Response ID ANON-URZ4-5FTS-Q

Submitted to Fast-track approval applications Submitted on 2024-05-03 17:05:37

Submitter details

Is this application for section 2a or 2b?

2A

1 Submitter name

Individual or organisation name: SolarGen Joint Venture

2 Contact person

Contact person name: s 9(2)(a)

3 What is your job title

Job title: Environmental Policy and Planning Manager

4 What is your contact email address?

Email: s 9(2)(a)

5 What is your phone number?

Phone number: s 9(2)(a)

6 What is your postal address?

Postal address:

s 9(2)(a)

7 Is your address for service different from your postal address?

No

Organisation:

Contact person:

Phone number:

Email address:

Job title:

Please enter your service address:

Section 1: Project location

Site address or location

Add the address or describe the location:

The proposed ^{s 9(2)(b)(i)} Solar Farm is located across two properties s 9(2)(b)(ii) addresses:

s 9(2)(b)(ii)

File upload: s 9(2)(b)(ii) The site includes the following

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Do you have a current copy of the relevant Record(s) of Title?

Yes

upload file: s 9(2)(b)(ii)

Who are the registered legal land owner(s)?

Please write your answer here:

s 9(2)(b)(ii)

s 9(2)(b)(ii)

Detail the nature of the applicant's legal interest (if any) in the land on which the project will occur

Please write your answer here:

SolarGen holds Agreements to Lease and Licence with the legal landowners for the land identified as the site. These agreements allow SolarGen to construct and operate a solar farm at the site.

Section 2: Project details

What is the project name?

Please write your answer here: s 9(2)(b) Solar Farm

What is the project summary?

Please write your answer here:

To construct, operate, and maintain a new National Grid connected solar facility with a battery energy storage system (BESS), a substation, and ancillary buildings and infrastructure.

What are the project details?

Please write your answer here:

The ^{s (2)(b)(II)} Solar Farm is part of a wider portfolio of solar farms that SolarGen has in our renewable electricity generation development pipeline. SolarGen is a partnership between Genesis Energy and FRV Australia and we are committed to building 500 MW of solar capacity throughout Aotearoa New Zealand.

The proposed solar farm comprises the construction, operation and maintenance of an approximately 180 MWp photovoltaic solar farm on an approximately 400 ha site 9(2)(b)(ii). The predicted energy output from the project is around 304 GWh/year of renewable electricity, which will be supplied into the National Grid and could power the equivalent of 43,000 homes annually.

The solar farm facility will consist of rows of solar panels set back from the site boundary, associated infrastructure (including cabinets, transformers, cabling, fencing and security), a Battery Energy Storage System (BESS), and a new 220kV substation connecting to the Bunnythorpe to Haywards (BPE-HAY) 220kV transmission line that runs across the site. The exact number and location of the solar panels will be confirmed during the detailed design process.

Electricity is expected to be generated from rows of mono or bifacial monocrystalline panels mounted on a tracking system that will rotate to follow the movement of the sun. Earthworks will be required to establish foundations, vehicle access, operation and maintenance buildings, and to lay cabling throughout the site.

We are actively investigating sheep grazing underneath the panels. Sheep grazing has lower environmental impacts than the existing dairy farming operation, which requires significant on-going irrigation water use but still contributes to the local agri-economy.

The project will include landscape and ecological planting where appropriate, including boundary planting to screen the development from key locations and to help integrate the solar farm into the surrounding rural landscape.

It is anticipated that the following resource consents will be required for the solar farm facility activities:

• Land use consent under the Horowhenua District Plan for a solar farm, BESS, associated structures and infrastructure, and substation (unless Transpower prefers to submit a notice of requirements for a designation)

• Land use consent under the Horizons One Plan for earthworks as well as potentially stormwater discharge from the substation and BESS impervious areas

• Consent under the National Environmental Standards for Freshwater for earthworks and discharges associated with specified infrastructure in or within 100m of a natural inland wetland.

Describe the staging of the project, including the nature and timing of the staging

Please write your answer here:

No staging is currently proposed. The project is expected to be constructed and commissioned as one singular staged project.

While SolarGen is seeking to have this project listed in Schedule 2A of the FTA Bill, it is imperative that if this project is listed, that SolarGen retains flexibility of consenting process because of the uncertainty in timing of the FTA Bill becoming law and the details of the final legislation remain to be seen. SolarGen may lodge resource consents through the RMA process before the FTA Bill becomes law and must retain flexibility of process so that SolarGen can use the standard process if necessary.

Genesis has submitted on these matters (amongst others) in relation to the FTA Bill.

What are the details of the regime under which approval is being sought?

Please write your answer here:

Resource consents under the Resource Management Act 1991 It is unlikely but if required an authority under the Wildlife Act 1953 and/or an archaeological authority under Heritage New Zealand Pouhere Taonga 2014 will be applied for.

If you seeking approval under the Resource Management Act, who are the relevant local authorities?

Please write your answer here:

Horowhenua District Council and Horizons Regional Council.

What applications have you already made for approvals on the same or a similar project?

Please write your answer here:

No applications have been made for this project.

Is approval required for the project by someone other than the applicant?

Yes

Please explain your answer here:

Approvals are required from Transpower for the connection into the National Grid. An application has been lodged and is in their queue.

