

Attachment A

Queensland Renewable Energy Zones (QREZ) Technical Discussion Paper Submission Template

Submission on behalf of:

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Consultation questions:

A fit-for-purpose model for Queensland

- 1.** Do you support the development of renewable energy zones (REZ) in Queensland? Why or why not?

Stanwell supports the development of renewable energy zones (REZs) in Queensland.

As a major provider of electricity to Queensland, the National Electricity Market (NEM) and large energy users throughout Australia, Stanwell is committed to providing affordable energy for today and into the future. As we continue to diversify our portfolio to develop cleaner energy resources, we are exploring new generation and storage technologies that will help reduce emissions while also ensuring Queensland's electricity supply remains secure and reliable into the future.

Stanwell sees the development of REZs in Queensland, if structured effectively, as a positive step by the Queensland government to encourage the growth of additional renewable energy supply in the State in areas close to current and future energy load centres. We consider that REZs will deliver best value when load and generation can be connected via transmission and operate flexibly to support delivery of government policies such as industrial decarbonisation.

Stanwell contends that REZs should also assist in guiding investment decisions by providing more certainty and increasing investor awareness of the importance of locating in uncongested parts of the network, reducing investment in sub-optimal parts of the network.

To support this, we are pursuing opportunities to:

- invest in the development of a portfolio of renewable energy projects in Queensland;
- develop a portfolio of large-scale storage assets (batteries) in both the Southern and Central proposed Renewable Energy Zones;
- include hydrogen as a part of our portfolio, with a detailed feasibility study currently underway investigating the development of a proposed large-scale electrolyser and liquefaction facility in Central Queensland; and
- investigate and provide sustainable, reliable network services that support the growth of renewable energy projects in Queensland.



It is Stanwell's intention is to use the areas surrounding its existing Tarong and Stanwell power stations as 'energy hubs' within each zone and we currently have a pipeline of renewable energy projects in progress which align with the proposed Central and Southern QREZs. For example, Stanwell has already entered into a long-term 346.5 MW offtake agreement with Clarke Creek Wind Farm that will enable us to provide clean, renewable energy to our customers and decarbonise our portfolio. The Clarke Creek Wind Farm is located approximately 150 km north-west of Rockhampton, and depending on the QREZ zoning, this would place the Clarke Creek Wind Farm in either the proposed Central or Northern QREZ.

2. Should Queensland adopt elements of the REZ frameworks from other jurisdictions? Please provide details.

Stanwell supports consistency across all jurisdictions within the National Energy Network (NEM) wherever possible, noting there will be some technical and access variations amongst regions. Stanwell also notes that REZ frameworks in other Australian jurisdictions are still evolving so adopting elements from other jurisdictions should be considered in this light.

We recognise that each jurisdiction within the NEM is facing similar challenges associated with generating and integrating higher levels of renewable energy into the electricity network, while simultaneously ensuring a reliable energy supply to support current and future demand. Stanwell notes that each jurisdiction has their own unique characteristics, objectives and challenges. Adopting elements of the REZ frameworks from other jurisdictions may not always provide the same benefits when translated cross-regionally. Stanwell suggests that careful consideration will need to be given to the application of other jurisdictional elements prior to being implemented within QREZs

Stanwell sees the potential benefits of consistent REZ framework principles across jurisdictions that allow for flexibility and variation amongst States where there are demonstrable jurisdictional commercial, economic, or operational interests or benefits. For example, we suggest this may include the adoption of an Independent Coordinator role similar to what has been done in New South Wales.

Attributes of the QREZ model

3. Do you agree with the desired attributes and outcomes? What, if any, additional attributes should be considered?

Stanwell agrees in principle with the desired attributes and outcomes of the proposed QREZ model.

We look forward to making further contributions as more detail and information becomes available.

We do however note there may be potential challenges associated with how infrastructure, access and connection will be assessed, coordinated and executed in order for the benefits and attributes of the QREZ model to be realised.

Please see also our response to Question 4 below.

Planning

4. Do you agree with this approach to planning declared REZ within the broader QREZ regions? Why or why not?

Stanwell agrees in principle with the approach that focusing renewable energy development in QREZs can expand connection of load to renewable energy,¹ coordinate investment in electricity transmission and renewable energy infrastructure and create benefits for local communities. However, we note consideration should also be given to co-location of load, generation and the use of flexibility to ensure that delivery of best economic outcomes can be achieved.

