

03 March 2023

Madeline Berry  
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To Madeline,

**RESPONSE TO REQUEST FOR FURTHER INFORMATION – ENERGY FARMS LIMITED –  
OPUNAKE SOLAR FARM PROJECT – BRF-1824**

**Introduction**

1. We now have the information required to respond to request issued on 17/02/2023 for the Opunake Solar Farm Project. Please see the response below.

**Sale and purchase agreement**

2. A copy of the sale and purchase agreement is enclosed. This does not include any provisions that would delay the implementation of the project once consented.

**Economic assessment**

3. A copy of the economic assessment is enclosed. This outlines the range of economic benefits associated with the project and concludes that the proposal meets the economic intent of the fast track legislation.

**Interconnection details**

4.
  - a. The incorrect report was attached to the application. A copy of the Aurecon report is enclosed. It is noted that Transpower were consulted and have contributed to this report.
  - b. Aurecon are working with Powerco and Transpower to finalise the details for the interconnection. Option 2 detailed in the Aurecon report (using the existing 33 kV transmission buffer corridor) is the preferred option. This option will involve Powerco upgrading the existing infrastructure along the existing 33 kV route so that both the existing 33 kV and proposed 110 kV lines can be accommodated. Aurecon are currently waiting for Powerco to provide a quote for the required works.
  - c. The preferred option is for the new 110 kV lines to be located on existing Powerco infrastructure.
    - i. Please see enclosed a letter from Powerco outlining the working relationship between themselves, Aurecon and Energy Farms Limited. They are currently engaging in Memorandum of Understanding for the required work. Contact

details are provided in the letter should there be any further queries regarding Powerco's engagement with Energy Farms Limited/Aurecon.

- ii. The approvals required to facilitate the interconnection of the solar farm into the Transpower network have been factored into the timeframes detailed in the application. Obtaining the necessary approvals will therefore not impact those timeframes.
- iii. Given that there are a number of viable options available with respect to the interconnection of the solar farm (noting that option 2 is the preferred option that is being finalised between the relevant parties) and that Powerco have outlined that they are working in collaboration with Aurecon and Energy Farms Limited to finalise the arrangement, the separate approval required from Powerco will not prevent project delivery. The approval required from Powerco is not expected to delay the delivery of the project as outlined above.
- iv. No approvals will be required from private landowners to facilitate option 2. The works will be undertaken within the existing Powerco buffer corridor as identified in the Aurecon report. The upgrade works would be funded by Energy Farms Limited but will be undertaken by Powerco as part of their 'normal works'.

d. N/A

#### **Transpower substation details**

5.

- a. Energy Farms Limited have submitted an application to Transpower with respect to the new 110 kV connection at the Opunake substation – this approval is part of the detailed design process that is currently underway for the project. Details of the upgrade works required to facilitate the connection are outlined in the enclosed Aurecon report. While an agreement is yet to be formalised with Transpower, the following is taken from the Transpower website. The Aurecon report confirms that the upgrade works are technically and logistically feasible, while Energy Farms Limited will fund the upgrade works.

*as a regulated monopoly, Transpower is required to provide open access connections to New Zealand's power system. Transpower will connect any new development where the new connection is technically and logistically feasible, the developer covers all costs associated with the connection, and our ability to operate the power system for the benefit of New Zealand is not compromised*

- b. Yes, the upgrade works are necessary and therefore form part of the project scope. Electricity substations are provided for as a permitted activity in the Rural Zone under Rule 14.1.1 of the South Taranaki District Plan where the gross floor area does not exceed 50m<sup>2</sup>. Resource consent is required as a discretionary activity under Rule 14.1.4 where the gross floor area exceeds 50m<sup>2</sup>. We would like to amend the application to seek a precautionary consent under this rule from the South Taranaki District Plan to cover the scenario that the gross floor area of the expanded substation exceeds 50m<sup>2</sup>. No other consenting requirements have been identified with respect to the upgrade works.