The on-site substation and National Grid connection will be designed and constructed by SolarGen before being handed to Transpower New Zealand Limited (Transpower). This aspect of the project will be designed to meet Transpower design requirements and need to receive Transpower approval to ensure the substation facility can be transferred to Transpower at the appropriate time. The substation will require RMA approval. SolarGen will consult with Transpower on their preferred process (either resource consent sought by SolarGen as part of the main bundle and transferred to Transpower at a later date or a Notice of Requirement for Designation with Transpower as the Requiring Authority).

If the approval(s) are granted, when do you anticipate construction activities will begin, and be completed?

Please write your answer here:

Following obtaining resource consents, we currently anticipate the below timing for pre-construction and construction activities: **s** 9(2)(b)(ii)



Section 3: Consultation

Who are the persons affected by the project?

Please write your answer here:

For this project, we anticipate that the interested and potentially affected parties will include:

- · Local authorities: Horowhenua District Council and Horizons Regional Council
- Hapū and iwi s 9(2)(b)(ii)

• Treaty Settlement Entities: s 9(2)(b)(ii)

 Neighbouring landowners 	
•s 9(2)(b)(ii)	
•s 9(2)(b)(ii)	
s 9(2)(h)(ii)	1

There are no relevant protected customary rights groups, customary marine title groups, MACA applicants. The project does not impact Ngā Hapū o Ngāti Porou. No land needs to be acquired under the Public Works Act 1981.

Detail all consultation undertaken with the persons referred to above. Include a statement explaining how engagement has informed the project.

Please write your answer here:

This project is currently in the early stages of development and consultation has not yet fully commenced.

SolarGen's intention is to develop a positive, meaningful and enduring relationship with mana whenua in ^{§ 9(2)(b)(ii)} We will continue to work proactively with mana whenua throughout the project's development so that we can incorporate cultural values and aspirations, as appropriate. Mana whenua are best placed to describe their history and connection with the site and how the project may impact on cultural values and aspirations. An initial hui with mana whenua is scheduled for early May and ongoing engagement with mana whenua will be directed by this initial korero.

SolarGen's intention is to engage with neighbouring landowners and the wider community (including community groups and local airfields) and appropriately engage throughout the project's development. It is expected that the site layout, any proposed mitigation and enhancement, and conditions of consent will be influenced by this engagement. Community consultation will commence in May and will involve provision of information on the project and opportunities for direct meetings as required.

This consultation and engagement will collectively influence the final design of the project.

The District and Regional Councils have been contacted regarding the project. Consultation with both will be ongoing as the project design and assessment reports are completed.

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Describe any processes already undertaken under the Public Works Act 1981 in relation to the land or any part of the land on which the project will occur:

Please write your answer here:

Not applicable.

Section 4: Iwi authorities and Treaty settlements

What treaty settlements apply to the geographical location of the project?

Please write your answer here:

s 9(2)(b)(ii)

The project site is within an area subject to a statutory acknowledgement and deed of recognitions 9(2)(b)(ii)

We understand that **s** 9(2)(b)(ii) do not yet have a treaty settlement; however, their claims are being heard as part of the Wai-2200 Porirua ki **s** 9(2)(b)(ii) District inquiry.

Are there any Ngā Rohe Moana o Ngā Hapū o Ngāti Porou Act 2019 principles or provisions that are relevant to the project?

No

If yes, what are they?:

Are there any identified parcels of Māori land within the project area, marae, and identified wāhi tapu?

No

If yes, what are they?:

While there are no identified parcels of Māori land, marae, or wāhi tapu within the proposed solar farm site, there are a number of Māori freehold land parcels adjoining the site. s 9(2)(b)(ii) . We anticipate that through our engagement and consultation with mana whenua we will identify any wāhi tapu within the wider area that may be impacted by the project.

There is also an access easement on the site that is noted as being subject to the Māori Land Court in 1916; however, this area can be avoided through design as needed.

Is the project proposed on any land returned under a Treaty settlement or any identified Māori land described in the ineligibility criteria?

No

Has the applicant has secured the relevant landowners' consent?

Yes

Is the project proposed in any customary marine title area, protected customary rights area, or aquaculture settlement area declared under s 12 of the Māori Commercial Aquaculture Claims Settlement Act 2004 or identified within an individual iwi settlement?

No

If yes, what are they?:

Has there been an assessment of any effects of the activity on the exercise of a protected customary right?

No

If yes, please explain:

Not applicable

Upload your assessment if necessary: No file uploaded

Section 5: Adverse effects

What are the anticipated and known adverse effects of the project on the environment?

Please describe:

An assessment of environmental effects is currently being prepared for the project. The assessment below is based on detail that is currently available and may change as site assessments and engagement activities are completed. The site has a number of features and potential values that may require avoidance through layout design, could be enhanced, or may be removed as appropriate. Engagement with mana whenua, councils, and the community will help identify priority values to determine where enhancement or mitigation efforts are best directed. We anticipate there will be effects in the minor to less than minor range associated with the following aspects:

Cultural effects

SolarGen's intention is to develop a positive, meaningful and enduring relationship with mana whenua in ^{\$ 9(2)(b)(i)} We will continue to work proactively with mana whenua throughout the project's development so that we can incorporate cultural values and aspirations, as appropriate. Mana whenua are best placed to describe their history and connection with the site and how the project may impact on cultural values and aspirations. An initial hui with mana whenua is scheduled for early May and ongoing engagement with mana whenua will be directed by this initial korero. As such it is not possible to assess the potential cultural effects.

