

## Submission form

Access Schemes are a key part of the NSW Government's work to coordinate and encourage investment in Renewable Energy Zones (REZ) and realise the objectives of the Electricity Infrastructure Roadmap and enabling legislation. The Central-West Orana REZ Access Scheme will be the first of its kind in the National Electricity Market.

The Department has published the Central-West Orana Renewable Energy Zone Issues Paper (the Issues Paper) to facilitate consultation on the access scheme models being considered for the Central-West Orana REZ. This form is for use by stakeholders who wish to make a submission on the Issues Paper to provide feedback to the Department. This form is not required to have your say on the Issues Paper - the Department also welcomes free form submissions.

## Submission response options

We encourage stakeholders to use this form to respond to the specific questions raised in the Issues Paper. This will help us interpret and incorporate your responses into our decision making process.

We also welcome free form submissions and responses instead of, or in addition to, this submission form.

Please email your submission form and/or free form response to: [rez@planning.nsw.gov.au](mailto:rez@planning.nsw.gov.au) with 'CWO REZ Access Scheme Issues Paper' in the subject line. Please identify if you would like your submission to be confidential or anonymous.

## Disclaimer

The Department encourages publication of submissions to build transparency in the decision-making process and ensure that a variety of views are understood by the public and relevant stakeholders.

Providing submissions is voluntary, is not assessable, and will not impact an entity's participation in, or be used in the assessment of, any future procurement or competitive process regarding the Central-West Orana REZ or other NSW Government programs.

All submissions will be made publicly available on the Department's website unless a submission author indicates a preference below for confidential treatment. In the absence of an explicit declaration to the contrary, the Department will assume that all information can be made public.

The Department may disclose appropriate confidential information provided by stakeholders to:

- the NSW Minister for Energy and Environment or Minister's office
- the NSW Ombudsman, Audit Office of NSW or as may be otherwise required for auditing purposes or Parliamentary accountability
- directly relevant Department staff, consultants, professional service providers and advisers
- other parties where authorised or required by law to be disclosed.

Participants should also be aware that provisions of the *Government Information (Public Access) Act 2009 (NSW)* may apply to any documents submitted (and information should be submitted on that basis) and to any summary report compiling key information and feedback.

Submissions may also be shared with the Australian Energy Market Operator, Australian Energy Market Commission, Australian Energy Regulator, the Energy Security Board, TransGrid, the Clean Energy Finance Corporation, Australian Renewable Energy Agency, Essential Energy, Endeavour Energy and AusGrid to better understand and respond to issues raised. Please make

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clear in your form response below or otherwise in your submission if you do not want your submission to be shared with the above parties.

## Submission type and contact details

Submission type	<input type="checkbox"/> Individual <input checked="" type="checkbox"/> Organisation <input type="checkbox"/> Other <a href="#">Click or tap here to enter text.</a>
Approving author name	Mark Waring
Organisation	WalchaEnergy
Approving author title	Director
Phone	[REDACTED]
Email	[REDACTED]
Stakeholder group	<input checked="" type="checkbox"/> Energy generation <input checked="" type="checkbox"/> Energy storage <input type="checkbox"/> Ancillary services <input type="checkbox"/> Electricity distribution provider <input type="checkbox"/> Transmission provider <input type="checkbox"/> Energy industry/market body <input type="checkbox"/> Financial institution of financial services <input type="checkbox"/> Consumer advocacy <input type="checkbox"/> Government <input type="checkbox"/> Individual <input type="checkbox"/> Other (please specify) <a href="#">Click or tap here to enter text.</a>

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### Confidentiality and submission publication preferences

Submissions may be published in whole or in part on the Department's website. Authors may elect for some or all of their submission to be confidential.

