



Ms Chloe Hicks
Director, Energy Infrastructure and Zones
NSW Department of Planning, Industry and Environment

Via email: rez@planning.nsw.gov.au

30 April 2021

Dear Ms Hicks

Central-West Orana Renewable Energy Zone Access Scheme Issues Paper

PricewaterhouseCoopers (**PwC**) welcomes the opportunity to provide feedback on the NSW Government's Central-West Orana Renewable Energy Zone Access Scheme Issues Paper. PwC's Infrastructure Lead Advisory team provides strategic, commercial and financial advisory services to a wide range of energy market participants, including renewable energy developers, network service providers, institutional investors financiers and government bodies.

Several of our clients have expressed concern about the implications of uncertainty, increased curtailment and marginal loss factor (**MLF**) deterioration that have been observed in parts of the National Electricity Market (**NEM**). These implications include reduced revenue, delays to the connection and commissioning processes, contractors exiting the market, increased connection costs, greater uncertainty and risk leading to increased costs of capital, and reduced investor appetite in the sector.

PwC supports the NSW Government's Renewable Energy Zone (**REZ**) initiative as a means of addressing some of these challenges. The initiative has the potential to increase certainty for market participants and promote ongoing investment in renewable energy in NSW. We expect that this will lead to the lowest cost electricity for NSW consumers, contribute to the successful transition from NSW's retiring coal-fired generator fleet, and ultimately help achieve the NSW Government's net zero target by 2050.

In this submission we provide our observations on each of the proposed access scheme models and their ability to deliver on the access scheme objectives (as stipulated in the Issues Paper). We also identify key risks that should be considered as the initiative evolves.

In formulating our observations, we have assessed each of the proposed access scheme models against the evaluation criteria in the Issues Paper, namely:

1. Greater certainty and lower costs of capital for generation and storage investors;

PricewaterhouseCoopers, ABN 52 780 433 757

One International Towers Sydney, Watermans Quay, Barangaroo NSW 2000, GPO BOX 2650 Sydney NSW 2001
T: +61 2 8266 0000, F: +61 2 8266 9999, www.pwc.com.au

Level 11, 1PSQ, 169 Macquarie Street, Parramatta NSW 2150, PO Box 1155 Parramatta NSW 2124
T: +61 2 9659 2476, F: +61 2 8266 9999, www.pwc.com.au

Liability limited by a scheme approved under Professional Standards Legislation.

2. Efficient investment in and utilisation of the REZ Shared Network;
3. Timely implementation;
4. Limited administrative and enforcement burden for REZ Administrator;
5. Minimal intervention in existing energy and contract markets; and
6. Coexists with proposed national reform.

Based on our assessment of the benefits and risks associated with each of the proposed access scheme models, we prefer Option 1. Detailed commentary on the benefits of each of the options, as well as risks which we believe should be considered during further stages of scheme design and implementation, are presented below.

Option 1 - Limited physical connection

Based on our assessment of Option 1 against the evaluation criteria, the following are the key benefits of Option 1:

- Option 1 most closely resembles existing shared network access arrangements. This will provide continuity to developers, investors and financiers to assess a project's risk profile, potentially resulting in superior cost of capital outcomes relative to Option 2A and 2B.
- Option 1 is the simplest for developers, investors and financiers to quantify risks and price access rights, further contributing to cost of capital reductions.
- While the risk of curtailment is relatively higher than Option 2A and 2B, a connection cap set based on consideration of the solar and wind resource profiles within the Central-West Orana REZ area and the ability for storage to manage curtailment, is likely to yield an access scheme with significantly less curtailment risk than a connection to the existing shared network.
- Option 1 is the least administratively complex for both the REZ Administrator and generators and will be relatively quick to implement. This is important if the NSW Government continues to target achieving a 'shovel-ready' Central-West Orana REZ by the end of 2022.
- Option 1 can co-exist with a contracts market that re-allocates access rights to the REZ Shared Network. The contracts traded in such a market would be designed by REZ access right holders to reflect specific market needs and preferences. A market-led solution could be more efficient and flexible relative to the binary offering (i.e. Tier 1 and 2 access rights only) under Option 2A and 2B. If necessary, contracts could be reported and centrally cleared (similar, for example, to the regime that applies to certain OTC derivatives in Australia)