Archaeological effects

There are no known archaeological sites on the property and a site walk over has been undertaken by a suitably qualified professional and no new archaeological sites were discovered. There are known urupā and two Marae within close proximity to the site (~2km). We anticipate that through our engagement with mana whenua, we will understand if there are any wāhi tapu or sites of significance within the project site. We expect that a condition of consent will include an appropriate accidental discovery protocol.

We expect that any archaeological effects will be less than minor.

Landscape and visual effects (including amenity effects)

There are expected to be landscape and visual effects including for neighbouring landowners and users of the surrounding road network. These effects arise from the solar farm itself as well as the change from a highly modified dairy farm environment to a solar farm. Such effects are often highly subjective to the viewer and engagement with neighbours will assist with assessing these effects. Proposed mitigation will likely include retaining existing landform features where practicable (dunes and shelterbelts) and landscape screening planting using appropriate species at key location. We will work

with neighbours to understand their priorities when considering planting layout and species.

The site is located within the s 9(2)(b)(ii) and the dunes are identified as a landscape feature. We understand that most of the dune features that historically existed at this site have been removed to level much the site to allow for pivot irrigation and agricultural activities. It is expected that the solar farm will be designed to protect the remaining dunes on the site if this is identified as a priority though engagement with mana whenua, councils, and the community.

Glint and glare effects

A glint and glare assessment will be undertaken focusing on surrounding dwellings, roads, and airfields. This will identify the length of time per day that glare could be potentially experienced and options to mitigate glare effects.

Due to the flat nature of the site and surrounding land, it is anticipated that screen planting will be an effective form of mitigation where required such that the adverse effects of glint and glare can be avoided or mitigated to no more than minor.

Ecological effects

Ecological effects are expected to be less than minor. The site is currently used for dairy farming and subject to ongoing irrigation, spreading of dairy effluent, and intensive grazing activities.

Initial site investigations have not identified any areas of significant indigenous vegetation or habitats of indigenous species.

There are a number of artificial drains and areas of identified low value remnant wetland (being areas of currently grazed pasture that may meet the definition of a natural inland wetland under the NPS-FM). The project is looking at opportunities to set aside areas within the site for ecological enhancement, where appropriate.

Effects from hazardous substances

The proposed solar farm will likely involve the use and storage of large volumes of oil for the transformers and substation. The site will be designed with appropriate bunding to contain spills in the case of an accident and an Emergency Response Plan will be developed to put in place processes on the site to avoid adverse environmental and health and safety effects.

Effects from contaminated soil

The site has a history of extensive earthworks. Landowners advise that no fill was imported into the site as part of these earthworks. Horizons Regional Council has a record of a potential sheep dip near a former woolshed on the southern side of the site, adjacent to the eastern boundary. No visual evidence of a former sheep dip or evidence of stressed vegetation was observed during the site walkover; however, the presence of this former sheep dip cannot be discounted.

If soil disturbance is expected to exceed the permitted activity volumes detailed in regulation 8(3)(c) of the National Environmental Standards for Assessing and Managing Contaminants in Soil for Human Health, then a Detailed Site Investigation will be undertaken to assess the potential risk to human health and / or the environment and an appropriate site management plan developed.

Hydrological and water quality effects

Conversion of the land from agriculture to solar farm is unlikely to result in adverse effects on either ground or surface water quality or quantity. Rather, removal of intensive agricultural activities is expected to have a positive effect on water quality, particularly with respect to nitrogen.

Areas of low-level surface ponding have been identified and further assessment will be undertaken to determine whether existing farm drains can be removed without adversely impacting the hydrology of the site. Development of the solar farm is not expected to result in any change in flood risks to people or property downstream of the site.

Potential adverse effects of stormwater from development of the solar fam facility and ancillary buildings and internal roads will be managed through appropriate design and siting of infrastructure to maintain drain conveyance and overland flow paths. Likewise, stormwater runoff from the substation or BESS areas is expected to be appropriately treated prior to discharge.

We expect that effects on water quality and quantity will be less than minor or positive.

Operational effects (noise and traffic)

Operational effects from the site are expected to be low as day to day staff and traffic movements will be minimal and related to site maintenance. The layout of solar farm is expected to be designed so that the noise generating components, which are the substation and BESS, are appropriately setback from neighbouring dwellings to minimise noise effects.

Temporary construction effects (earthworks, dust, traffic, noise and vibration).

The project will require earthworks across much of the site for construction of access roads and building platforms, construction of the substation and BESS platforms, trenching for cabling, and topsoil disturbance for piles and installation of the panels themselves. While this may not be considered bulk earthworks, earthworks will cumulatively occur over a large area which will result in a large total volume.

It is expected that earthworks will be subject to an Erosion and Sediment Control Plan (ESCP) which will detail the design and control measures to be implemented on the site. The ESCP will contain specific provisions and construction methodology details to outline how works near or within drains and wetlands will be undertaken to prevent more than short term effects on these.

The potential effects of dust and construction noise and vibration are expected to be managed through standard conditions of consent including as appropriate: monitoring, dust control, and the implementation of Construction Management Plans.