Would you like your submission to be confidential?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Some confidential submissions may be shared with the Australian Energy Market Operator, Australian Energy Market Commission, Australian Energy Regulator, the Energy Security Board, TransGrid, the Clean Energy Finance Corporation, Australian Renewable Energy Agency, Essential Energy, Endeavour Energy and/or AusGrid to better understand and respond to issues raised.  Would you like your submission to be kept confidential from these parties?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If published, would you like your submission to be anonymous and personal details redacted?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

**If you do not want your personal details or any part of your submission published, please state this clearly in your submission. We may be required to release the information in your submission in some circumstances, such as under the *Government Information (Public Access) Act 2009*.**

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### Questions

The fillable fields for answers to these questions will expand to accommodate the length of your response.

#### 1. Objectives and evaluation

<b>Question 1:</b> 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?	No comment. Walcha Energy is developing outside of this REZ.
<b>Question 2:</b> What, if any, additional benefits should the CWO REZ Access Scheme deliver to provide value to connecting generation and storage projects?	No comment.
<b>Question 3:</b> Do you agree with the proposed evaluation criteria? What, if any, additional criteria should be considered?	Yes

#### 2. Access scheme models

<b>Question 4:</b> 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?	Option 1 – see freeform response point 2
<b>Question 5:</b> Are there other access models that you consider would be superior to the shortlisted models in this paper? If so, what are these models, and what are their strengths in comparison to the shortlisted models?	Enhancements to Option 1. See freeform response point 2
<b>Question 6:</b> How could the characteristics of either Option 1, 2A or 2B be adjusted to improve them in a manner that achieves the access scheme's objectives?	Enhancements to Option 1. See freeform response point 2 Simplicity is most important as the grid will subsequently be further augmented.
<b>Question 7:</b> Characteristics such as more granular access rights (for example, rights defined in five-minute intervals) and tradeable rights can provide flexibility to access right holders, but also make the access scheme more complex. How should the trade-off between flexibility for access right holders and simplicity of the access scheme be assessed?	Enhancements to Option 1. See freeform response point 2

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Which better achieves the access scheme's objectives?	
<b>Question 8:</b> If not nameplate capacity, what is the appropriate level of capacity that should be used to determine requirements for access rights coverage that would better achieve the scheme's objectives? If a Probability of Exceedance (POE) value is used, what process should be used to verify this?	This needs to be assessed considering the mix of solar and wind. Walcha Energy runs a spreadsheet incorporating 10 years of wind data and solar data to instantly assess the curtailment caused by the quantities of each resource developed. At sites we have studied, the curtailment with nameplate installed capacity of 150% relative to grid entry capacity is as low 2% with an optimal mix of wind and solar.
<b>Question 9:</b> 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?	This depends on the functional purposes and strategy adopted for the storage. Each proposal has to be evaluated on its own merits.
<b>Question 10:</b> Is there a minimum term (in years) for which access rights would need to apply to benefit project finance?	Yes

## Option 1: Limited physical connection model

<b>Question 11:</b> Under Option 1, connected generation capacity could be capped above the capacity of the REZ Shared Network. How should generation and storage capacity be set or capped to optimise REZ Shared Network utilisation without introducing too much constraint risk?	See answer to question 8
<b>Question 12:</b> How could network capacity be allocated between different generation types? Should it, for example, be based on a particular, pre-defined generation profile ("shape") for different types of generation technologies?	See answer to question 8.