In addition to the above listed benefits of Option 1, the following risks should be considered during future stages of detailed implementation design to ensure that the scheme objectives are achieved:

- In the event that the overall connection cap is lower than that which may have been achieved under either Option 2A or 2B, this may lead to inefficient outcomes for NSW electricity consumers through underutilisation of the REZ Shared Network and for REZ generators to the extent the cost of their access rights does not reflect the benefits of Option 1 access. An efficient connection cap will need to consider REZ generator willingness to bear (and manage) their own constraint risk within the REZ Shared Network, relative to the cost of the access rights and the

reduction of constraint risk that Option 1 access achieves. This information could be sought from potential developers in the REZ to inform how the overall connection cap (and sub-caps) are set.

- Generic network access shape assumptions being applied to each technology class may lead to inefficient REZ Shared Network utilisation and market outcomes. While we support shaping of access rights as a key measure to influence the technology mix within the REZ, there are likely to be variations in the energy resource (particularly for wind projects) and the dispatch strategy amongst access right holders. Where a predetermined access right shape prevents a generator from dispatching, competition in the NSW electricity market may be reduced. Site and technology specific profile information could be requested from developers when applying for access rights to better inform likely generation profile shapes within the REZ to optimise utilisation.

Option 2A and 2B - Financial compensation models

Based on our assessment of Option 2A and 2B against the evaluation criteria, the following observations represent benefits of Option 2A and 2B:

- Option 2A and 2B are likely to lead to greater investor certainty for Tier 1 access right holders (given firmness of access to the REZ Shared Network) relative to Option 1. However, firmness within the REZ Shared Network may be of limited benefit if there are offsetting risks of constraint outside of the REZ.
- Where Option 2A and 2B yields a larger number of access right holders, and therefore a higher number of connected generation and storage projects, this may be perceived as more closely resembling the existing open access regime. However, as noted above, setting the connection cap in Option 1 could also be informed by developer preferences.
- The division of access rights into Tier 1 and 2 gives developers, investors and financiers with different risk-reward preferences and tolerances, resulting in greater choice in how they invest in the Central-West Orana REZ.

In addition to the above listed benefits of Option 2A and 2B, we believe that the following risks should be considered during future stages of implementation to ensure that the scheme objectives are achieved:

- The additional scheme complexity will likely make valuation of access rights and quantification of the risk profile more challenging for developers, investors and financiers. As a result, further perceived improvements to cost of capital of Tier 1 access rights beyond those provided by Option 1 may not be realised.
- It will be difficult for developers, investors and financiers to forecast Tier 2 cash flows and to value Tier 2 access rights, unless potential Tier 2 access right holders are given full transparency of the distribution of Tier 1 and 2 capacity in the Central-West Orana REZ by technology class and NEM trading interval. Further, it is unclear which types of constraints (e.g. thermal, voltage stability, transient stability, oscillatory stability, etc.) within the REZ Shared Network will trigger compensation by Tier 2 access right holders where Tier 1 generation capacity is

constrained off, and how these constraints will be causally linked to the activity or bidding behaviour of individual Tier 2 access right holders. Compensation outcomes for Tier 2 access right holders may also be inequitable if shared on a pro rata with energy dispatched, rather than on a causer pays basis. Finally, trading of Tier 1 and 2 access rights may create further uncertainty for Tier 2 access right holder cash flows. If expected cash flows for Tier 2 access rights cannot be reliably forecast, this will limit the bankability of these products.

- Subject to the access rights allocation mechanism and any target volume of Tier 2 access rights to be allocated, the market-clearing value of Tier 2 access rights could be zero or negative, effectively requiring the NSW Government to give away Tier 2 access rights or pay for Tier 2 access right holders to enter the market. Further, Tier 2 access rights could introduce a level of speculation into the market with longer term adverse outcomes (e.g. insolvency of REZ generation or storage assets).
- Flat 24-hour access rights provided under Option 2B will inefficiently utilise the REZ Shared Network and provide for less influence over the technology mix within the REZ.
- Both Option 2A and 2B entail greater administrative and operational complexity than Option 1 for both the REZ Administrator and generators. This complexity may increase operating and transaction costs for all parties, ultimately leading to higher cost outcomes for NSW electricity consumers.