Construction traffic volumes will be high. A preliminary traffic assessment has been undertaken which has found that the local roading network is likely of sufficient standard for this volume of traffic to safely occur, especially as the site is located close to the State Highway. A detailed traffic assessment will determine whether any modifications to site access points are required as well as outlining key aspects to be included in a Construction Traffic Management Plan.

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Section 6: National policy statements and national environmental standards

What is the general assessment of the project in relation to any relevant national policy statement (including the New Zealand Coastal Policy Statement) and national environmental standard?

Please write your answer here:

The National Policy Statement for Renewable Electricity Generation 2011 (NPS-REG) applies to renewable electricity generation activities at all scales and covers the construction, operation, maintenance and upgrading of new and existing structures associated with renewable electricity generation. The proposed ^{9 (2)(b)(ii)} Solar Farm is demonstrably consistent with the matters of national significance set out in the National Policy Statement for Renewable Electricity Generation 2011 (NPS-REG) and the objective of the NPSREG as:

• It will support achieving New Zealand's climate change aspirations, the aspirations of Electrify NZ, and the new coalition Government's commitment to double the overall volume of electricity from renewable sources by 2050.

• The solar farm will create enough renewable electricity to supply the equivalent of 43,000 typical New Zealand homes.

• Increasing New Zealand's solar energy resource will support the national economy during periods when power from other renewable sources does not met demand – including periods of low rainfall and wind.

The NPS-REG promotes a more consistent approach to balancing the competing values associated with the development of New Zealand's renewable energy resources when consent decisions are made on resource consent applications. The NPS-REG requires decision makers to have particular regard to:

• the need to locate renewable electricity generation activities where the renewable electricity resource is available.

- the logistical or technical practicalities associated with operating the renewable electricity generation activities.
- the location of existing structures and infrastructure, including in relation to the electricity distribution network and the national grid.

• the need to connect renewable electricity generation activities to the national grid.

• designing measures which allow operational requirements to complement and provide for mitigation opportunities.

The NPS-REG also requires that regional policy statements, regional plans, and district plans incorporate provisions for renewable electricity generation activities including solar. The Horowhenua District Plan was made operative in 2015 and the objectives contain specific reference to recognising renewable energy projects.

The National Policy Statement for Highly Productive Land 2022 (NPS-HPL) applies to land that contains highly productive soils. The proposed site includes some LUC Class 3 soils and therefore meets the definition of highly productive land. The NPS-HPL seeks to restrict the conversion of such land to urban zoning, avoid subdivision into smaller lifestyle lots and protect the land from inappropriate use and development.

Renewable electricity developments are specified infrastructure under the NPS-HPL and there is therefore a pathway for the solar farm to be consented. If there is a functional and operational need for the proposal to be located on the site, the project is excluded from the definition of "inappropriate use". There is an operational need for the proposed solar farm to be located at this site.

To be suitable for a solar farm, sites need to meet specific characteristic requirements that are difficult to achieve in very many locations; it is these characteristics that define the operational need. These characteristics are:

• An area of flat land large enough for a solar farm to be economically viable

- Medium to high solar hours with minimal potential for shading (eg from hills and large stands of vegetation)
- Proximity to a grid connection point (in this case the BPE-HAY transmission line)
- Free of significant cultural, heritage, landscape, or ecological features (or such features are able to be avoided)

• Ability to negotiate sufficient interest in the land (which typically requires larger land holdings to enable efficient negotiations)

Demonstration of operational need does not require that this is the only site at which a solar farm could operate but that the site contains a cluster of characteristics that, overall, satisfy the "operational need" requirement.

As well as having an operational need to be located on this site, the solar farm does not create adverse effects on the highly productive soils of the site. The panels can be removed and the site returned to primary production at the end of the solar farm's life. The project will not therefore result in any permanent loss of productive land. The temporary reduction in the loss of production activities from the site will be reduced if the solar farm includes provision for sheep grazing to occur beneath the solar panels for the duration of the generation activity.

Overall, the solar farm is not considered to be an inappropriate use or development of the site and is not contrary to the NPSHPL.

The National Policy Statement for Freshwater Management 2020 (NPS-FM) sets out matters relevant to considering applications for resource consents that impact on freshwater, including wetlands.

Several areas of the site have been identified as potentially containing wetlands. These appear to be low value wetlands in areas currently grazed by dairy stock and may have been created by the on-going irrigation of the site. The project is expected to require consent under the National Environmental Standards for Freshwater for activities in or near these wetland areas and the project is looking at opportunities to set aside a wetland area within the site for ecological enhancement to offset any potential effects that are created on wetlands on the site.

The proposal removes an intensive dairying activity, with associated nutrient discharges. The change of activity to solar farming, with the potential provision of a less intensive sheep grazing activity, will reduce nutrients entering surface and groundwater and improve water quality. It will also remove the need to irrigate the land, reducing water requirements.

Overall, effects on freshwater are expected to be positive and the proposal is not contrary to the NPSFM.

National Environmental Standards for Assessing and Managing Contaminants in Soil to Protect Human Health (NESCS) and National Environmental Standards for Freshwater (NESFW)

Consent may be required under these regulations for disturbance of contaminated soil and for earthworks and discharges in or within 100m of a natural inland wetland (associated with specified infrastructure). The relevant provisions of these statutory documents are being considered through preparation of resource consent applications. It is expected that any adverse effects relating to contaminated soils and impacts on wetlands will be suitably managed to the extent they will be no more than minor. As such, the proposal is considered to be consistent with the NESCS and NESFW.

