

Feedback submission – Improving visibility of generation investment: Clause 2.16 information notices

Names:

Jannik Haas, Rebecca Peer, Hadi Vatankhah Ghadim

Affiliation:

Sustainable Energy Research Group, University of Canterbury, Christchurch

Email addresses:

Questions

Q1. Do you agree with the Authority’s proposal to require monthly provision of information to the Authority, to enable a ‘rolling’ set of information?

Yes, we do agree with the Authority’s proposal on the regular information provision to the Authority, as we believe it can be beneficial from a planning viewpoint.

We are also confident that developing a communication network between developers and Transpower (as mentioned in Q4), along with a real-time secured communication route between Transpower and the Authority, would provide timely updates on information variations regarding commissioned and in-pipeline projects. This approach would also greatly assist in the digitalisation of our national grid and is something that the Authority can focus on in the long-term. Further information on the data transfer between developers and Transpower, the suggested data acquisition scheme and security concerns, and how the Authority should access the aggregated information are available in Q2, Q4, and Q6, respectively.

Q2. Do you agree with the Authority’s initial assessment that developers will be required to regularly update Transpower when significant information changes for their projects, or should Transpower be required to regularly ask for information from developers?

Yes, we do agree with the Authority’s initial assessment on requiring regularly updating the database within Transpower on generation projects.

However, we also believe that a hybrid model could provide higher accuracy and efficiency in forming a centralised database of projects, whether consented, in the pipeline, or under construction. Transpower could establish a regular check-in schedule (e.g., monthly or quarterly) to ensure that no significant updates are missed. For instance, the information on capacity and grid-connected-ness status for the Ashburton solar farm is different in the Authority’s wholesale datasets (<https://www.emi.ea.govt.nz/Wholesale/Datasets/Generation/GenerationFleet/Proposed>) and the developer’s website (<https://www.lightyearssolar.co.nz/ashburton-solar-farm>). This would balance the responsibility between developers and Transpower, ensuring that critical updates are not overlooked due to oversight or differing interpretations of what constitutes a “significant” change in project information.

Q3. Do you have any comments on the proposal to require developers (via Transpower) to provide increased information on their generation and load projects?

No. We believe the proposal to require developers to provide increased information on their generation and load projects is a positive step towards greater transparency and better planning. This information is critical for assessing the future supply and demand balance and for identifying potential bottlenecks or areas needing investment. We also believe that the additional points

discussed in Q4, Q5, and Q7 would provide insights on how this increased information should be gathered and managed.

Q4. Do you have any comments on the proposal to require generators to provide cost information through a clause 2.16 notice? Do you have any comments on the specific information proposed to be collected in the clause 2.16 notice?

While we believe that having clear and transparent access to economic data of energy projects would significantly contribute to a sustainable energy transition, we are concerned about the increasing confidentiality of such data and the subsequent burden of protecting the privacy of developers and their customers for Transpower and the Authority in the future. Furthermore, we believe that there is a need for more clarity on exactly what information is needed from developers. Our suggestion is that the section on required info should be clarified first. Then, a summary of key cost metrics could be provided by Transpower. This summary could include capital and operational costs of projects without delving into sensitive financial details. This approach would still provide valuable insights while protecting commercially sensitive information received by Transpower.

If the required information table in the clause is not altered, we recommend that Transpower focus on developing a secure data portal to access data from operational and in-pipeline projects in a secure and low-latency manner, while preserving the developers' trust in Transpower as a "data recipient". We believe this would accelerate the transition toward a decarbonised and digitalised grid, and provide foundational security for the future energy market, as there are products from New Zealand's energy ecosystem that are being traded in a foreign market infrastructure (in this case, ASX). The discussion on the security of outsourcing energy trades to a foreign platform can be extended on demand.

Q5. Do you agree that the appropriate time to collect cost information is when new generation is commissioned, or whether it should be earlier in the development process?

Yes, we do agree about the timing of collection cost information from generation projects.

In an additional step, we believe that obtaining data at earlier stages can also be beneficial. However, this approach may lead to inaccuracies due to the evolving nature of project costs, which need to be avoided through regular cost database updating schemes. Another issue with this approach could be additional administrative burden. A phased approach could be more effective, where preliminary cost estimates are provided at the planning stage, with more detailed updates at key milestones (e.g., after securing financing, during construction, and at the commissioned stage). This phased approach would provide a more accurate and comprehensive view of project costs over time.

Q6. Do you agree with the Authority's proposal to aggregate some information provided by Transpower to assess the status or stage of projects, and do you have any comments on the breakdown of the proposed stages?

Yes. Aggregating information to assess the status or stage of projects is a practical approach that can provide a clear overview of the development pipeline. The proposed breakdown of stages—such as planning, consenting, construction, and commissioning—seems logical and aligns with typical project development phases. However, we recommend that this data transfer between Transpower and the Authority remain within sufficient data privacy standards to ensure that developers' trust in Transpower is never compromised.

Q7. Do you agree the benefits of the proposed clause 2.16 notices outweigh their costs? If not, what area(s) of the Authority's preliminary assessment of benefits and costs do you disagree with?

Yes. We agree that the benefits of the proposed clause 2.16 notices, such as improved transparency, better planning, and more informed decision-making, would likely outweigh the costs. The preliminary assessment by the Authority also appears to have considered the value of the information collected. However, while the Authority believes the benefits outweigh the costs, it is important to consider the administrative burden on smaller developers who might find the reporting requirements (and in general, the bureaucracy in the process) particularly challenging. An alternative could be to introduce a tiered reporting system, where the level of detail required is proportional to the size and impact of the project. A similar domestic example of a tiered reporting system would be the New Zealand Accounting Standards Framework (NZASF) for Public Benefit Entities (PBEs). This would ensure that the reporting requirements are manageable for all developers, regardless of their size.

Q8. Do you agree the proposed clause 2.16 notices are preferable to the other options? If you disagree, please explain your preferred option in terms consistent with the Authority's statutory objective in section 15 of Act.

Yes. We agree that the proposed clause 2.16 notices seem preferable to other options because they provide a structured and consistent method for collecting essential information. However, if deemed burdensome, attempts to prevent reporting duplication, such as integrating cost and project status updates into existing regulatory filings or annual reports, or implementing a tiered reporting system (mentioned in Q7), could be alternative solutions.

Q9. Should the Authority consider further work to monitor and assess the pipeline of new generation and demand?

Yes. The Authority should consider further work to monitor and assess the pipeline of new generation and demand. Continuous monitoring is essential for adapting to changes in the national energy system and ensuring that the supply meets the growing demand. Furthermore, we believe that the Authority and Transpower should work on getting developers to compete for "pipeline priority" based on "revealed costs" may contribute some useful additional competitive pressure to the electricity market.

Besides, we firmly believe that, along with focusing on renewable energy generation infrastructure, the Authority and Transpower should mutually focus on further development in the transmission and distribution network. A successful transition toward a fully renewable energy system requires higher levels of interconnectivity in the grid. Lacking or having considerable delays in developing such infrastructure would threaten the planning and operation of renewable energy generation units (e.g., current issues within Australia ([AEMO ESOO report 2024 – Section 3.4](#)), north of Chile ([Link](#)), and Vietnam ([ETP Policy Brief – page 4](#))), resulting in a delayed transition.