Access scheme general observations

Quantifiability of access right benefits

For an access scheme to yield the cost of capital outcomes desired under the access scheme evaluation criteria, the benefits in terms of constraint and MLF certainty (both from factors within and outside of the REZ Shared Network) must be quantifiable so as to demonstrate to investors and financiers the lower risk of connecting within the REZ relative to the existing shared network. We have previously noted that where an access scheme model entails significant complexity, the ability for investors and financiers to assess risk and quantify the benefits of REZ access is diminished and may not necessarily reduce the cost of capital of REZ generation and storage assets.

Technology profiles

While we agree with the proposition to base access rights profiles on technology specific shapes, we note that the application of generic access right shapes to each technology type may result in inefficient utilisation of the REZ Shared Network. This may occur as a result of dispatch limitations arising from variations in the solar and wind energy resource profiles across the REZ as well as variations in generator and storage dispatch strategy. A potential solution to this issue is to require developers to submit their indicative generation profile at one or more probability of exceedance levels, and using any on-site measurements and desktop simulation, as part of the access rights allocation process. Anticipated degradation over the term of the access rights should also be considered. It is envisaged that a combination of the most meritorious projects, which cumulatively make efficient use of the REZ Shared Network, contribute to power system security and reliability, and are likely to deliver a REZ dispatch profile that is well correlated to forecasts of the NSW operational demand profile, are selected.

Flows from generators outside of the REZ

Given the Central-West Orana REZ will be meshed network, it is anticipated that generators and other facilities outside of the REZ will influence and/or contribute to power flows on the REZ Shared Network elements. This could increase the risk of constraints on the REZ Shared Network. In order to prioritise access to the REZ Shared Network to REZ generators (who on the current proposal will be required to pay for preferred access to those network elements), the NSW Government could investigate, together with the Australian Energy Market Operator and TransGrid, whether there are feasible solutions for giving priority access to the REZ Shared Network to REZ generators (e.g. changes to the constraint equation set used by the NEM dispatch engine). Implementation of any solutions may need to consider grandfathering for existing generators outside of the REZ Shared Network and strike a balance between giving priority access to REZ generators and disincentivising ongoing investment under the NEM open access scheme which would continue to apply outside of the REZ. Further, National Electricity Rule changes may need to be considered to support this.

Impact on NEM bidding behaviour and on power purchase agreements

The detailed design of access right products should consider the impact on access right holder bidding behaviour in the NEM. Further analysis should be undertaken to consider whether the REZ access scheme could contribute to any market distortion in the broader NEM energy market.

In our experience, the majority of contracted power purchase arrangements (**Offtakes**) entered into by renewable generators in the NEM are 'generation following' (potentially, with minimum generation requirement set on quarterly, half-yearly or yearly basis). That is, this class of Offtakes are settled by reference to generation recorded at the project's revenue meter during each trading interval. There are also a number of Offtakes in the market that are settled against a prespecified generation profile, but to date these products have been less common, given the additional risk they pose to intermittent renewable generators. The impact of access right products on the Offtake market should be further investigated. For example, under Option 2A and 2B, a Tier 2 access right holder may under a standard 'generation following' Offtake be exposed to double settlement for its Tier 2 generation – first, under the Offtake, and second, to the extent Tier 1 access right holders are constrained off, as compensation to Tier 1 holders. Offtake products may evolve to factor in specific access right features that attach to the contracted generation. However, the appetite for Offtakes to accommodate changes and, where applicable, share or assume risks needs to be further studied before the detailed design of access rights is settled. This is particularly so if the aim of the NSW Government is to rely on the private sector Offtake market to support investment of renewables in NSW REZs.

REZ Shared Network costs

The Issues Paper provides that access right payments will be used to fund the costs of the REZ Shared Network assets, thereby reducing the network costs relating to these assets that are passed through to NSW electricity consumers. Although this will cause a direct reduction in network costs borne by consumers, the NSW Government should also consider the broader impact of the REZ access scheme on the total cost of electricity supply to consumers (which includes the wholesale price of electricity). We anticipate that access right costs borne by REZ generators will, in practice, be considered an additional 'connection cost'. Material increases in these costs that is not offset by the benefits

associated with REZ access will likely place upward pressure on the bid stacks of REZ generators, in turn placing upward pressure on wholesale electricity prices in NSW.