File upload: No file uploaded Will access to the fast-track process enable the project to be processed in a more timely and cost-efficient way than under normal processes?

Yes

Please explain your answer here:

Whether the fast-track process will be more timely and cost-efficient than the normal council process for this project will depend on a number of factors: • Timing of the Fast-track approvals legislation: the project is currently seeking to complete consent documentation for lodgement in Q3 2024. We are seeing solar farm applications of a similar scale and nature taking 9-12 months to reach a decision through the normal process (including limited notification). The timing of the legislation and any lead in time required to engage expert panels will influence which process is more timely. • Issues arising during processing: The solar farm is not expected to give rise to any significant adverse effects but may give rise to effects that are considered minor or more than minor (the assessment of effects is currently being completed but at this time, no significant adverse effects have been identified), particularly with respect to visual and amenity effects (which can be highly subjective). Depending on how the proposed solar farm and the effects of its development are viewed by the councils, mana whenua and local community, the normal council process may be no less timely and cost-efficient than a fast-track process. However, new activities can sometimes be opposed by parties, including by those not actually affected by the project, that are fundamentally opposed to the activity or not satisfied with the proposed mitigations, which can result in lengthy pre-hearing and hearing processes, and sometimes lengthy appeals while attempting to address these issues. In such situations, SolarGen considers the use of the fast-track process could enable the project to be processed in a more timely and cost-efficient way.

While SolarGen is seeking to have this project listed in Schedule 2A of the FTA Bill, it is imperative that if this project is listed, that SolarGen retains flexibility of consenting process because of the uncertainty in timing of the FTA Bill becoming law and the details of the final legislation remain to be seen. SolarGen may lodge resource consents through the RMA process before the FTA Bill becomes law and must retain flexibility of process so that SolarGen can use the standard process if necessary.

What is the impact referring this project will have on the efficient operation of the fast-track process?

Please write your answer here:

Detailed assessment of the site and its environmental constraints is already well underway, and the project is expected to have a complete AEE and all other application documents by the time the Fast-track Approvals Bill becomes legislation. As such, we anticipate the project will be well documented and ready for an expert panel to assess at the time the Fast-track legislation is implemented, if SolarGen chooses to utilise the fast-track process. Therefore, the project being referred is considered to have positive effects on the efficient operation of the Fast-track process, should SolarGen choose to proceed.

Has the project been identified as a priority project in a:

Central government plan or strategy

Please explain your answer here:

While the project is not identified by name in a plan or strategy listed above, as a utility-scale renewable electricity generation project connected to the National Grid the proposed solar farm falls as a priority project under:

the National Policy Statement for Renewable Electricity Generation 2011

• NZ Infrastructure Action Plan (May 2023), which highlights actions from the Emissions Reduction Plan including renewable development. While the associated government infrastructure priority list has not yet been completed, the equivalent list for Australia includes a range of renewable energy projects

• the NZ Emissions Reduction Plan (June 2022), which seeks to accelerate development of new renewable electricity generation (action 11.2.1)

• the New Zealand Energy Strategy (2011-2021, currently under review), which lists diverse resource development (including the development of renewable energy) as one of four priority areas

• the New Zealand Energy Efficiency and Conservation Strategy (2017-2022), which seeks to unlock NZ's energy productivity and renewable potential

• the Government's Electrify NZ policy, which highlights that electrifying large parts of the economy will require enormous investment in renewable generation

• the Government's commitment to double the overall volume of electricity from renewable sources by 2050

• the Horizons Regional Council's Climate Action Strategy 2023, which seeks to support renewable energy generation

• the Horizons One Plan (Regionally Policy Statement), which seeks to increase generation of energy from renewable resources in the region

Will the project deliver regionally or nationally significant infrastructure?

National significant infrastructure

Please explain your answer here:

The NPS-REG states that the development and operation of new renewable electricity generation activities is a matter of national significance and therefore the project is considered to deliver nationally significant infrastructure.

The Horizons One Plan definition of infrastructure of regional or national importance includes all facilities that generate more than 1MW of electricity where that electricity is supplied to the electricity distribution and transmission network. As a new utility-scale solar farm connected to the National Grid, the proposed solar farm meets that definition.

Will the project:

contribute to a well-functioning urban environment

Please explain your answer here:

The project will contribute to a well-functioning urban environment through its contribution of renewable electricity generation to the National Grid and being situated near large urban environments that demand electricity (Wellington and Palmerston North). The project will also assist Aotearoa New Zealand to meet its climate change commitments.

Will the project deliver significant economic benefits?

Yes

Please explain your answer here:

The $\frac{9(2)(b)}{m}$ Solar Farm is expected to generate some 304 GWh/yr of 100% renewable electricity. In energy terms, the solar farm's annual output is expected to supply the equivalent of approximately 43,000 households which will support the economy.

SolarGen expects there to be significant economic benefits during construction and operation including capital construction cost and ongoing annual expenditure. Some of the construction costs and a significant proportion of the operational costs are likely to be spent within the local and national economy. The construction and operation of the solar farm is expected to create significant employment opportunities, including potential opportunities for both the local region and New Zealand. Constructing the solar farm will create up to 200 jobs over an approximate 12-month period.