We consider that for these benefits to be realised, it is imperative that a detailed fit for purpose framework, along with an implementation and integration plan is developed that specifically outlines how infrastructure, access and connection will be assessed, coordinated and executed in each declared REZ, from both a load and generation perspective.

Stanwell believes the proposed targeted approach to QREZ planning focusing on delivering scale efficient investment in an integrated way, that if done well, will benefit and not limit potential development opportunities in some Queensland regions. For example, Central QREZ is likely to develop into a generation and transmission 'hub' for Queensland as power flows north and south along the network. It is therefore likely that more infrastructure, new and additional resources, and more power generation will be required in the Central QREZ. This will be in addition to what will be required to support the predicted growth in the Central Queensland region including new industrial loads from hydrogen and electrification of other industry sectors in that region, and to accommodate forecasted future growth.

Stanwell agrees that further detailed market-sounding and transmission planning for both load and generation, while valuing flexibility, is required to unlock this capacity in line with demand for clean energy which is expected to grow significantly in line with anticipated growth and subsequent energy demand in the Central QREZ region.

In addition, we believe that any planning would need to consider and develop mechanisms to ensure existing network attributes are not disrupted and can potentially be improved. Further details will need to be provided around system stability, access and order of priority, for planning of the QREZs.

5. Should Powerlink be the designated planning body to undertake analysis regarding development of declared REZ? Why or why not?

While noting there are limited details provided around the scope of the planning body at this time, Stanwell considers that an independent dedicated planning body is a preferable governance arrangement that would avoid both actual and perceived conflicts of interest with Powerlink's existing core business activities.

In addition, the successful delivery of QREZ will require consideration of impacts and implications for the broader energy system, beyond that of Powerlink's role and areas of expertise. This includes load, generation, valuing flexibility as well as transmission planning. Stanwell notes that other Australian jurisdictions, including New South Wales and Victoria, have explicitly and consciously established new entities, separate from existing transmission network service

¹ COAG Energy Council Energy Security Board Renewable Energy Zones Consultation Paper January 2021.

providers in order to maintain the independence of this role in their REZ frameworks and address any perceptions of conflicts of interest.

Stanwell acknowledges that under whatever arrangements are put in place, Powerlink will have a significant role to play in the REZ planning process. However, we contend the planning body requires independence from other business interests, dedicated resourcing, independent powers, a separate governance framework, and additional review provisions in order to operate effectively and transparently. Stanwell also suggests that any designated planning body needs to be independently funded and staffed in order to deliver on its remit and objectives.

In the event Powerlink is appointed as the designated planning body, ringfencing arrangements should be put in place to separate the operational and service delivery functions of Powerlink from that of the planning body.

Stanwell notes that even if appropriate ringfencing provisions are in place, there would need to be industry and public confidence that the designated planning body is separated from other network transmission servicing provisions and commercial interests.

6. If a separate entity were to be appointed the designated planning body, is a new or existing entity more appropriate?

If a separate entity were to be appointed as the designated planning body, Stanwell believes that the establishment of a new entity would be appropriate.

As noted above, this would help ensure the planning body's functions are independent of any other existing functions and responsibilities. Establishing a new entity would also help ensure industry and public confidence in the independence of the planning body functions.

7. How should the distribution network be considered in the QREZ model?

Distribution networks and entities will need to be considered as part of the QREZ framework. Embedded renewable generation is already occurring at the distribution level, and as such it should be appropriately considered. However, the lead role of the planning body will need to be explicit, with the distribution entities involvement being that of information provision and advice to that body.

Notice

8. Do you agree with this approach to community and market notice? Why or why not?

Based on the information available, Stanwell agrees in principle with the proposed approach to community and market notices. We would suggest that where notices flag potential new transmission infrastructure, it should also include indicative figures of potential future generation and storage capacity that would be enabled by that infrastructure investment. This information could include, where applicable, timeframes for staged development and the capacity increases that could result from each stage (and/or option).

Additionally, we would suggest that the notice period could also provide the opportunity for the planning body to conduct a cost/benefit analysis of potential VRE candidates and consider other viable options for designing and developing a REZ. This would send a stronger signal to the market and potential developers for future projects under consideration.

More information is required on whether the designated planning body should conduct a review of projects prior to deciding on which projects to connect, the size of the connection and whether the REZ business case will demonstrate the economic value across the supply chain, or only demonstrate return on the REZ investment.