Sharing of connection infrastructure

To optimise overall connection costs in the REZ, the REZ Administrator could identify and notify relevant parties of opportunities for efficient sharing of partly or fully contestable connection assets (i.e. dedicated connection assets, designated network assets and identified user shared assets) or other facilities (e.g. plant for the provision of system strength services). This could be organised as an opt-in or opt-out scheme that is coordinated by the REZ Administrator. Importantly, access regimes that apply to contestable connection assets or other facilities will need to be aligned with the REZ access scheme to avoid inconsistency and unnecessary complexity.

Access rights pricing mechanism

There are various mechanisms available to price access rights, including auctions (including both uniform and discriminatory price auctions) and pre-determined pricing (which could vary by technology class and type of access right) for potential access rights holders. We believe that the impact of each pricing mechanism on the allocation of access rights, and on wholesale electricity prices must be considered further as part of the detailed design stage of the REZ access scheme.

Scheme administrative costs

We assume that the cost of access scheme implementation and administration will be recovered from REZ access right holders over time. Where an access scheme entails additional administrative, operational or transactional complexity, the cost of scheme implementation is likely to be increased relative to low complexity models. Additional costs that are passed through to REZ generators may make some projects uneconomic and/or ultimately flow through to NSW consumers in the form of higher wholesale electricity prices.

Criteria for the allocation of access rights

While the criteria for the allocation of access rights is not yet fully formed, we believe that consideration should be given to the development of a balanced criteria which does not bias award to large developers over smaller developers. For example, bias could inadvertently occur if eligibility for access rights requires a developer to show 100% upfront committed funding, or to agree to 'change in control' restrictions which commit the developer to both the development and long-term operation of its REZ generation or storage assets. This is because the business model adopted by many smaller developers in the NEM relies on their ability to sell-down their ownership interest and arrange funding commitment from equity investors and debt financiers, when the project is 'shovel-ready'. Rigid criteria may lead to the concentration of project ownership within the Central-West Orana REZ that is detrimental to effective competition or the efficient functioning of the REZ.



In addition to the feedback provided in this letter, we have included responses to select questions set out in the Issues Paper in **Appendix A**.

Thank you for providing industry an opportunity to comment on the proposed REZ access scheme. Please contact us if you would like to clarify or discuss any of the elements of our submission.

Yours sincerely,

A handwritten signature in black ink that reads "Katie Barnett".

Katie Barnett
Partner

A handwritten signature in blue ink that reads "Chris McLean".

Chris McLean
Partner

Appendix A – Question responses

| Question | Answer |
|------------|---|
| Question 1 | <p><i>If the CWO REZ Access Scheme delivers on the proposed objectives and benefits, how would connecting projects value connecting under this Scheme rather than elsewhere under current NEM network access arrangements? Should proposed benefits be given weightings, and if so, what should these be?</i></p> <p>We support the REZ access scheme objectives identified in the Issues Paper, noting that if delivered, they are likely to mitigate a number of recent challenges encountered by generators and network service providers in the NEM.</p> <p>The value to generators of connecting to the REZ Shared Network relative to the existing shared network will be a function of the quality of the renewable resource in the REZ, the incremental net project cash flows due to the access rights, and any improvement (or, if applicable, deterioration) in the project's cost of capital. Incremental net project cash flows represents the net effect of positive cash flow impacts (e.g. reduced curtailment, improved MLF, etc.) and negative cash flow impacts (e.g. access right acquisition costs, payment of compensation). In the event that the overall resource quality, cash flow and cost of capital impact is not seen to be positive and readily quantifiable by developers, investors and financiers, it would be less valuable for a generator to connect to the REZ Shared Network relative to the existing shared network, leading to a prioritisation of new connections outside of the REZ.</p> <p>We therefore believe that ensuring sufficient benefits, certainty and savings for projects connecting to the REZ Shared Network relative to connecting to the existing shared network should be given the highest weighting of the benefits identified, noting that a number of the remaining benefits will naturally result from these savings.</p> <p>If the REZ access scheme ultimately implemented delivers on the proposed objectives, positive cost of capital outcomes are likely result from objectives relating to greater certainty in relation to network constraints and MLF deterioration, which will reduce project risk and increase 'investability'. We therefore recommend prioritising benefits pertaining to increased competitive pressure on energy prices, reduced connection costs, improved certainty of connecting timing and ensuring sufficient benefits and savings for projects connecting to the REZ Shared Network, which will not be realised if the overall cost of network access in the Central-West Orana REZ exceeds connecting elsewhere in the existing shared network.</p> |
| Question 2 | <p><i>What, if any, additional benefits should the CWO REZ Access Scheme deliver to provide value to connecting generation and storage projects?</i></p> <p>The access scheme represents an opportunity to secure timely and cost-efficient access</p> |