Construction work will require both skilled and unskilled labour for mechanical assembly, electrical components, civil works, and connecting plant. Operating the solar farm will create both ongoing and intermittent employment opportunities including an estimated 3-5 permanent roles and additional roles (likely for contractors) created on a monthly or quarterly basis for routine onsite operations and maintenance.

Will the project support primary industries, including aquaculture?

No

Please explain your answer here:

NA

Will the project support development of natural resources, including minerals and petroleum?

Yes

Please explain your answer here:

The ^{s 9(2)(b)(ii)} Solar Farm will involve the use of a renewable natural resource (solar energy) for the generation of electricity

Will the project support climate change mitigation, including the reduction or removal of greenhouse gas emissions?

Yes

Please explain your answer here:

The proposed ^{s 9(2)(b)(ii)} Solar Farm will support achieving Aotearoa New Zealand's climate change commitments, the aspirations of Electrify NZ, and the new coalition Government's commitment to double the overall volume of electricity from renewable sources by 2050. The project will contribute towards Aotearoa New Zealand meeting its international and domestic commitments and have significant climate benefits including:

- Contributing approximately 304 GWh/yr of 100% renewable electricity, increasing the overall renewable electricity supply.

- Improve the resilience of our electricity supply by helping to diversify the source of that renewable electricity (as solar currently comprises of less than 1% of New Zealand's renewable energy generation).

- Reducing reliance on imported energy sources (such as coal and petroleum).

- Displace existing emissions from the site produced by the current agricultural activities.

- Displacing baseload thermal generation.

Will the project support adaptation, resilience, and recovery from natural hazards?

Yes

Please explain your answer here:

Adding solar energy to the mix of electricity generation introduces diversity to national generation and supports adaptation as demand grows. Diversification and distribution of New Zealand's renewable electricity generation will provide additional resilience to and recovery from natural hazards, for instance where flooding or earthquake impacts generation in one area or prevents transmission, having additional generation sites may reduce the impact.

Solar farms are relatively resilient to natural hazards and can be lifted/raised, removed, or repaired if partially damaged without taking the entire site offline.

Will the project address significant environmental issues?

Yes

Please explain your answer here:

The project is not expected to give rise to any significant environmental issues. The actual and potential effects that will be the subject of resource consent applications for the solar farm will be considered in accordance with section 104(1)(a) of the RMA. Any more than minor adverse effects will be addressed through avoidance, mitigation, or compensation as appropriate.

As new renewable electricity generation, the proposed solar farm will support a reduction in greenhouse gas emission and support the climate change response, arguably the greatest environmental issue facing the country.

The drive to further electrify the economy will require significant new generation capacity. The proposed solar farm will feed into the National Grid and support the continued health, safety and wellbeing of people and communities.

Is the project consistent with local or regional planning documents, including spatial strategies?

Yes

Please explain your answer here:

Horizons Regional Policy Statement

The Horizons Regional Policy Statement provides an overview of the resource management issues in the Manawatū-Whanganui Region and the ways in which integrated management of the region's natural and physical resources will be achieved.

Chapter 3 of the Regional Policy Statement sets out objectives and policies relating to infrastructure and renewable energy projects which at a high level: • Recognises electricity generation facilities of more than 1 MW of electricity and supporting infrastructure as having regional or national significance where the electricity generated is supplied to the electricity distribution and transmission networks, and recognising the benefits derived from this infrastructure.

• Requires an increase in the use of renewable energy resources in the region.

• Requires the regional council and territorial authorities to have particular regard to the benefits of renewable energy resources, the region's potential for renewable energy resources, the need for these activities to be located where the resource is located, and the benefits of enabling increased electricity generation capacity.

• Ensuring that in managing adverse environmental effects arising from the establishment, operation, maintenance and upgrading of infrastructure, the regional council and territorial authorities must:

o Recognise and provide for the operation, maintenance and upgrade of such activities once they are established;

o Allow minor adverse effects from establishing new infrastructure; and

o Avoid, remedy or mitigate more than minor adverse effects arising from establishing new infrastructure, taking into account the need for the infrastructure; any functional, technical or operational constraints that require the infrastructure to be located or designed in the manner proposed; any reasonably practicable alternative locations or designs; and whether any more than minor adverse effects that cannot be adequately avoided, remedied or mitigated by services or works can be appropriately offset, including through the use of financial contributions.

The Regional Policy Statement is directive in its approach to requiring that the District and Regional Councils have regard to the benefits of renewable energy. It also directs that adverse effects must be avoided, remedied or mitigated but states this must be done whilst having regard to the need for the infrastructure.

The project is consistent with the Regional Policy Statement.

Horizons Regional Plan

The Horizons Regional Plan contains objectives, policies and methods to manage the natural and physical resources of the Manawatū-Wanganui Region outside of the coastal marine area. The Regional Plan specifically manages activities in relation to water (takes, diversions, discharges), activities in the beds of streams, lakes and artificial watercourses, and land (land disturbance, vegetation removal, discharges and contamination).

The Regional Plan is relevant to the proposal when assessing the effects of earthworks, stormwater discharges or the disturbance of any wetland or stream. Key matters include:

• Land Disturbance and Vegetation Clearance: These objectives and policies seek to ensure that these activities occur in a way which avoids, remedies or mitigates accelerated erosion and increased sedimentation in water bodies. The proposal is not likely to be found contrary to the objectives and policies in this plan as only a controlled activity consent for earthworks is required. The consent will detail the sediment control methods proposed for the earthworks that will occur across the site to demonstrate these objectives are achieved.

