Ref: 20230928HP

28 September 2022

Mr Ashok Kaniyal
Senior Advisor
Australian Energy Market Commission
60 Castlereagh Street
Sydney NSW 2000

Dear Mr Kaniyal,

Essential Energy Submission - Enhancing investment certainty in the R1 process (ERC0363)

Essential Energy welcomes the opportunity to provide a submission in response to the Australian Energy Market Commission's (**AEMC**) *Enhancing investment certainty in the R1 process Consultation Paper* (the **Consultation Paper**). Essential Energy supports the intent of the rule proposal to both enhance the certainty and efficiency of generator connections.

Whilst we support elements of the proposal, we are concerned that some portions of the rule proposal may add complexity to the R1 process. As an alternative we recommend minor modifications, which represent incremental reform of existing connection processes and still align with the rule proponent's intent.

Our submission makes the following important points:

1. We agree that a lack of clear obligations in the National Electricity Rules (**NER**) can, in some instances, contribute to delays in the R1 application process. As part of the AEMC's next stage of analysis, we would support the further contemplation of timelines and well-defined quality metrics for R1 package assessments being introduced.
2. We recommend focusing on changes between the R0 and R1 stages for more efficient project transitions. New approaches should be aimed at proportional renegotiations and a focused sensitivity analysis of differences that occur between stages.
3. We are of the view that the current R1 process can delve into broad system security assessments by the market operator, slowing down processes overall. To speed up connections we recommend a model specifically tailored for connection impact assessments only.
4. We recommend against the insertion of a new independent expert into dispute resolution processes. Instead, we think disputes could be avoided through transparent and comprehensive reporting by Network Service Providers' (**NSPs**) and the Australian Energy Market Operator (**AEMO**). If disputes do occur, we suggest a tripartite consensus model could be a more efficient resolution method.
5. We do not support the proposal to introduce materiality guidelines and connection pathways for sub-divided R1 packages, noting the inherent complexity of self-assessing "materiality".

28 September 2023

Please find attached in **Attachment A** our detailed response to the specific questions raised in the consultation paper. We look forward to continued collaboration with the AEMC in the pursuit of improved connection outcomes to the network.

If you have any queries, please contact, Mr Anders Sangkuhl, Regulatory Strategy Manager on 0409 968 326 or via anders.sangkuhl@essentialenergy.com.au.

Yours sincerely

Hilary Priest
A/g Head of Regulatory Affairs

ATTACHMENT A: SPECIFIC RESPONSES TO QUESTIONS RAISED IN *THE **ENHANCING INVESTMENT CERTAINTY IN THE R1 PROCESS*** CONSULTATION PAPER

DO YOU AGREE THAT THE ABSENCE OF NER OBLIGATIONS ON PARTIES TO THE R1 PROCESS IS CONTRIBUTING TO POOR ENGAGEMENT AND PROCESS DELAYS?

Lack of clarity in obligations between AEMO and NSPs and information gaps

We agree that unclear obligations can contribute to delays in the R1 process. In addition, whilst there is some information publicly available on the documentation required for a complete R1 package, we agree that there is an absence of exact guidelines on how the quality of the R1 package will be assessed or the criteria against which it will be evaluated. This lack of transparency could, in some cases, contribute to delays if proponents are not sure exactly what is expected of them.

This ambiguity has the potential to hinder the advancement of projects. Given this, we support further consideration and analysis which clarify roles and streamlines the R1 application process.
We recommend the AEMC focus its analysis on changes that currently occur between the R0 and R1 stage. In this regard, it is worth noting the current process which is that after receiving an indication from the proponent that they are developing an R1 package, Essential Energy and AEMO currently already provide a list of required documentation to be submitted as part of the R1 package.

To efficiently and effectively reach R1 completion, proponents should explicitly be required to focus on these changes between the R0 and R1 stages. By doing so, this will assist in developing a more efficient and tailored R1 package which ultimately will make assessment easier and quicker.

Our expectation is that the structure of the R1 package should essentially remain consistent with that of the R0 package. Any updates should solely be based on the detailed design of the project. We recommend proponents use the same package structure to maintain clarity that clearly demonstrates the changes that have occurred between the R0 and R1 stages.

AEMO retuning initiatives

In our view, AEMO's current initiatives have not materially impacted the quality of the R1 packages submitted by proponents. For instance, the West Murray AEMO tuning practice has resulted in an 18-month delay for the connection of several projects. These delays have had considerable cost implications for these projects. Whilst the concept of "collective retuning" might be suitable for multiple generating systems causing a collective issue, it can also delay projects that are not part of the issue. Therefore, we would suggest that practises such as these could be amended to avoid blanket delays.

HOW DO CONNECTING PARTIES CURRENTLY MANAGE UNCERTAINTY REGARDING TIMEFRAMES FOR THE R1 MODELLING PACKAGE ASSESSMENT AND TO WHAT EXTENT DOES PUBLIC DATA (E.G. AEMO CONNECTION SCORECARDS) ASSIST?