| Question | Answer |
|------------|--|
| | <p>to a suitable and future-proofed area of the transmission network and influence the technology mix to ensure that net market benefits are maximised.</p> <p>As a result of lower technical and commercial barriers to entry applying to certain technologies, unbalanced technology trends have emerged in the mix of new generator connections in recent years. As existing thermal baseload generators continue to retire, achieving a balance between the various renewable generation, storage and system stability technologies will be critical to ensure long-term power system security and reliability.</p> <p>While the objectives identified allude to a delivering a diversified technology mix, we believe that this should form a unique standalone objective.</p> |
| Question 3 | <p><i>Do you agree with the proposed evaluation criteria? What, if any, additional criteria should be considered?</i></p> <p>We support the evaluation criteria included in the Issues Paper for assessing the shortlisted models.</p> <p>In addition to the listed evaluation criteria, PwC recommends the inclusion of the following criteria:</p> <ul style="list-style-type: none"> • <i>Impacts on the overall cost of supply to NSW consumers:</i> Although payments for access rights will contribute to REZ Shared Network costs and reduce the cost to consumers, there may be an offsetting effect if REZ generators seek to recover access right costs in the NEM energy market. An increase in wholesale electricity prices will eventually flow through to NSW consumer retail electricity prices. Therefore the effect of a REZ access scheme on the <i>overall</i> cost of electricity supply to NSW consumers (including both network charges and wholesale costs) should be considered. |
| Question 4 | <p><i>Which of the shortlisted models presented is preferred? Which best balances the need to deliver value to investors with the need to maximise utilisation of the REZ, and together achieve the access scheme's objectives? In particular, does the 'non-firm' connection right, under Option 1 provide sufficient certainty to investors to be of value? If it does not, is this outweighed by the increased utilisation of the REZ that would result under such non-firm connection rights?</i></p> <p>Based on our assessment of the benefits and risks associated with each of the proposed access scheme models, which are discussed in the body of this submission, we prefer Option 1.</p> |

| Question | Answer |
|-------------|--|
| | <p>Option 1 represents the least complex of the models proposed while also most closely resembling existing access arrangements. While the risk of curtailment is relatively higher than Option 2A and 2B, a connection cap set based on consideration of the various technology resource profiles within the REZ and the ability for storage to manage curtailment, is likely to yield an access scheme with significantly less curtailment risk than a connection to the existing shared network.</p> <p>Option 2A and 2B, while more complex, may lead to greater investor certainty for tier 1 access rights holders relative to Option 1. Option 2B is not preferred, as flat 24-hour access rights will inefficiently utilise the REZ Shared Network and provide for less influence over the technology mix within the REZ.</p> <p>We also note that while Option 2A and 2B ensure financial firmness to Tier 1 access rights holders and potentially quantifiable curtailment risk to Tier 2 access rights holders (although, as we say above in our letter, the ability to quantify these risks reliably will depend on the availability of information regarding the allocation and quantum of Tier 1 and 2 access rights), risk of curtailment and MLF reductions as a result of network connections outside the REZ is unchanged.</p> |
| Question 9 | <p><i>How should the allocation of access rights to hybrid (storage plus generation) assets be approached? What ‘shape’ of access rights would suit a hybrid asset? How could projects which use some of their maximum capacity ‘behind the meter’ be accounted for in determining the appropriate level of capacity for access rights coverage?</i></p> <p>The dispatch strategy of hybrid assets is likely to vary based on technology type, owner risk profile and operational strategy in relation to any broader asset or retail portfolio. Given this variation, we believe that hybrid assets should be able to bid in their desired access rights profile (by trading interval) as part of the access right allocation process.</p> <p>This process will also simplify access right allocation for REZ generators who intend to utilise a portion of their maximum capacity ‘behind the meter’ at certain times.</p> |
| Question 10 | <p><i>Is there a minimum term (in years) for which access rights would need to apply to benefit project finance?</i></p> <p>The proposed access rights in the Issues Paper (with the exception of Tier 2 rights under Option 2A and 2B) contribute to volume certainty for access rights holders. Price certainty will, however, need to be provided by an Offtake. In our view, the term of access rights should, as a <i>minimum</i>, track the term of an Offtake required to secure project financing. In our experience, this <i>minimum</i> term is typically 10 years, with an implied Offtake re-contracting exercise at year 11.</p> |