- c. The upgrade works will be scheduled with Powerco and Transpower as part of the detailed design process. Both parties have indicated that the upgrade works for the substation upgrade (and interconnection works) can be completed in parallel with the development of the solar farm – they do not need to be completed prior to development. It is therefore intended that the works will be completed within the same 18 month timeframe indicated in the original application, and that the upgrade works will not impact the delivery of the project.
- d. Aurecon have been leading the consultation process with Transpower. They have provided the following summary of correspondence regarding this project. Any approvals required under s176 of the RMA will be obtained in due course.
- A meeting was held 16 August 2022 from 11am – 12pm.
  - Present at the meeting was Mike Burrows (Transpower – Investigations Lead), Malcolm Macaulay (Transpower), Vanessa Head (Transpower), Fernando Guzman (Aurecon), James Herbert (Aurecon).
  - Apologies were Todd Wilson (Energy Farms) and Rupert Holbrook (Transpower)
  - The meeting agenda was Energy Farms Project update – Opunake Site.
  - The discussion topics were:
    - Aurecon presented the various grid connection solutions for the solar farm and work completed to date on this, particularly to discuss the substation works and the power export availability.
    - Aurecon noted the preference was the 110 kV line (owned by Energy Farms) to connect into the Opunake Substation 110 kV.
    - Transpower noted that the 110 kV at Opunake does not have a bus with protection and incoming line bay CBs, so without a 110 kV bus upgrade (expensive) at best the line can only tee into one of the two circuits that connect at Opunake from Stratford.
    - Of the two lines - Circuit 2 already has a tee on it to Kapuni where there is some generation connected already. There are some export constraints in connecting to this side (this is the Northern bay in the substation).
    - Circuit 1 is the best option for least constraints and export capacity (Southern bay of the substation).
    - Aurecon noted that connecting to circuit 2 was a preference due to the ease of line entry, but would also evaluate the connection to Circuit 1 and what is required for that. Undergrounding the 33 kV line out to Opunake would be required from the 33 kV substation to the substation boundary to allow a new 110 kV line entry to the circuit 1 location.

### **Clarification of relevant rules**

6. The following addresses the consenting requirements under the identified chapters of the South Taranaki District Plan.

#### **Section 14 'Network Utilities'**

- a. Point 5.b. of this letter identifies that consent is required as a discretionary activity under Rule 14.1.4 of the South Taranaki District Plan. This is due to the possibility of the gross floor area of Transpower's Opunake substation exceeding 50m<sup>2</sup>.
- b. Rule 14.1.1 of the South Taranaki District Plan provides for underground and overhead electricity lines and associated support structures that do not exceed 110 kV as a permitted activity in the Rural Zone where they comply with the standards in 14.2. The standards in 14.2.10 are specific to aboveground lines and support structures. The proposal complies with these requirements as the support structures will not exceed 25m in height. The electricity lines can therefore be established as a permitted activity.
- c. While there is an on-site substation, this forms part of the 'large scale renewable electricity generation activity'. The definition from the South Taranaki District Plan is included below. The consideration of this aspect of the proposal therefore occurs under Rule 13.1.4 of the South Taranaki District Plan, under which consent is sought as a discretionary activity – section 14 is not relevant.

*LARGE SCALE RENEWABLE ELECTRICITY GENERATION ACTIVITIES: means electricity generation activities utilising renewable energy sources with a capacity of 20kW or greater for the purpose of exporting electricity directly into the distribution network or National Grid. Includes all ancillary components and activities such as substations, climate/environmental monitoring equipment, earthworks, roading, maintenance buildings, temporary concrete batching plants, internal transmission and fibre networks, vegetation clearance, and site rehabilitation works.*

