Australian Government

Department of the Environment and Energy

Underwriting New Generation Investments

Public Consultation Paper

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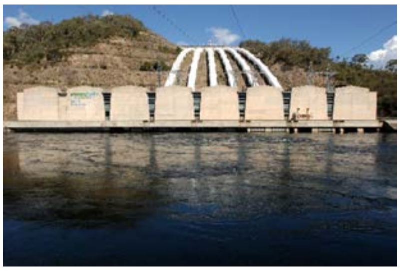

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INTRODUCTION

The Australian Government commissioned the Australian Competition and Consumer Commission (ACCC) to undertake its Retail Electricity Pricing Inquiry[1] to ensure the National Electricity Market (NEM) is a competitive one which delivers the best price outcomes for households and businesses.

The ACCC's overarching finding was that the NEM is not operating in the best interests of consumers and reform is needed. All regions in the NEM are highly concentrated which has contributed to a lack of competitive constraint in the wholesale market. The ACCC found that competition in the wholesale market is not working as well as it could and this has affected electricity affordability.

The ACCC recommended a package of changes to improve, among other things, competition in wholesale markets and reduce market concentration and barriers to entry by market participants, thereby encouraging investment in new generation across the NEM.

New, large-scale generation projects typically require considerable upfront investment and carry significant risk given the difficulty in predicting future wholesale electricity prices. This creates the desire for generators to enter longer-term contracts to de-risk the investment and lower financing costs. However, the ACCC received representations from a number of project developers, smaller retailers and large C&I customers, that there was a potential market failure with respect to financing projects that will deliver new lower cost electricity generation. These participants cited an inability of certain customers to commit to longer-term contracts and/or insufficient credit-worthiness as the main reasons why they have been unable to finance projects.

Customers' preference for shorter-term agreements, up to around five years, reflects concerns about locking in electricity volumes when future loads are uncertain. This is especially the case for smaller retailers that typically have a high degree of customer churn. However, this timeframe is typically insufficient to underwrite most electricity generation projects. The ACCC noted that, to obtain financing on this timeframe, the developer would need to charge a much higher price per MWh in order to recoup its investment over the shorter period, and that price would be uncompetitive.

This results in a market failure where some large industrial or manufacturing customers with high electricity needs are unable to invest in, or sponsor, low-cost sources of generation in the same way that major electricity retailers or some large corporate customers have done.

Large vertically integrated generators and retailers are often able to finance new generation projects through leveraging their existing generation portfolio and customer base. However, for individual generation projects, debt investors typically require foundation customers with longer term electricity agreements in place in order to finance the project.

The barrier to entry for new independent generation further entrenches the high levels of concentration in generation ownership. The ACCC found that high market concentration, in part, leads to high wholesale prices which is a key contributor to increasing bills.

To address this market failure, the ACCC recommended the Government develop a program to underwrite new generation projects that meet specific criteria (Recommendation 4).

[1] ACCC, Restoring electricity affordability and Australia's competitive advantage: Retail Electricity Pricing Inquiry—Final Report, June 2018

Box 1 – ACCC Recommendation 4

The Australian Government should operate a program under which it will enter into low fixed-price (for example, $45–50/MWh) energy offtake agreements for the later years (say 6–15) of appropriate new generation projects which meet certain criteria. In doing so, project developers will be able to secure debt finance for projects where they do not have sufficient offtake commitments from [Commercial & Industrial] customers for later years of projects. This will encourage new entry, promote competition and to enable C&I customers to access low-cost new generation.

The program should operate for at least a four-year period, with support provided for qualifying projects. To qualify, a project proposal must:

- have at least three customers who have committed to acquire energy from the project for at least the first five years of operation
- not involve any existing retail or wholesale market participant with a significant market share (say a share of 10 per cent or more in any NEM region)
- be of sufficient capacity to serve the needs of a number of large customers
- be capable of providing a firm product so that it can meet the needs of C&I customers.