9. Should the REZ notice be issued by the Queensland Energy Minister or the designated planning body?

Stanwell considers the designated planning body is the appropriate entity to issue notices for early market and community engagement. Given the designated planning body will be leading the engagement with stakeholders and conducting expressions of interest for REZ participation, having that body issue a REZ notice will ensure appropriate continuity of the planning and consultation processes.

However, clear and transparent processes and criteria need to be developed and implemented regarding how stakeholder feedback will be considered and accommodated (where applicable) by the designated planning body in developing its recommendation(s) to the Queensland Energy Minister to declare a REZ.

10. What is an adequate length of time for the market and community notice period and how far in advance of REZ declaration should this be conducted?

Stanwell suggests that the length of time for market and community notice periods could be approximately six months for an Expression of Interest and then business case development, with a potential option to vary the time depending on the opportunity stakeholders may or may not have had to previously engage with the proposal. We suggest the notice period should also be relative to the timeframe the draft proposal or plan is made available.

As noted in our response to Question 14 below, Stanwell considers the REZ Management Plan should be presented as a draft at the time of the declaration.

Stanwell strongly recommends that the designated planning body undertake meaningful engagement with stakeholders on the REZ Management Plan prior to its final approval and publication, and that the planning body be transparent with stakeholders as to how and why feedback was considered and accommodated (or not). This level of transparency is essential to ensuring confidence on the part of developers, communities and other stakeholders in the REZ development and decision process.

11. What level of information should be published in the notice?

Stanwell considers the level of information published in the notice should coincide with the Queensland Government consultation document and a notice issued outlining selected investigation areas proposed for declared REZ development.

The notice will need to provide initial details about the opportunity, potentially including (but not necessarily limited to):

- the proposed location alongside publication of a geographical map
- estimated generator and/or storage capacity

- indicative figures of potential future generation and storage capacity
- existing transmission infrastructure of interest
- potential for new transmission infrastructure (if applicable).

Additionally, where an Expression of Interest generates significant credible demand for new load, this should also be considered in the final decision on the capacity and mix of generation and storage in the REZ.

Please also refer to our response to Question 8.

- 12.** Are there benefits to aligning QREZ terminology with other jurisdictions? For example, the notice period is similar in intent to the NSW draft REZ declaration stage.

Stanwell is not concerned with aligning QREZ terminology with other jurisdictions. While the identification, assessment and declaration stages under NSW and Victoria’s REZ models are relatively consistent, it is inevitable that some terminology used in each respective jurisdiction will differ slightly due to jurisdictional terminology protocols.

Stanwell would suggest that where possible and appropriate, QREZ terminology should be consistent with that used in the Australian Energy Market Operator’s (AEMO) Integrated System Plan (ISP). This will help to ensure consistencies with nationally accepted market terminology and references.

Declaration

- 13.** Do you agree with the approach for declaration of REZ within the broader QREZ regions? Why or why not?

Stanwell agrees with the approach for declaration of a REZ within the broader QREZ regions. This process will allow for specific characteristics or requirements for those focused REZ areas to be appropriately accommodated in the final REZ Management Plan.

Further details of what will be included in the declaration notice will be of particular interest to Stanwell and other industry participants. We believe that the notice should include justification for the proposed mixture of generation and storage for the declared REZ, as well as a detailed cost/benefit analysis to provide confidence and clarity to the market, potential developers and other stakeholders.

- 14.** Should the REZ Management Plan published at the time of declaration be a final version based on engagement through the notice period or should this be a draft?

Stanwell notes that Figure 4 of the Technical Discussion Paper flags refinement of the REZ Management Plan “based on further community and stakeholder engagement”, yet section 3.4 of the paper is less clear on the proposed engagement level in relation to the REZ Management Plan.

Stanwell considers the REZ Management Plan should be presented as a draft at the time of the declaration. This will be the first opportunity for stakeholders to view and assess the REZ Management Plan, and raise any issues, concerns, or provide suggestions for improvement.

Stanwell strongly recommends that the designated planning body undertake meaningful engagement with stakeholders on the REZ Management Plan prior to its final approval and

publication, and that the planning body be transparent with stakeholders as to how and why feedback was considered and accommodated (or not).

This level of transparency is essential to ensuring confidence on the part of developers, communities, and other stakeholders in the REZ development and decision process.

15. Should declaration of a REZ include a bespoke planning framework within the declared area? What would be the advantage of this?