#### **Section 17 'Natural Environment'**

- d. Please note that I have enclosed the final ecological report from Beca – this is addressed further in the proceeding points of this document.
- e. The rules in section 17 of the South Taranaki District Plan relate to the removal of indigenous vegetation. Rule 17.1.1 outlines the permitted standards. Points a – c are not relevant as the site is not located within any of the specified areas. Point d. is a relevant consideration as the site is not part of a Significant Natural Area identified in Schedule 2.
- f. I have discussed the requirements of this rule with Beca. They have advised that any areas of indigenous vegetation that need to be removed have a diameter of less than 30cm when measured 1.4m up from the ground, contain four or fewer trees at least 6m in height, while the continuous patches are all smaller than 0.5ha. The only vegetation that would trigger the above would be the riparian margins of some of the permanent stream systems, and near the north-west corner of the site. The design has been specifically tailored to avoid vegetation

removal within these areas. The proposal therefore complied with the permitted activity standards under Rule 17.1.1 of the South Taranaki District Plan.

- g. There are no triggers for resource consent under Section 17 of the South Taranaki District Plan.

#### Section 19 'Signs

- h. It is not proposed to erect any signage for the purpose of identifying or advertising the solar farm activity. There are therefore no general signs that need consideration under Section 19 of the South Taranaki District Plan.
- i. There could be signs erected by contractors during the construction phase of the activity – the permitted activity standards for such signs are outlined under rule 19.2.3 of the South Taranaki District Plan. Any signs erected for this purpose will not exceed 6m<sup>2</sup> in area and will be removed within 3 weeks of the contractors finishing works. Any signs erected by contractors during the construction phase of the project will therefore comply with the permitted standards under Section 19 of the South Taranaki District Plan.
- j. There may also be signs established within the development for health and safety reasons or to comply with legislative requirements. Any such signs are provided for as a permitted activity under point b. of Rule 19.1.1 of the South Taranaki District Plan.
- k. There are no triggers for resource consent under Section 19 of the South Taranaki District Plan.

#### **National Environmental Standards for Fresh Water – additional information**

- 7. As noted above, I have enclosed a copy of the final ecological report from Beca. This includes a range of relevant information relating to the wetlands. A response to the specific queries raised in the request for further information are outlined below.
  - a. Please refer to the plan included on page 24 of the report for a map that identified the wetlands on the subject site. The wetland areas have been excluded from the project area as shown on the solar farm layout plan included with the original application.
  - b.
    - i. The final ecological report includes a range of information relating to the delineation of the wetlands and confirms that these have been excluded from the project area. It is noted that Beca also prepared the solar farm layout plan, and that their ecological reporting has fed directly into the design process.
    - ii. With regards to prohibited activities under clause 53 of the NES-F, no earthworks are proposed within the wetlands, and there is no taking, use, damming or diversion of water within a natural wetland. None of the works associated with the project are prohibited under the NES-F.

### **Stream and wetland enhancement details**

8. The application states that it is anticipated that consideration will be given to the enhancement of riparian margins and degraded wetlands across the site. It is envisaged that this will be required via an ecological management/enhancement plan, with the requirements for this plan specified in the consent conditions.

I have discussed this further with Beca. They have advised that the enhancement measures have been recommended to improve ecological outcomes, but that they are not required from an effects management perspective. The implementation of these measures would shift the overall level of effect from low – very low to an expected net gain in ecological values.

Given the above, I have discussed the inclusion of such measures as part of the application with the applicant. They have confirmed that they are happy to implement ecological enhancement in accordance with the recommendations of the Beca report. This therefore forms part of the project scope.

### **Shape files**

9. Please see a copy of the shape files enclosed with this response. Please let me know if there are any issues accessing these.

### **Megawatt-peak output**

10. The output of the solar farm will be between 80 and 110MWp.

### **Conclusions**

11. We trust that the above is sufficient to address the matters raised in the further information request.

Feel free to give me a call if you would like to discuss any of the above further.

Yours faithfully



Thomas Keogh  
*Senior Planner*

*Encl. Sale and purchase agreement, Urban Economics assessment, Aurecon switch yard and transmission line report, letter from Powerco, Beca ecological report, shape files*