## Option 2A and 2B: Financial compensation models

<b>Question 13:</b> 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?	We do not support the financial compensation model
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<p><b>Question 14:</b> Would currently available information, including solar and wind forecasts for corresponding Tier 1 generators, be sufficient for Tier 2 access right holders to make a reasonable assessment of the risk of being constrained off? Or would additional data need to be available to achieve this?</p>	<p>This depends on the extent of wind monitoring available for the localities.</p>
<p><b>Question 15:</b> With reference to Appendix B, to what extent should curtailment (and therefore the compensation mechanism) take bid price or market settlement price into account? In particular, what would be the downside to limiting compensation to only the bids from Tier 1 access right holders that are below the market settlement price?</p>	<p>Walcha Energy does not support financial compensation models.</p>
<p><b>Question 16:</b> In what ways could the proposed models and compensation mechanism design result in changes to the bidding strategies of Tier 1 and Tier 2 access right holders? Would this be expected to have a material impact on the NSW market?</p>	<p>Walcha Energy does not support financial compensation models.</p>
<p><b>Question 17:</b> There could be circumstances in which the revenue earned by Tier 2 access right holders will not equal the revenue lost by the Tier 1 access right holders through subsequent curtailment. This includes instances of intra-REZ constraints, and when MLFs for Tier 2 generators are systematically lower than for Tier 1 generators. What are the other circumstances, if any, in which potential 'compensation inadequacy' may occur? How material is this risk for Tier 1 access right holders in comparison to the open-access regime?</p>	<p>Walcha Energy does not support financial compensation models.</p>
<p><b>Question 18:</b> Does this Issues Paper identify the key risks associated with the Financial Compensation Models? Can the risks be sufficiently managed through the design features of the models and the proposed compensation mechanism referred to in this Issues Paper?</p>	<p>No. See freeform response point 2, paragraph 4.</p>
<p><b>Question 19:</b> 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?</p>	<p>Walcha Energy does not support financial compensation models. It would be a mistake to assume the opinions on this will cover the reality that will eventuate. This is just one of many complexities that it would be better to do without.</p>



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### Other models considered but not progressed

<p><b>Question 20:</b> The NSW Government is not proposing to progress the Limited NEM Bidding and REZ Locational Marginal Pricing models further at this time. Are there elements unique to these two models which should be considered for integration into the models that have been shortlisted?</p>	<p>No. It is right not to progress them.</p>
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### 3. Access scheme design issues

<p><b>Question 21:</b> How valuable is the ability to trade access rights, and in what circumstances would this be useful?</p>	<p>See freeform response point 5.</p>
<p><b>Question 22:</b> 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?</p>	<p>The establishment of a trading market should be avoided. Should an access rights holder be unable to proceed, the access should be offered for reallocation to holders of provisional rights as well as issued rights based on competitive bids.</p>
<p><b>Question 23:</b> 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?</p>	<p>No.</p>
<p><b>Question 24:</b> 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?</p>	<p>Low risk in arbitrage. Storage should be required to operate in accordance with an approved operation plan.</p>
<p><b>Question 25:</b> Would proponents of storage projects value firm access rights? In the financial compensation models, how would storage operations differ under Tier 1 versus Tier 2 access rights? How could an access scheme provide sufficiently flexibility for storage to connect in future as technology costs come down and the market evolves?</p>	<p>Walcha Energy does not support financial compensation models.</p>
<p><b>Question 26:</b> Would prevailing market signals provide sufficient and appropriate incentive for storage to operate in a manner that is aligned with the needs of the REZ? If not, then what REZ-specific types of incentive mechanisms should be considered to incentivise load and</p>	<p>See freeform response point 3. Proponents of storage should be required to propose their functional allocation of their storage prior to allocation and an operational plan updated periodically e.g. quarterly. Periodic opportunity to propose variations to their approved functional allocation plan could also be provided at the same time.</p>