• Natural Inland Wetlands: These objectives and policies seek that any loss of extent of natural inland wetlands is avoided, their values are protected, and that their restoration is promoted (in line with the NPS-FM). The NPS-FM sets out an effects hierarchy for when works for specified infrastructure will modify wetlands. There are numerous low value wetlands on the site, some are expected to be impacted by the project. Appropriate mitigation will be put in place where required.

• Stormwater Discharges: Objectives and policies relating to stormwater discharges seek to ensure that discharges onto or into land are managed to safeguard the life supporting capacity of water and avoid, remedy or mitigate adverse effects on surface water and/or groundwater. These objectives will be taken into account in the design of the project.

Summary

The proposal is expected to be considered consistent with the Regional Plan.

Horowhenua District Plan

The land is zoned Rural under the Horowhenua Operative District Plan (District Plan) ${
m s}$ 9(2)(b)(ii)

site is not subject to any other designations or overlays in the District Plan. Adjacent land is also zoned Rural. The National Grid Corridor (High Voltage Transmission Corridor operated by Transpower) traverses through the site in a north to south direction.

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The Horowhenua District Plan Network Utilities and Energy objectives and policies support the project. There is some potential tension between the project and the District Plan's objectives and policies that require the maintenance and enhancement of the detailed landscape values of the state area in the Rural objectives and policies.

The key provisions are the objectives and policies that relate to landscape character in the Rural Zone and the s 9(2)(b)(ii)

Rural Environment Wide Objectives: At a high-level, the rural environment wide objectives and policies in Chapter 2 of the HDP seek that:

• Development maintains and enhances the character and amenity values of the rural environment [objective 2.1.1];

• The open space and spacious character of rural areas is retained, with a dominance of open space and planting over buildings, and conflict between rural and residential activities is minimised [policy 2.1.6];

• Development minimises obtrusive built elements in the rural environment through integrating building location and design with the surrounding landform and landscape qualities [policy 2.1.7];

Adverse effects on areas or features of landscape, biodiversity, historic heritage or cultural value are avoided, remedied or mitigated [policy 2.1.9];
Regard is given to the elements of rural character to ensure that new activities locating in the rural area are of a nature, scale, intensity and location consistent with maintaining the character of the rural area and be undertaken in a manner which avoids, remedies or mitigates adverse effects on rural character, including rural productive values [policy 2.1.9]; and

• That new activities locating in the rural environment are of a nature, scale, intensity and location consistent with maintaining the character of the rural area and to be undertaken in a manner which avoids, remedies or mitigates adverse effects on rural character, including rural productive values and potential reverse sensitivity effects [policy 2.1.20].

The key theme in the above objectives and policies relates to maintaining and enhancing the rural character and amenity of the rural environment, with a focus on the nature, scale, intensity and location of development. The proposal has a potential adverse effect on the open spacious nature of the area with screen planting likely to be required to assimilate the project into the area.

The solar farm and associated structures will change the character and amenity of the site and its surroundings, noting that the land is presently utilised for dairy farming activities and the natural dunes in the area have been levelled to provide for this farming activity.

Policy 2.1.19 requires the council to have regard to the Explanation and Principal Reasons set out in Chapter 2. This explanation states that rural character may include: "The presence of manmade structures where those structures are related to rural production activities or industry and infrastructure for which a rural location is either required or is most appropriate". This statement acknowledges that the visual effects of projects such as these may be considered appropriate in the area when they have a need to be located in the rural production area such as this project does.

s 9(2)(b)(ii)

Fragmentation and Soil Resource: The key objectives relating to the soil resource seeks:

• To safeguard the life supporting capacity of soils to enable a wide range of primary production activities and provide a resource for future generations while recognising the finite nature of the versatile land resource [objective 2.1.1].

The proposal does not fragment the land but does temporarily remove it from primary production. The District Plan only refers to LUC 1 and 2 as being subject to these objectives and the best quality soils on the site are LUC 3.

Nature, Character, Amenity Values and Servicing: The objectives and policies relating to nature, character, amenity values and servicing are outlined below:

• seek to enable primary production activities and other rural based land uses to function efficiently and effectively in the Rural Zone, while avoiding, remedying or mitigating the adverse effects of activities, including reverse sensitivity effects caused by new activities on existing activities, in a way that maintains and enhances the character and amenity values of the rural environment [objective 2.4.1];

• provide for the establishment and operation of new non-primary production activities and the ongoing operation of existing lawfully established activities which are compatible and/or associated with primary production activities in the rural environment provided they meet minimum environmental standards to avoid, remedy or mitigate any adverse effects [policy 2.4.3];

• seek to control and manage the establishment and operation of a range of other land use activities, including sensitive activities, in the rural environment to ensure their adverse effects on the environment (including reverse sensitivity effects on existing lawfully established activities) are avoided, remedied or mitigated [policy 2.4.4];

• seek to avoid, remedy or mitigate the impact of buildings on the rural landscape and maintain overall low building density and building height throughout the rural environment [policy 2.4.7];

• seek to avoid, remedy or mitigate adverse effects on rural privacy and rural character in the Rural Zone by maintaining road and site boundary setbacks for all buildings, while recognising the degree of privacy and rural spaciousness is different in areas comprising existing smaller rural-residential lots [policy 2.4.10]; and

• seeks to ensure that land use activities, subdivision and development adjoining the National Grid, the State Highway network and the North Island Main Trunk Railway Line avoid, remedy or mitigate any adverse effects on the safe and efficient operation of the electricity transmission, roading and rail networks [policy 2.4.16].