The Government shares the ACCC's concerns regarding current levels of competitiveness in the wholesale market and the impact it is having in increasing prices for consumers. In addition, the Government remains concerned about the level of firm or firmed capacity that is available in the market.[2]

In their most recent Electricity Statement of Opportunities (ESOO), the Australian Energy Market Operator (AEMO) identified that the NEM needs an additional 1160 MW of 'firming capability' to enter the market in the next decade to meet the reliability standard.[3] The ESOO is a forecast to help inform the market about potential future supply gaps to allow time for a market response. Removing barriers that limit the ability of all but the largest participants in the electricity market to respond to future supply gaps can improve competition and help bring wholesale prices down. The Government supports the ACCC's recommendation in principle and under the current circumstances in the market sees a role for Government in underwriting new firm or firmed generation projects to increase competition.

As with any market intervention, this program carries risks. These include incentivising over-investment in generation assets, distortion of debt markets for generation investment, and transferring investment risks from investors to taxpayers, who do not have the ability to manage them. In addition, intervention also risks a dampening effect on investment. These risks need to be carefully managed through program design.

[2] Firm capacity is generation which can be available when needed, for example coal- or gas-fired generation or wind generation with onsite storage such as batteries. Firmed capacity would encompass variable generation such as wind or solar that is contracted with a certain proportion of firm capacity across the grid.
[3] AEMO, 2018 Electricity Statement of Opportunities – August 2018. AEMO state: "Firming capability can be dispatched to maintain balance on the power grid. It can include generation on the grid, storage, demand resources behind the meter, flexible demand, or flexible network capability".

This consultation paper outlines a preliminary program design to achieve the intent of the ACCC's recommendation. Submissions are being sought to inform the final design of the program.

PROGRAM OBJECTIVES

The program's primary objective is to reduce wholesale electricity prices through increased competition and supply in a manner that:

- assists commercial and industrial customers access affordable energy supply arrangements
- improves reliability and security by increasing the level of firm and firmed capacity in the system
- minimises costs to electricity consumers and taxpayers

The design of the program will also consider interactions with other initiatives to improve reliability and security, including the proposed Retailer Reliability Obligation and AEMO's Reliability and Emergency Reserve Trader.

The additional generation supply will be enabled by the Government attracting investment in new generation capacity. The program will offer a level playing field to enable the best and lowest cost generation options to be supported—this includes consideration of 'greenfield' or 'brownfield' projects as well as upgrades or life extensions of existing generators.

The firmness of the additional supply does not need to be provided through the supported generation project, but could be through any combination of generation, storage, demand response and financial contracts packaged through a retailer or other brokerage service provider.

It is the Government's intention to target projects that would have occurred in the absence of the market failure identified by the ACCC and that could maximise impact on competition and price. In order to minimise costs and risks to taxpayers, the program will be revenue neutral and will recover administration costs from project proponents.

MECHANISMS FOR ATTRACTING INVESTMENT

The ACCC recommended using offtake arrangements that guarantee a minimum fixed-price beyond typical contracting periods (for example years six to 15) to encourage new entry, promote competition and to enable commercial and industrial customers to access low-cost new generation.

While the Government agrees with the need to address the market failure the ACCC has identified, it is open to looking at options beyond the recommended mechanism.

The Government is focussed on attracting new investment in firm or firmed generation to increase competition and reduce electricity prices. To achieve this, the Government invites proponents and other interested parties to propose mechanisms that they consider would work best to unlock investment which could be considered. Examples of mechanisms that could be considered in the final program design are listed below. This is not an exhaustive list.

Providing a floor price

As recommended by the ACCC, under this mechanism, the Government would agree to a floor price with the generator which could be enacted after year five. This agreement is a final fall back option to allow the generator to service its debt agreements and in doing so, allow the project to go ahead with only shorter term energy offtake agreements signed with foundation customers. This option could be implemented as recommended by the ACCC or adjusted to be fit for purpose.

As the contract is only able to be enacted under certain situations, it effectively supplies a put option to the project proponent of the new investment. If the floor price is triggered, the Government would then pay the project proponent the difference when the spot price is below the floor price but the project proponent would keep the gains above the floor price. Further to the ACCC's recommendation, the Government could charge a premium or ongoing fee for this product.