| Question | Answer |
|-------------|--|
| | <p>Other practical issues that need to be considered in informing minimum term include:</p> <ul style="list-style-type: none"> • What access regime will apply when access rights on the REZ Shared Network expire? Re-contracting of access rights also needs to be considered for generators with 30–50+ year project lives. Does the expiry of access rights need to occur on the same date for all REZ generators? • What protection will REZ generators be provided if amendments are made to the current network access frameworks in the NEM (e.g. under the post-2025 NEM market design initiative) during the term of the access rights? |
| Question 13 | <p><i>How would 24-hour access rights impact the value and efficiency of a financial compensation model? If access rights were defined as flat, 24-hour, access rights, would access right holders be incentivised to firm up their generation to make efficient use of the access rights (either technically, or commercially with sharing arrangements)? If not, what adjustments would need to be made to the access scheme design to incentivise this?</i></p> <p>While 24-hour access rights may incentivise access right holders to include firming capabilities, we believe that this may not represent the most efficient way to introduce firming capacity into the REZ and the NSW power system (e.g. an access right holder may not have experience or appetite to add firming). Also, incentivising entry and dispatch of firming capacity based on available REZ Shared Network capacity may not align with the level and type/duration of firming capacity that is required by the NSW power system.</p> |
| Question 19 | <p><i>How would the implementation of the financial compensation models impact existing contracts, such as PPAs? Could the compensation mechanism be appropriately accounted for in the design of new contract structures?</i></p> <p>Existing contracts which are likely to be affected by the financial compensation models include Offtakes and project finance documents (e.g. syndicated facility agreements). We believe that the following observations should be further considered as part of the access scheme selection process in regards to these agreements:</p> <ul style="list-style-type: none"> • Offtakes: <ul style="list-style-type: none"> – An Offtaker of Tier 1 capacity may seek to adjust upwards settled volume under the Offtake to cover constrained off generation that Tier 1 will be compensated for by Tier 2 access right holders (particularly if this generation is likely to occur during high price trading intervals). Alternatively, Tier 1 capacity may provide ‘firmer’ Offtakes whereby the generation volume settled under the Offtake is prespecified. The risks |

| Question | Answer |
|---------------------|---|
| | <p>associated with Tier 1 capacity entering into these arrangements would be controlled by the compensation payments from Tier 2 access rights holders.</p> <ul style="list-style-type: none"> – An Offtaker of Tier 2 capacity will have to protect against the possibility of double settlement for dispatched energy during trading intervals where Tier 1 is constrained off. Tier 2 could seek to carve out this volume from settlement under the Offtake, but the appetite for offtakers to accept such arrangements (without, for example, reducing Offtake price) is unclear. Alternatively, a REZ generator could seek to independently manage this risk by defending its Offtake position using a mix of Tier 1 and 2 capacity. • Project finance documents: <ul style="list-style-type: none"> – It is unclear whether project financing would be available against cash flows associated with Tier 2 capacity i.e. financiers may simply choose not to 'bank' any Tier 2 cash flows, but nonetheless consider the potential downside impacts due to compensation payments in their credit approval process. If Tier 2 capacity is financed, project financiers may introduce mechanisms to control for downside impacts e.g. cash reserving, review events, distribution tests and/or financial covenants. Where the future liabilities of tier 2 access rights holders are complicated to forecast and quantify, uncertainty will be introduced. We note that one of the objectives of the REZ access scheme is to reduce the cost of capital available to projects in the REZ by reducing uncertainty. In the event that Option 2A and 2B introduce additional uncertainty for Tier 2 access right holders, the 'bankability' of these assets and cost of capital available will likely be compromised. |
| Question 21, 22, 23 | <p><i>How valuable is the ability to trade access rights, and in what circumstances would this be useful?</i></p> <p><i>To what extent would flexibility to trade access rights increase the value of access rights for their holders? How flexible and unrestricted would access rights trading need to be to provide value?</i></p> <p><i>Would the introduction of a central access rights trading platform be of benefit to access right holders? If so, why? If beneficial, then which party would be best placed to design, maintain and operate this trading platform?</i></p> <p>Tradeable access rights will be of value under a variety of circumstances, including changes of risk appetite as a result of a 'change in control' of the generator (i.e. change in investor preferences), refinancing or recapitalisation events, extensions to project operating life, periods of maintenance unavailability, and periods of low energy resource. Flexibility to trade rights as required and as available under these circumstances will provide additional liquidity and certainty to REZ project owners and</p> |