The proposal creates various areas of tension with some of these objectives and policies particularly those that seek to avoid the impact of buildings on the landscape (if the solar panels are considered buildings) and to reduce the scale of non-productive activities and avoid remedy or mitigate effects on rural character.

Utilities and Energy: Only the substation part of the proposal meets the definition of a utility; however, these objectives and policies are relevant as they relate to energy generation as well. A number of the objectives specifically refer to recognising the importance of renewable energy generation; however, they also require that the adverse effects of projects are carefully managed.

At a high-level, the objectives and policies in Chapter 12.1 of the HDP relating to network utilities and energy seek that:

• the establishment, operation, maintenance and upgrading of network utilities is provided for and protected, while avoiding, remedying or mitigating

adverse effects on the environment [objective 12.1.1];

• the health and safety of the community is not compromised by the establishment, operation, maintenance and upgrading of network utilities [policy 12.1.5];

• that when the location, design and appearance of network utilities is assessed, the locational, technical and operational requirements of network utilities is considered as well as the contribution that they make to the function and well-being of communities [policy 12.1.6];

• the efficient use of energy and the development and use of renewable electricity generation infrastructure is recognised and provided for, where the adverse effects on the environment can be avoided, remedied or mitigated [objective 12.2.1];

• the establishment and development of new renewable electricity generation facilities is managed to ensure the adverse environmental effects that are more than minor are avoided, remedied or mitigated [policy 12.2.4];

• the contribution of renewable energy use and development to the well-being of the District, Region and Nation is recognised [policy 12.2.5];

• adverse effects on the environment from renewable electricity generation and distribution activities are avoided, remedied or mitigated, specifically on those parts of the environment most sensitive to change [policy 12.2.6].

These objectives support the proposal.

Summary

As a Discretionary activity it is not necessary to find that the proposal is not contrary to any of the objectives and policies in the District Plan but it will need to be demonstrated that the proposal finds support in these where it can.

Other key values of the area are listed as the duneland vegetation

The proposed project is likely to have tension with the objectives and policies that seek to maintain and enhance rural character. s 9(2)(b)(ii)

and wetlands.

The scale of the project is likely to create some tension with the policies that speak of maintaining open views in the area. The site assessments undertaken by the landscape architects will be important in this regard and the project design will need to be mindful of the extent to which screen planting will break the open views of the solar panels.

The project does find support in the Utilities and Energy Generation provisions, as they require renewable generation projects to be recognised and provided for, while avoiding, remedying or mitigating adverse effects.

Reflecting the influence of the NPS-REG, the District Plan policy framework positively refers to renewable energy. However, direct provision for a utility scale solar farm is not provided for in the district plan rules and is therefore a Discretionary activity. The support for renewable electricity generation provided by the NPS-REG (and as reflected in the district plan policy framework) needs to be had regard to.

Anything else?

Please write your answer here:

While SolarGen is seeking to have this project listed in Schedule 2A of the FTA Bill, it is imperative that if this project is listed, that SolarGen retains flexibility of consenting process because of the uncertainty in timing of the FTA Bill becoming law and the details of the final legislation remain to be seen. SolarGen may lodge resource consents through the RMA process before the FTA Bill becomes law and must retain flexibility of process so that SolarGen can use the standard process if necessary.

Genesis has submitted on these matters (amongst others) in relation to the Bill.

Does the project includes an activity which would make it ineligible?

No

If yes, please explain:

NA

Section 8: Climate change and natural hazards

Will the project be affected by climate change and natural hazards?

No

If yes, please explain:

The project site is not subject to significant climate change or natural hazard risk. Potential flooding and geotechnical hazards will be assessed during the design process and the layout designed accordingly. Solar panels not particularly susceptible to low-level flooding and all associated infrastructure can be located on piles or foundations that can be elevated if necessary.

Section 9: Track record

Please add a summary of all compliance and/or enforcement actions taken against the applicant by any entity with enforcement powers under the Acts referred to in the Bill, and the outcome of those actions.

Please write your answer here:

SolarGen is a joint venture partnership between Genesis Energy Limited and FRV NZ1 Limited. SolarGen has had no compliance or enforcement actions taken against it or any limited partnership set up under the SolarGen umbrella.

Genesis is committed to ensuring that environmental, social and cultural awareness and responsibility are cornerstones of the company's business

activities and that a duty of care towards people, communities and the environment is exercised at and around its assets. The company achieves this by implementing an Environmental Management System that aligns with core company values. Genesis seeks full regulatory compliance as a minimum standard and publicly reports on its environmental performance.

Genesis' activities are monitored regularly by the relevant regulatory authorities and Genesis has a history of very high environmental compliance, with no environmental enforcement actions having been taken against it.

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Declaration

Do you acknowledge your submission will be published on environment.govt.nz if required

Yes

By typing your name in the field below you are electronically signing this application form and certifying the information given in this application is true and correct.

Please write your name here: s 9(2)(a)

Important notes