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storage to consume electricity when the REZ Shared Network is congested?	Incentives should be provided by government using the range and types of incentives already established for development zones. This does not need to be locked into predetermined REZ rules.
<b>Question 27:</b> If an incentive mechanism for storage is implemented how should the costs of this arrangement be recovered?	See answer to question 26.
<b>Question 28:</b> How should the treatment of storage under the CWO REZ Access Scheme account for differences between long-duration storage and fast-firming technologies?	This does not need to be set out in advance. Proposals from developers of storage should be make their individual proposals and they should be evaluated on their merits in terms of aggregate contribution to the goals of the REZ.
<b>Question 29:</b> How should load be integrated into REZs and what types of incentives (if any) would be needed to attract load to connect to the REZ Shared Network?	See freeform response item 3 and question 26 above.
<b>Question 30:</b> Would additional incentives be necessary, beyond market-based commercial incentives, to encourage storage/load to increase their electricity use during periods of REZ network congestion?	Additional incentives are needed for the installation of loads where they serve the efficiency of the grid. The incentives are for government to determine. Both capital contribution and operational return solutions may be required. Participation in special low interest funding arrangements proposed for the REZ is one significant incentive,
<b>Question 31:</b> If an incentive mechanism for load is implemented how should the costs of this arrangement be recovered?	This is a matter for government, not for this consultation.
<b>Question 32:</b> How should the potential impact of changes in distribution load and embedded generation on the CWO REZ hosting/export capacity be incorporated into the REZ Access Scheme design and implementation?	Reductions of local loads will impact on export from the REZ if local loads are connected to the REZ substations. The REZ itself will inject money into the zone from renewable energy operating licence agreements and this is likely to increase local loads. The curtailment cap under enhanced Option 1 access will need a clause allowing downward variation of caps for this scenario and transferring this risk to the REZ Generators.
<b>Question 33:</b> Should non-scheduled generation and exempt generators be required to hold access rights under the CWO REZ Access Scheme, and/or should the total capacity of non-scheduled generation or generation from exempt	YES if they connect to REZ infrastructure. Otherwise see question 32 above.



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generators permitted to connect be capped? Is there an alternative approach to the treatment of non-scheduled generation or generation from exempt generators which should be considered?	
<b>Question 34:</b> If 'use it or lose it' provisions were introduced, how should the utilisation requirements be set/measured? What exemptions or concessions should be considered?	This needs to be considered. Reasonable time leeway must be allowed. Inadequately compliant development should lose the relevant part of its access rights which would be treated the same way as indicated at question 22.
<b>Question 35:</b> If an access right holder was required to return some or all of its access rights under the 'use it or lose it' provisions, how should these provisions be structured?	The offering of provisional access rights to incumbent generators or to applicants, rights that cannot be used unless and until released, provides the mechanism for dealing with this is noted at question 22.
<b>Question 36:</b> What impact do you consider capping of connection in a REZ, and the proposed access scheme models, will have on reducing the risk of volatile MLFs? Are additional measures warranted? If so, what measures?	No comment.
<b>Question 37:</b> What are your views on the appropriateness of the principles for managing the interface between the CWO REZ Access Scheme and common DCAs/DNAs? How could consistency between the CWO REZ Access Scheme and access policies on DCAs and DNAs best be achieved?	If this REZ is to proceed part of the REZ infrastructure between the hub and the main grid needs to be developed with funding from sources other than from the connecting Generators. This provides a key incentive for connection within the REZ.

## 4. Other coordination initiatives

<b>Question 38:</b> Would a process to coordinate connection assets for multiple projects be of interest? If so, what coordination initiatives would be of interest?	Walcha Energy has no comment for the CWSO REZ, however this is a process WalchaEnergy is seeking to drive in its WalchaLink project.
<b>Question 39:</b> Given the unique nature of connecting to coordinated REZs, such as the CWO REZ, the barriers to coordination of connection assets may be reduced. What further barriers to coordination will still need to be overcome, and how could this be achieved?	No comment
<b>Question 40:</b> What opportunities exist for the NSW Government to improve connection processes in the CWO REZ? What improvements would deliver greatest value?	Adopt the simplest access model.

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<b>Question 41:</b> What, if any, additional connection challenges could be created under the CWO REZ Access Scheme? How could these be mitigated?	No comment.
<b>Question 42:</b> What value could be delivered to generation and storage projects through centralised approaches to connection and system services, and what are the trade-offs? For example, would projects be willing to forego optionality around aspects of their project through requirements like minimum equipment standards, to reduce costs and the risk of potential delays to commissioning?	Centralised measures to support system strength (if needed) and to mitigate harmonics should be considered.

## 5. Open comment

<b>Question 43:</b> Are there any other matters you wish to raise relevant to this issues paper?	No comment
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