| Question | Answer |
|-------------|---|
| | <p>potentially provide for more efficient utilisation of the REZ Shared Network. If, however, trading is event driven, we anticipate the market to be relatively illiquid.</p> <p>A central access rights trading platform may reduce transaction costs, as well as support price discovery, transparency of trading volumes and trading credit risk management (i.e. clearing). Utilising established commodity/product trading platforms would be cost-effective (rather than creating one from inception). Consideration of access rights trading across REZ areas (or even regional reference nodes) could enhance liquidity and trading volumes.</p> |
| Question 24 | <p><i>For generation projects connecting to the REZ, how important is it that storage is required to purchase access rights (i.e. that total connecting storage capacity is limited)? If storage was not to be required to purchase access rights, how high is the risk of storage competing with (i.e. curtailing) generation dispatch?</i></p> <p>The need for storage to purchase access rights will depend on the level of correlation between the various technology resource profiles within the REZ and peak demand periods in NSW, when storage is likely to seek to dispatch to earn energy arbitrage revenue. Where the aggregate REZ generation profile is uncorrelated with peak demand periods, it is anticipated that there will be minimal competition between REZ renewable generation and storage for access to the REZ Shared Network. Where there is a high level of correlation relative to available REZ Shared Network capacity, congestion risk could be mitigated by ensuring that the REZ access scheme incentivises the creation of additional revenue opportunities for storage (outside of energy arbitrage), including in relation to the provision of bespoke services to REZ generators and/or to the REZ Shared Network or broader NSW power system.</p> |
| Question 34 | <p><i>If ‘use it or lose it’ provisions were introduced, how should the utilisation requirements be set/measured? What exemptions or concessions should be considered?</i></p> <p>We believe ‘use it or lose it’ provisions are necessary to encourage development and construction of projects in a timely manner and to prevent developers and investors from holding unused access rights for financial gain or to create artificial barriers to entry for competitors.</p> <p>We note that the risk that access rights are unused by recipients and subsequent utilisation requirements, depends upon the timing of access rights award during the development phase. We consider securement of land and receipt of development approval to be the minimum development milestone required before access rights can be awarded to minimise the likelihood that access rights go unused.</p> |

| Question | Answer |
|----------|--|
| | <p>The period between award of access rights and commercial operations date (COD), at which point it is assumed access rights are expected to be utilised, should be sufficient to accommodate remaining development and construction activities. It is likely that this period will vary based on project technology (e.g. wind farm development and construction typically exceeds that of a solar farm), we therefore recommend technology specific ‘sunset periods’ which do not inadvertently favour certain technologies.</p> <p>Access rights utilisation requirements should provide for sufficient flexibility for reasonable delays experienced. There are a number of potential ‘use it or lose it’ arrangements which we believe should be considered during further stages of the Scheme’s implementation, including:</p> <ul style="list-style-type: none"> • Establishing and pre-agreeing a set of acceptable circumstances under which a project’s COD may be delayed. These may include legitimate commercial and market based events which are beyond the control of project proponents. If project delays, and therefore access right utilisation, occur for any reason other than the pre-agreed set of circumstances, ‘lose it’ provisions may be exercised by the REZ Administrator / Consumer Trustee. • Imposing liquidated damages on project proponents who do not reach COD by a pre-agreed date, whereby the delayed project proponent must pay damages which make the REZ Administrator / Consumer Trustee whole until utilisation occurs. <p>Any ‘lose it’ provisions must adequately consider any costs contributed by the access rights holder to the REZ so as to avoid reduced interest in REZ participation as a result of the risk that access rights payments which contribute to REZ infrastructure are lost due to reasonable delays.</p> |