Statutory Planning Policy Assessment

This policy assessment relies in part on the findings of the Assessment of Environmental Effects undertaken for the Twizel Solar Plant and the outcomes of consultation prepared by Nova Energy.

MACKENZIE DISTRICT PLAN

The policy assessment for the Mackenzie District Plan is informed by Table 1 of the Renewable Electricity Generation chapter. Table 1 limits the applicability of other chapters and provisions in the MDP.

In accordance with the direction in the Renewable Electricity Generation Introduction and Table 1, the following chapters and provisions of the Plan have been assessed:

a) Renewable Electricity Generation
b) Strategic directions
c) Contaminated Land
d) Natural Hazards
e) Hazardous substances
f) Historic heritage
g) Lighting
h) Noise
i) Signs

The Project does not involve Notable Trees or Activities on the Surface of Water and for this reason these provisions have not been assessed. The relevant Ecosystems and Indigenous Biodiversity provisions in Table 1 of the Renewable Energy Generation chapter only relate to the Waitaki Power Scheme and Opuha Scheme. For this reason, these provisions have not been considered any further in the assessment below.

Renewable Electricity Generation

REG - Renewable Electricity Generation	Assessment
Objective REG-O1 General Output The output from renewable electricity generation activities in the District for national, regional and local use is increased to support achievement of the New Zealand Government's national target for renewable electricity generation.	*This is an enabling policy and the proposal is entirely consistent with it insofar as it provides for an increase in renewable electricity generation in the District.*
Objective REG-O2 Adverse Effects The adverse effects of renewable electricity generation activities are appropriately managed	*A detailed and comprehensive Assessment of Environmental Effects has been undertaken for the project which demonstrates that all actual and potential adverse effects will be appropriately managed.*
Objective REG-O3 Te Manahuna / Mackenzie Basin ONL - Waitaki Power Scheme To maintain and develop structures and works for the Waitaki Power Scheme: (1) within the existing footprints of the Takapō /Tekapo-Pūkaki and Ōhau Canal Corridor, the Takapo, Pūkaki and Ōhau Rivers, along the existing transmission lines, and in the Crown-owned land containing Lakes Takapō / Tekapo, Pūkaki, Ruataniwha and Ōhau and subject only (in respect of landscape values) to the objectives, policies and methods of implementation within this chapter, except for	*Not applicable*

management of exotic tree species in respect of which NFL-O3.1 and all implementing policies and methods in the NFL Chapter apply; (2) elsewhere within Te Manahuna / the Mackenzie Basin ONL so as to achieve NFL-O3.1.	
Policy REG-P1 Benefits Recognise and provide for the national, regional, and local benefits of renewable electricity generation activities and assets, including avoiding, reducing, or displacing greenhouse gas emissions.	*This is an enabling policy and the proposal is entirely consistent with it insofar as the project will contribute to New Zealand's efforts to reduce greenhouse gas emissions.*
Policy REG-P2 Te Manahuna / Mackenzie Basin ONL – Renewable Energy To recognise and provide for the use and development of renewable energy generation and transmission infrastructure and operations within the footprint of current operations or on land owned by infrastructure operators as at 1 October 2011 while, as far as practicable, avoiding, remedying or mitigating significant adverse effects on the outstanding natural landscape and features of Te Manahuna / the Mackenzie Basin	*Not applicable*
Policy REG-P3 Lakeside Protection Areas (1) Provide for the upgrading, maintenance and enhancement of the existing elements of the Waitaki Power Scheme; and (2) Avoid, remedy or mitigate the adverse impacts of further buildings and structures required for the Waitaki Power Scheme on the landscape values and character of the Basin's lakes and their margins.	*Not applicable*
Policy REG-P3A Opuha Scheme and the Waitaki Power Scheme Enable the operation, maintenance and upgrade of the: (1) Opuha Scheme; and (2) Waitaki Power Scheme within its existing footprint and core sites; while managing adverse effects in accordance with REG-P2 and REG-P3, where relevant	*Not applicable*
Policy REG-P4 Investigation Activities and Small-Scale Renewable Electricity Generation Activities Enable: (1) investigation and identification of renewable electricity generation sources; and (2) small-scale renewable electricity generation activities while managing adverse effects on the environment relative to the values of the area in which they are located	*Not applicable*
Policy REG-P5 Other Renewable Electricity Generation Activities Provide for renewable electricity generation (not otherwise specified in REG-P2, REG-P3, REG-P3A, REG-P4 or REG-P6), while managing adverse effects by: (1) avoiding, remedying or mitigating adverse effects as far as practicable; (2) where residual adverse effects remain, having regard to any proposed offsetting measures and/or environmental compensation (including considering Policy 4 in Section 19 and Appendix Z); and	*Not applicable*

