's consultation paper highlighted that some project developers felt that uncertainty in the generation market had led to difficulty in obtaining finance.[3]

It is not clear that the best solution to this uncertainty would be fixed by the government underwriting new projects. It is more likely that the uncertainty is being caused by a lack of government policy that takes into consideration the transitional period the electricity generation sector is going through.

A more effective solution would be to put in place long term policies that take account of both the electricity sector's transition to renewable forms of energy and the role the sector can play in combating climate change. This solution would also reduce the risk

[1] Australian Government (2018) *Underwriting New Generation: Public Consultation Paper*, Department of the Environment and Energy, October, p 4

[2] Australian Competition and Consumer Commission (2018) *Restoring electricity affordability & Australia's competitive advantage*, 11 July

[3] Australian Government (2018) *Underwriting New Generation: Public Consultation Paper*, Department of the Environment and Energy, October, p 3

that tax payers will be exposed to unviable, expensive projects that have the potential to become stranded assets.

Finally the Australia Institute believes Commonwealth legislation is required to undertake the courses of action proposed. The Government must clarify how it intends to implement the program, in particular the contracts and capacity payments, without amended or new legislation.

RELIABILITY STANDARD

AEMO'S Integrated System Plan provides an excellent blue print for how to met the reliability standard.[4] The Government would be better advised to pursue actions outlined in the Integrated System Plan that help the electricity sector transition. AEMO says that renewable penetration in the electricity sector can increase to 48 per cent by 2030 without compromising reliability.

The Integrated System Plan says the least cost way forward for the electricity sector is to replace retiring coal powered generators with a mix of utility scale renewable generation, storage, distributed energy resources, flexible thermal capacity and improved transmission. AEMO does not recommend new large scale gas or coal base load generation.

ADDITIONAL COMPETITION

There is a proven method for reducing wholesale electricity prices with additional competition. A few years ago the Renewable Energy target was doing exactly this and fossil fuel generators were complaining that wholesale electricity prices were too low.[5] This was because the Renewable Energy Target was pushing additional generation onto the market and putting downward pressure on prices.[6]

If the Government really wants to reduce wholesale prices through additional competition then it should go with a proven method and increase the Renewable Energy Target to 50 percent by 2030. AEMO has calculated that around 50 per cent renewable energy penetration is possible without compromising reliability and with some modifications renewable energy penetration could rise to be almost 70 per cent.

---

[4] Australian Energy Market Operator (2018) *Integrated System Plan*, July

[5] RMIT ABC Fact Check (2014) *Fact file: How does the Renewable Energy Target affect your power bill?*, ABC, 23 July

[6] RET Review Expert Panel (2014) *Renewable energy target scheme report of the expert panel*, 15 August

FINANCIAL RISK TO THE TAXPAYER

The Government's proposal to underwrite new generation exposes taxpayers to considerable financial risk. The timetable that the government proposes is also very short and this further exacerbates that risk.

The reality is that the electricity sector is going through a transition period and this heightens the uncertainty in the sector and increases the chances that the Government could end up exposing taxpayers to an unviable and very expensive failure. This is further enhanced if the Government chooses to ignore wider issues facing the sector like future action on climate change.

We recommend that the government rethink the time table for setting up this program and give more consideration to the following issues that are designed to reduce the risk to taxpayers:

- The Government needs to work closely with AEMO to accurately quantify how much firmed generation is needed and the best way to facilitate it. It also needs to work with AEMO on the timing of that generation being released into the market.
- More consideration needs to be given to the types of firmed generation that the Government will consider. The Government seems to be focused on a large generator projects but this is unlikely to be the most cost effective method. The Government needs to further develop how it will integrate the use of multiple small projects to provide firmed generation rather than a few (or even one) large project.
- Given the rushed nature of the project the Government needs to ensure that there are strong clauses in any contract that it signs with successful project proponents to allow the Government to cheaply exit the agreement, particularly at the early stages of the project before construction has begun.

TECHNOLOGY NEUTRAL

The Government has previously extolled policies that are technology neutral but on the 7^{th} November 2018 the energy minister stated:

> We are working towards a shortlist of electricity generation investment projects by early next year that deliver when customers need it (likely to include coal, gas and hydro).[7]

The program should make clear that it is indeed technology neutral. The Energy Minister should also take a more open mind to the selection of any projects. Presupposing that the successful project or projects must be large scale projects that provide both additional firmed capacity and more generation competition will reduce the chances that the government finds the least cost projects.

TIMELINE AND LEGISLATION

The consultation paper proposes an ambitious timeline commencing next month (December 2018) with Expressions of Interest (EOIs). While the EOIs are submitted the Government will "update and finalise" its program guidelines to ensure it is fit for purpose. Formal proposals are then due in March 2019. The Government appears to be building the process while running it – which poses a number of risks.