While further information is required on the intention and benefits of a ‘bespoke planning framework’, to allow for variations between REZ areas (within a broader QREZ region), Stanwell suggests that a series or set of technical connection standards be included in the REZ Management Plan. These should be designed to maximise regional development and manage resources within a REZ. Allocation could also be made for flexibility of those standards to account for area-specific characteristics and objectives where there are unique or specified reasons for derogation.

For example, a REZ in the Gladstone region would need to consider and enable industrial decarbonisation for that region, combining load and generation (and flexibility) as noted at Question 4. This would differ significantly from other REZ areas that are more focused on connecting generation.

Specification

16. Do you agree with the approach for developing the specifications for the declared REZ? Why or why not?

Similar to our response to Question 14, there appears to be an inconsistency between the process outlined in Figure 4 and what is proposed in section 3.5 of the Technical Discussion Paper. Figure 4 clearly presents a process where the draft REZ Management Plan is subject to further stakeholder consultation after the Queensland Energy Minister declares a REZ. However, section 3.5 of the Paper states *“Timing of the release of the final RMP is subject to the consultation questions but could occur at the time of declaration taking effect immediately or could be a draft RMP that is finalised soon after declaration.”*

As noted in our response to Question 14, Stanwell strongly recommends that the designated planning body undertake meaningful engagement with stakeholders on a draft REZ Management Plan prior to its final approval and publication.

17. Should the REZ Management Plan take effect from declaration of the REZ or should there be two-stage draft and final process?

Please see our response to Questions 14 and 16.

18. What level of information should be included in the REZ Management Plan?

Stanwell considers that to ensure all relevant or affected parties can prepare and plan for the implementation of QREZs, we support the inclusion of all the information related to the development and management of QREZs.

As noted in section 3.5 of the QREZ Consultation document, this would include but would not be limited to the technical requirements relating to participating generators, the approach to develop maximum capacity for proposed REZ assets (load, storage and generation), any applicable technical requirements, generation profile including potential storage requirements or technology capacity caps, hosting capacity, management of assets, access arrangements, management of allocated and unallocated capacity, market sounding process to support utilisation of REZ infrastructure, and all other information impacting or related to the development and management of a QREZ.

19. Should the designated planning body be responsible for developing and administering the REZ Management Plan?

Stanwell notes that although limited details are provided at this time, we anticipate the designated planning body would of course take into consideration relevant planning tools and strategies such as the ISP, and inputs from other relevant bodies such as AEMO.

20. What are the advantages or disadvantages of creating a new asset category for REZ?

Stanwell supports the creation of a new asset category for REZs with a provision that includes clear pathways and criteria for assets moving from one category to another, noting any new asset class would need to meet or exceed existing national performance standards.

Connections and access

21. Do you agree with the approach to connections and access? Why or why not?

While there is limited information available, Stanwell considers the current approach to connection and access under the REZ appears to be a reasonable model, particularly noting the consideration of the caps on capacity which should, as stated in the technical discussion paper, reduce issues in relation to congestion and constraints, while also allowing for efficient investment in required systems services such as system strength. However, we also recommend that load be explicitly considered as part of the approach to connection and access.

Stanwell believes there is currently insufficient detail in the technical discussion paper to do any real assessment of the practical implications, including the way the access model would or could accommodate transition from a radial network connection to a meshed network connection. This will be a particular challenge in the Central QREZ where there is more likely to be a higher intra-connection to provide for expected new industrial loads from hydrogen and electrification of other industry sectors in that region, and to accommodate forecasted future growth.

In addition, Stanwell notes the technical paper mentions the current national reform process underway to develop a congestion management model to complement REZs. As this process is still under development and a final model and potential rule change is not expected to be provided to Ministers until the end of 2022, this presents a risk to the design of the QREZ development and access model in the interim.

22. Does the proposed QREZ model offer sufficient benefits to connecting generators to encourage participation? If not, what additional benefits could the QREZ model provide?

With the limited detail available, it is likely the proposed model does offer sufficient benefits to connecting generations to encourage participation. However, we note this would be contingent on the final detail design of connection and access and the impacts of the congestion and management model currently under development as part of the national process.

23. Are there any circumstances where projects connecting outside declared REZ that materially impact the efficient development of the REZ should be restricted?

Stanwell does not believe access should be restricted to the network by a project developed outside a declared REZ and notes this issue may be addressed through the national transmission and access reform process.

Stanwell is mindful that restricting access is likely to go against the principle of an open access network – the model under which the NEM is currently operating.