We agree that there exists some uncertainty with respect to the timeframes for R1 modelling package assessment. The absence of explicit timelines can leave parties with a level of ambiguity. To bring increased transparency into the process, we agree that specified timelines for the R1 package assessments could be included within the NER.

At present, both NSP's and AEMO have been adhering to a review period of 20 business days for the R1 package, consistent with the R0 stage. And whilst, NER Clauses 2.9.1 and 2.9.2 do currently discuss timeframes for AEMO's response to the NEM registration application, they do omit specifics on the R1 assessment. It is worth noting that connecting parties are informally told by NSPs and AEMO about the expected R1 package response timeframe as the review progresses. Nonetheless, we support consideration on incorporating provisions into NER that deal with the R1 package

assessment explicitly. A more systematic approach to providing such updates could help manage expectations.

It is also worth noting that the timeframe for the approval of the R1 package is contingent on the quality of the submitted package. While this may appear somewhat intuitive, it can become a point of uncertainty when there are no established criteria to judge the 'quality' of an R1 package, as such clearly defined quality assessment metrics could be developed to address this.

Finally, we make the comment that the use of AEMO connection scorecards as a public data source is not a particularly effective tool for informing parties about the R1 process. This is because each NSP (both transmission and distribution) have unique requirements that may vary across jurisdictions. This means a one-size-fits-all scorecard may not provide a good indication of timeframes.

DOES THE EXISTING PROCESS FOR RENEGOTIATING TECHNICAL PERFORMANCE STANDARDS CREATE BARRIERS FOR ENABLING CONNECTING PARTIES TO NEGOTIATE EFFICIENT SYSTEM SECURITY AND RELIABILITY OUTCOMES?

In our view the current renegotiation process fails to proportionally renegotiate generator performance standards (**GPS**) based on changes from R0 to R1 stages. A more proportional approach is needed to streamline transitions and improve efficiency in negotiations.

Currently, any change in performance standards triggers a full re-assessment by AEMO, similar to the R0 stage. When this occurs, AEMO often requires a full update of the proponents GPS to adhere to the latest rules and requirements (which can be numerous depending on when the generator originally connected). This practice imposes extra requirements and delays for proponents.

In our view, efficiency could be better achieved by carrying out proportional renegotiations based on changes between R0 and R1, supported by a focused sensitivity analysis. Maintaining consistency in GPS versions under the version of the NER from when the generator originally connected could also be maintained.

DO YOU AGREE THAT THERE ARE PROBLEMS WITH THE WAY THE R1 PROCESS SEEKS TO RESOLVE EXTERNAL SYSTEM SECURITY ISSUES?

Essential Energy agrees that on some occasions the R1 process often devolves into a broad system security assessment rather than focusing on connection impact. The use of AEMO's large-scale 4-state model complicates the identification of specific causes for observed security issues. We recommend using a model tailored for connection impact assessment only, rather than a model designed for AEMO system security purposes. We also consider that AEMO's request for the proponent to consider the latest committed plants when developing their R1 package as redundant, as these plants have already included the R1 proponent in their assessments. Requiring the R1 proponent to consider changes in other nearby existing plants leads to duplicative efforts.

Finally we suggest that any retuning of a plant should be initiated after the R2 stage, rather than the R1 stage, to improve efficiency without disrupting the connection process. It is important to clarify that achieving high efficiency in performance standards, while desirable, is not the primary focus of the connection process. The connection merely needs to meet its agreed GPS.

HOW MATERIAL IS THE ABSENCE OF AN INDEPENDENT, EXTERNAL DISPUTE RESOLUTION PROCESS FOR THE EFFICIENT NEGOTIATION OF TECHNICAL PERFORMANCE PARAMETERS BEFORE REGISTRATION APPROVAL?

We do acknowledge that delays in resolving system security issues can be problematic. However, we do not support the proposal to introduce a new independent, external dispute resolution process.

It is worth noting that NSPs and AEMO already act independently when considering registrations. Therefore, in a situation where both organisations pause a registration for system security reasons, it is unlikely that an external fourth party's involvement would successfully resolve the dispute. The

reason being, for the fourth independent party to resolve the issue, they would need to effectively demonstrate that both AEMO and NSP were incorrect in their original assessment or have fundamentally misunderstood the NER. This could lead to adversarial and legalistic process.

Instead of focusing on an external dispute resolution process, we recommend that both the NSP and AEMO be required to provide a comprehensive, high-quality report that outlines the specific identified issues that require resolution. This report should include the raw data that led to the decision, thereby allowing the proponent to replicate the issue independently. This approach would empower the proponent either to rectify the issue or to counter the decision with robust evidence. We believe this could prove to be more effective in resolving disputes and promoting efficient negotiations rather than a more formalised dispute resolution mechanism.