To mitigate such risks the Government should clarify how it intends to administer the program.

The Australia Institute believes the Government requires legislative authority to carry out the full suite of approaches proposed including loans, capacity payments and derivative contracts. The Department of Energy and Environment suggested at the stakeholder consultation on 9 November that the program could be supported by either Commonwealth or COAG (State and Territory) legislation. Given the program is not being pursued through COAG that leaves Commonwealth legislation as the only course of action. The Department suggested the earliest legislation could be ready was the autumn sitting period (early 2019). If this is the case then participants are invited to submit EOIs before the legislation is even considered.

The only body capable of underwriting the full program without legislation is the Clean Energy Finance Corporation. However this would preclude supporting coal fired power which the Minister for Energy confirmed on 7 November will be within scope.

The Government must therefore clarify how it intends to implement the program noting the limitations posed by the *Williams v Commonwealth* High Court decision on unauthorised government spending.[8]

---

[7] Taylor, Angus (7 November 2018) Opinion in The Australian

EMISSIONS AND CLIMATE CHANGE

One aspect of the program that increases financial risk to taxpayers is the apparent exclusion of issues around climate change. The consultation paper does talk about projects not increasing electricity emissions so that it misses the Government's apparent sector by sector approach of a 26 per cent reduction on 2005 levels by 2030. Given that the electricity sector is the only sector rapidly reducing emissions this would not be difficult. The sector by sector approach also does not account for the difficulty that other sectors will have in reducing emissions by 26 per cent and the obvious additional role that the electricity sector should take as the sector that can most cheaply reduce emissions.[9]

Energy and climate change are closely linked and not considering future action on climate change when considering which projects to underwrite increases the risk that the Government will underwrite an unviable project.

A solution to this is to require any fossil fuel generation project to fully offset their carbon emissions and for this offset to be paid for by the project owner. This will mean that fossil fuel projects will compete on an equal footing with non-fossil fuel projects. It will allow the Government to compare projects while taking account of potential carbon risks. This will decrease the risk to taxpayers.

DEMAND MANAGEMENT

Planned demand management projects are likely to be one of the cheapest ways to deliver reliability and security to the NEM, especially to commercial and industrial customers some of whom are currently the focus when AEMO needs to reduce demand. The Government's consultation paper explicitly talks about demand management but the way the paper then talks about how projects will be assessed seems to preclude the use of demand management.

It is recommended that the Government consider and promote to prospective providers how demand management can best fit within its program.

---

[8] *Williams v Commonwealth* ('*Williams*') (2012) 248 CLR 156.

[9] For example see what a sector by sector approach entails for agriculture in Grudnoff (2018) *Harming Farming: The cost to agriculture from the government's emissions reduction plan* http://www.tai.org.au/content/harming-farming-cost-agriculture-government-s-emissions-reduction-plan

DELIVERING FIRMED CAPACITY VERSUS NEW GENERATION

The Government should formally separate the supply of additional firm capacity from projects that increase competition by providing additional generation. These two separate issues could be provided by one project but the Government should make clear that projects need not provide both. This will allow projects like battery storage and pumped hydro, which can provide firming capacity but not additional generation, can still take part in the tendering process.

PROJECT SELECTION

The consultation paper is not clear on how projects will be selected. It goes into detail about project selection criteria but does not say how projects that meet the selection criteria will be ranked. The Government has indicated that the objective of this program is to reduce electricity prices. If this is true then presumably suitable projects will be ranked by how cheaply they can provide their firming and generation.

The Government should consider separating the two aspects of the program, firming capacity and additional generation, and then holding a reverse auction to find the cheapest projects. The reverse auction could be based on the successful ACT renewable energy reverse auction and the Emissions Reduction Fund reverse auction.

FIRMING CAPACITY

The electricity sector is transitioning to be increasingly dominated by intermittent renewable energy. Renewable energy is becoming cheaper and is now the cheapest form of new built generation. Renewables are likely to become even cheaper in the future.

The intermittent nature of wind and solar means that the electricity market will increasingly have little use for firm generation that cannot be quickly switched on and off. It is recommended that the program's definition of firmed power should include a requirement that the generation can be quickly switched on and off. This will reduce the risk that taxpayers will be left backing an unviable expensive failure.

ACCC RECOMMENDATIONS

Any successful projects should follow the ACCC recommendations from their recent Retail Electricity Pricing Inquiry.[10] These includes:

- Any project proponent that already holds more than 10 per cent of a single market should be excluded
- Projects should only get funding from year 6 to 15 with no projects getting funding in the first five years
- Projects should have at least three large customers locked in

[10] Australian Competition and Consumer Commission (2018) *Restoring electricity affordability & Australia's competitive advantage*, 11 July