Projects proposing to connect outside a declared REZ are likely to face challenges in terms of the technical requirements to connect, forecast marginal loss factors and the level of access available to be agreed to by the network provider (at a given connection price). This should be sufficient, in most instances, to act as a deterrent when connecting to inefficient areas of the network such as areas of high congestion or that are far from load centres.

Funding of REZ assets

24. Do you agree with the approach for funding REZ assets? Why or why not?

Further clarity will need to be provided on the commencement requirements of a REZ including the minimum thresholds to be met. This will aid understanding whether requisite funding would be required to provide initial support, or whether ongoing government incentives should also be considered, and how costs would be recovered. In cases where assets would pass the Regulatory Investment Test for Transmission, Stanwell supports a non-taxpayer funded, commercial enterprise within the REZ.

Stanwell notes that further consideration should also be given to a set of principles or criteria outlining how a REZ will proceed, and who bears the risk and associated costs, of underutilisation of a REZ.

25. Should the Queensland Government consider an alternate test for efficient REZ investment similar to NSW?

Please see our response at Question 24.

26. Should the access fee for generators also support community and employment outcomes (similar to the NSW model)? Why or why not?

Stanwell does not support access fees for generators being used for community and employment outcomes. Projects are currently responsible for obtaining social licence and this is generally achieved through community consultation, landholder arrangements and compliance with Queensland Procurement Policy (QPP), Best Practice Principles (BPP) and Local Content policies.

Social licence, community support and employment outcomes should continue to be project based and not delivered through a levy. Stanwell notes that many projects already include some form of community support fund or similar. Increasing the access fee may see funding explicitly provided under these projects diminish or cease entirely.

In the event an access fee is increased above what it otherwise would be to support community and employment outcomes, the incentive to invest in REZ located projects will also diminish.

Stanwell notes the need for transparency on access fees, given the connection charge to a project can be significant. It would therefore be helpful for developers to have clarity on; (i) the connection charge; and (ii) the basis of the cost build-up, early in their interactions with the transmission network service provider (TNSP).

Stanwell's preference is that electricity bills ideally should not be increased to fund other government initiatives.

Ongoing management

27. What could the Queensland Government do to improve or streamline project development, and at which stages of project development would this be most helpful?

Given the proposed timeframe for emissions reduction and the development of QREZs set by State and Federal Governments, Stanwell supports streamlining environmental and planning processes, and other approvals, including integrating the requirements for Federal and State approvals and timeframes to alleviate duplication of processes and minimise unnecessary costs and delays.

Supporting competitive industries

28. What policies or incentives (if any) should be offered to attract industrial load into declared REZ and how should load be integrated?

Stanwell considers that co-location of diverse sources of generation and load is likely to be the most efficient outcome for both network investment and individual consumers.

Where a bespoke planning framework is put in place as noted at Question 15, there may be scope to offer reduced transmission use of load (TUOS) fees to loads, reflecting the incremental efficiency improvement arising from their locational decision.

Stanwell considers that where the REZ is set up to encourage development and investment, then this should provide sufficient economic benefit without needing to add additional incentives.

29. How should large loads connected within declared REZ be encouraged to be flexible to improve overall system outcomes and lower total system cost?

Stanwell considers that the encouragement of large loads within a REZ should be market based with retail and or wholesale mechanisms providing the signal for improved overall system outcomes and lower total system cost.

Stanwell does not consider that this is a key design feature of REZs, and there are a number of existing processes aimed at increasing both the flexibility and transparency of load and improve system outcomes.

30. Should the Queensland Government establish economic precincts that provide special access to energy provided by declared REZ?

Stanwell considers economic precincts may potentially be a positive option where costs sharing models could be established. However more clarity around the definition and the benefits of an economic precincts would need to be provided.

31. What are the current barriers for large energy users to access renewable energy?

Stanwell considers incorporation into the network for large energy users and identifying the most efficient source of supply is currently a barrier for larger energy users to access renewable energy.

Stanwell recommends that the REZ planning framework be designed to address this barrier i.e., locating diverse sources of VRE and storage in areas close to industrial load.

Further consideration should be given to setting requirements around that ability to cater for those power requirements. For example, a continuous power source, or ramping sources depending on the industrial sector government is encouraging to develop in those areas.

Stanwell considers that a REZ should create a locational cost signal that is advantageous to the load and reflects the reduced cost of infrastructure build.