WOULD THE PROPOSED TIMELINES PROVIDE SUFFICIENT CERTAINTY ABOUT THE DURATION OF THE R1 MODEL ASSESSMENT PHASE?

We support the proposed 20 and 30 business day timeline requirements for the R1 model, given that similar timelines are already in place under the NER for assessment processes.

However, it is worth noting, that like the R0 stage, the R1 application could be subjected to multiple rounds of review depending on the quality of the submission. Each review round essentially re-triggers the timelines, thereby prolonging the overall duration of the R1 assessment phase. Therefore, the mere presence of timelines does not guarantee efficiency or predictability rather the focus should be on the quality of response.

DO YOU AGREE WITH THE CEC'S PROPOSAL FOR MATERIALITY GUIDELINES, INCLUDING WHETHER THEY COULD APPROPRIATELY DEFINE MATERIALITY THRESHOLDS FOR THE CATEGORISATION OF CONNECTION TYPES?

We do not agree with the proposal for defining materiality guidelines, especially when it comes to setting thresholds for the categorisation of connection types. We acknowledge that the notion of "power system security" itself can be somewhat ambiguous. However, defining a specific "materiality threshold" can risk overlooking local characteristics of power system security. Factors such as location, asset types, technology in use, manufacturers involved, and current operating conditions make the security of a network a complex issue. As such, a one-size-fits-all criteria for materiality could become restrictive in some cases and too lenient in others.

In relation to AEMO's role, we think it is crucial to delineate between AEMO's responsibility to maintain overall power system security and its obligations to ensure that a new connection doesn't adversely impact that security. In our view, AEMO being tasked with creating materiality guidelines could conflate these distinct responsibilities, potentially leading AEMO to set criteria that make it even more challenging for proponents to secure endorsement for their R1 packages.

To address this concern, we encourage the AEMC to consider clarifying AEMO's role vis-à-vis maintaining power system security, particularly during the assessment of a new connection. Occasionally, AEMO may attempt to improve overall system security through the retuning of a specific connection, an approach that arguably is not required the NER. The NER stipulates that AEMO's role is to ensure that a proposed connection does not negatively impact system security.

In our view, the practical implementation of a materiality guideline risks introducing further complications and further analysis is required.

WHAT ARE YOUR VIEWS ABOUT THE PROPOSED PATHWAY FOR EACH CONNECTION TYPE, INCLUDING THE ASSIGNMENT OF OBLIGATIONS AND THE ALLOCATION OF COSTS AND RISKS?

We have reservations about the proposed classification of R1 packages into different types. In our view the existing 5.3.9 notification process already captures changes and their impact on GPS, making any extra self-assessment unnecessary. Issues can already be resolved at their appropriate

stages, either R2 or R1, in line with existing processes. Therefore, we see no real advantage in subdividing R1 packages into a new self-assessment framework.

Nonetheless we offer the following observations of the different connection types as proposed in the consultation paper:

- Regarding Type 2, we are of the view that pre-existing issues in the local power system are the NSPs responsibility and should not burden a new connection. However, we support the proposal for NSP-funded solutions for problems exacerbated by a new connection.

- Regarding Type 3, we are of the view that conditional registrations only defer resolution and therefore serve no real benefit. Typically, these conditions don't impact grid security and could be addressed at the R2 stage.

- Regarding Type 4, transparency and accountability are crucial. As we outlined above, we support the NSP and AEMO being required to provide detailed reports and raw data if the issue can be directly attributed to the proposed connection.

DO YOU SUPPORT THE CEC'S PROPOSED MODEL OR DO YOU PREFER AN ALTERNATIVE APPROACH? ARE THERE ANY MODIFICATIONS TO THE CEC PROPOSALS THAT YOU BELIEVE MAY IMPROVE IT?

Whilst we strongly support the intent of the rule change proposal to address the very real challenges in connection process, we believe that some elements of the proposal could add complexity and therefore prolong connections. As such, we recommend against making wholesale NER changes at this point in time, absent further analysis.

However, as outlined in our answers above we do recommend several alternative modifications which in our view are aligned with the rule proponent's intent, however, represent more incremental improvements of the rule's framework:

1. There needs to be a clearer understanding of AEMO's role in assessing a proposed connection. The focus should solely be on assessing the connection's impact on power system security, without the connection being responsible for maintaining or improving system security overall.

2. Related to the above point, we recommend that AEMO's ability to open GPS for renegotiation should be limited unless initiated by the proponent. The current practice of AEMO adding items to the GPS can lead to unnecessary delays and complexities.

3. If there is no change in the R1 stage, we believe that additional impact assessments could deemed unnecessary as it would have already been conducted.

4. We suggest that if R1 modelling issues do not jeopardise overall grid security, any minor modelling issues could be deferred for rectification at the R2 stage.

5. Lastly, any power system security issues should be addressed only if they are proven to be caused or exacerbated by the proposed connection.

We would encourage further consideration of the above points, which in our view would streamline the process and limit unnecessary assessments and renegotiations.