Contract for difference

Under this mechanism, the Government and the project proponent would agree to a strike price which could be triggered after year five. The parties would then have a contract for difference where the Government would pay the project proponent the difference when spot price is below the strike price and the project proponent would pay the difference to the Government when the spot price is above the strike price.

As the generator would also be involved in the NEM spot market, this agreement would form a perfect hedge. To ensure only generation that is firm or firmed is targeted, these contracts would be different to many existing contracts for difference which are paid on a basis of electricity produced. For example the strike price could be on the basis of:

- a pre-specified and fixed volume of output, akin to existing 'flat' baseload swaps, or
- a particular load profile, akin to existing 'load following' hedges.

However, the Government is not involved in the spot market and would be exposed to the volatility of the spot market, which carries both upside and downside risks.

Cap and floor (Collar) contracts

Under this mechanism, the Government would provide an effective floor price on the sale of electricity received by a proponent and cap above which the proponent would pay the difference between spot price and the cap when the spot price exceeds this cap. This mechanism would have features similar to contracts for difference and floor prices, but could be designed to be more cost effective for taxpayers and therefore could improve the competitiveness of a proposal.

Government loans

Under this mechanism, the Government may provide a debt at competitive rates, and receive a rate of return to offset the costs of the program.

Capacity payments

Under this mechanism, the Government could support the generation projects by providing capacity payments for the availability of firm or firmed generation. These generation projects would then have a decreased exposure to spot market volatility as they would receive payment whether or not they are dispatched. Consideration would need to be given as to the extent to which a project using this mechanism would help address the market failure identified by the ACCC.

Alternative mechanisms

The Government is interested in stakeholder views on alternative designs and the extent to which they can achieve the policy intent. The Government is also interested in stakeholder views on potential interactions with other mechanisms to support sufficient capacity to deliver a reliable power system, such as the retailer reliability obligation.

All options for mechanisms to attract investment would need to be carefully designed to meet the Government's intention to target projects that would have occurred in the absence of the market failure identified by the ACCC and in order to not impose significant additional risks and costs on the Commonwealth and its taxpayers.

SELECTION PROCESS

Project selection criteria

The Government will develop project selection criteria to ensure projects supported deliver on the program objectives. The criteria could be made up of a combination of conditions that must be met in order to be considered (project eligibility criteria), and factors that could be taken into account when considering the competiveness of proposals under the program (project merit criteria).

Project eligibility criteria

The Government is considering the following conditions that must be met:

a) The project must be able to provide (either individually or in combination with other instruments) a firm electricity supply product which meets the needs of its customers

b) The project must demonstrate the lack of availability of financing or the extent to which financing costs are above those of other larger market participants

c) The project will be able move to Final Investment Decision within [X] years of the application date

d) The project would be unlikely to result in an increase in electricity sector emissions to a level that is more than minus 26 per cent of the sector's 2005 levels by 2030

e) The project enhances market competition as a result of:

    i. Being owned by, contracted with and operated by participants with limited or no market share; or

    ii. Otherwise, has contracts in place for most of the project's capacity to supply electricity to commercial or industrial customers at a price that reflects cost.

Project merit criteria

The factors that could contribute to the competitiveness of proposals the Government is considering include:

a) The ability for the project to demonstrate how it has arrangements in place to supply commercial and industrial customers, the length of time these customers are able to commit to a contract, and their creditworthiness

b) The extent to which the project would be commercially viable with access to more competitive financing and estimated long run costs would be less than estimated revenues

c) Impact on electricity market prices, such as through increased low cost total supply, particularly in markets with high prices and taking account of any second order impacts especially on potential market withdrawal

d) The impacts on reliability and security of interconnected electricity networks

e) The impact of the project and its financing mechanism on investment conditions in the market

f) Ability to demonstrate that the project will supply additional generation, including through ‘greenfield’ generation, ‘brownfield’ redevelopment and upgrades or life extensions of existing generation

g) Whether the additional generation is located in a region where the system operator has identified a future capacity need

h) Ability to demonstrate that the project would be otherwise unable to proceed without Government underwriting

i) Timeframes required to meet a final investment decision and certainty of implementation

j) Cost or financial risk to taxpayers

k) Ability to leverage project support from other sources, such as through State and Territory governments

l) The extent to which the project has progressed in finalising relevant state and federal planning approvals required to proceed and all necessary network connection, licensing and permitting approvals.

Proponent eligibility requirements

For projects that are selected, proponents will need to meet the specific project management requirements of the program. The Government is considering the following proponent eligibility requirements:

a) The project proponent agrees to strict timeframes for project delivery

b) The project proponent adheres to reporting and record keeping requirements of the program

c) The project proponent is a corporation to which section 51(xx) of the Constitution applies

d) Foreign investors are welcome to the extent they meet the criteria, subject to normal Foreign Investment Review Board approval

e) The project proponent is able to demonstrate the financial capability and commercial viability to deliver the project

f) The project proponent is able to demonstrate the technical capability of the new generation project

g) The project proponent is willing to agree to conditions of support under a contract, including, that over the life of the support agreement, the Government support would be withdrawn if the project ceases to meet eligibility requirements.

h) The project proponent agrees to cover the costs of assessing its application for funding

i) The project proponent agrees to pay any other fees or premiums required under the program

THE WAY FORWARD

The Government is consulting on proposed program design over a three week period ending 9 November 2018. There will be stakeholder round-tables in Sydney and Melbourne to share feedback and seek any clarifications needed ahead of providing any written submissions. Based on feedback provided through consultation, the Government will release initial program guidelines and invite proponents to nominate projects through an Expression of Interest (EOI) process open from December 2018 to January 2019.

The EOI process is intended to allow the Government to update and finalise its program guidelines to ensure that it is fit for purpose and able to deliver on the program's objectives. EOIs will not represent a decision gate and failure to submit an EOI will not necessarily preclude a proponent from participating in the subsequent Request for Proposal (RFP) stage where projects will be assessed against the program guidelines and criteria.

The EOI will ask proponents to bring forward key details of their project and outline how the project can demonstrate consistency with and merit under the criteria of the program guidelines. The Government does not intend for the EOI process to be an onerous one; much of the detailed evidence will only be required during the RFP stage.

After considering EOIs the Government will release updated program guidelines in January 2019 with finalised assessment criteria and the information proponents will need to allow projects to be assessed during the RFP stage. The Government will then invite proponents who have submitted an EOI and any other interested parties to submit proposals due in March 2019.

In submitting a proposal, the proponent may be required to enter into an agreement to provide an upfront payment to cover reasonable costs incurred by the Government in assessing its proposal and conducting due diligence. The Government will be considering appoint experts to provide advice on parts of the proposal. The Government may seek further information from the proponent regarding any aspect of the proposal.

Following the assessment of the formal proposal, a recommendation would be made to the Energy Minister on whether the project should be supported. The final decision on project support will be made by the Government. The Government intends to commence support at the beginning of financial year 2019-20.

The program will remain open for a period of four years. The Government will announce further rounds requesting RFPs on future dates over the remainder of the program.

Questions for Stakeholders

Questions:

1. Which option, or combination of options, will best achieve the program objectives?
2. Are there any alternative options, eligibility/merit criteria, and requirements that should be considered
3. What are the key risks in relation to energy markets and investment associated with the various options?
4. Please provide additional feedback that may impact the Government's program

Making a submission

Stakeholders are invited to provide written submissions on the consultation paper by close of business on **9 November 2018**.

All stakeholder submissions will be published unless stakeholders have clearly indicated that a submission should remain confidential, either in whole or in part. Electronic submissions are preferred and can be sent to the Department of the Environment and Energy at UnderwritingNewGeneration@environment.gov.au

Those who wish to provide hard copies by post may do so by addressing their submissions to:

Energy Division – Underwriting New Generation Investment Submission
Department of Environment and Energy
GPO Box 787
Canberra ACT 2601

Should you have any queries or wish to indicate interest in participating in a stakeholder round table, please contact: UnderwritingNewGeneration@environment.gov.au