(3) having particular regard to the practical constraints associated with renewable electricity generation activities, including the: a. functional needs and operational needs of renewable electricity generation activities; b. location and efficient use of existing electricity generation, transmission and distribution infrastructure; and c. the need to locate the renewable electricity generation activity where the renewable energy resource is located.	
Policy REG-P6 Other Renewable Electricity Generation Activities – Within areas of significant indigenous vegetation and significant habitats of indigenous fauna, ONLs, ONFs, riparian areas and SASM or on highly productive land Provide for renewable electricity generation activities (not otherwise specified in REG-P3 and REG-P4) within areas of significant indigenous vegetation and significant habitats of indigenous fauna, Outstanding Natural Landscapes, Outstanding Natural Features, Sites and Areas of Significance to Māori, riparian areas, or within area of Highly Productive Land, where: 1. there is a functional need or operational need for the activity to be in that location; 2. adverse effects on the values of the area are avoided as far as practicable, including through site, route or method selection, design measures and other management methods; 3. adverse effects on the values of the area that cannot be avoided are remedied or mitigated, where practicable; 4. other adverse effects (that do not affect the values of the area) are avoided, remedied or mitigated, as far as practicable; 5. regard is had to any proposed offsetting measures or environmental compensation (including considering Policy 4 in Section 19 and Appendix Z), where there are significant residual adverse effects that cannot be avoided, remedied or mitigated; and 6. Particular regard is had to the practical constraints associated with renewable electricity generation activities, including the: a. location and efficient use of existing electricity generation, transmission and distribution infrastructure; and b. The need to locate the renewable electricity generation activity where the renewable energy resource is located. 7. Following application of 1-6 above, consideration is given to whether the benefits of the activity outweigh any significant residual adverse effects on the values of the area.	*The proposal is located within an Outstanding Natural Landscape. The proposal avoids areas of significant indigenous vegetation and significant habitats of indigenous fauna.* *The proposal has an operational need to be in the location because of the need to be located close to a National Grid connection and substation, within an area with strong solar irradiation and on land with flat contour which is not subject to any significant natural hazard risk. The operational need for the project to be in the proposed location is outlined in detail in section 1.3.4 of the substantive application.* *The proposal avoids adverse effects on the values of the area as far as practicable through site design, setbacks and adherence to a suite of conditions and management plans incorporating adaptive management. Other adverse effects will be avoided, remedied or mitigated, as far as practicable.* *The proposal will not result in any significant residual adverse effects and therefore proposed offsetting measures and/or environmental compensation is not required. Despite this Nova is proposing compensation as a backstop should the ecological avoidance and mitigation measures prove to be unsuccessful.* *Large scale solar plants need to locate where solar irradiation is high and on sites that are close to existing transmission infrastructure in order for a project to be commercially viable. The application site meets the above requirements. The suitability of the site is detailed in section 1.3.4 of the substantive application.* *The benefits of the Project have been demonstrated to be significant at both a regional and national level and are considered to outweigh any residual adverse effects, none of which have been found to be significant.*

Strategic directions

The objectives in the Strategic Directions chapter are classified within the following categories: A thriving Community; Mana Whenua; Natural Environment; Urban Form and Development.

The Introduction to the Strategic Direction chapter states that there is no hierarchy between the stated Objectives i.e. no one Strategic Objective has primacy over another Strategic Objective and the Strategic Objectives should be read as a whole.

Mackenzie District Plan	
Strategic Directions	
A Thriving Community	Assessment
Objective ATC-O1 Live, Work, Play and Visit The Mackenzie District is a desirable place to live, work, play and visit, where: (1) there are a range of living options, businesses and recreation activities to meet community needs; (2) activities that are important to the community's social, economic and cultural well-being, including appropriate economic development opportunities are provided for; and (3) the anticipated amenity values and character of different areas are maintained or enhanced.	*The proposal is considered to represent an appropriate economic development opportunity because it is an activity that is anticipated and enabled by the MDP and will generate significant regional benefits including $85 million in one-time GDP, 570 full-time equivalent (FTE) job-years, equating to approximately 285 people employed full-time for two years; and will generate approximately $51 million in wages and salaries across the construction, civil works, professional services, and supply sectors. Operation of the project will result in additional jobs and contribution to regional GDP.* *The project will maintain the anticipated amenity values and character of the area Renewable electricity generation activities are anticipated and enabled by the MDP and the Project will be located in part of the Mackenzie Basin where renewable electricity generation activities and transmission infrastructure form established components of the character and amenity of the area.*
Objective ATC-O2 Rural Areas The significant contribution of rural areas to the social, economic and cultural well-being of the District is recognised and provided for.	*The proposal is located within a rural area and will make a significant contribution to the social, economic and cultural well-being of the Mackenzie District.*
Objective ATC-O3 Infrastructure The importance to the District and beyond of infrastructure, particularly nationally and regionally significant infrastructure, is recognised and provided for.	*The proposal provides for nationally and regionally significant infrastructure.*
Objective ATC-O4 Renewable Electricity The local, regional and national benefits of the District's renewable electricity generation and electricity transmission activities and assets are recognised and their development, operation, maintenance and upgrade are provided for and reverse sensitivity effects on those activities and assets are avoided.	*The proposal provides for the development of a large-scale renewable electricity generation activity and asset with local, regional and national benefits.*
Objective ATC-O5 Adaption and Resilience Management of natural hazard risks is integrated with the effects of climate change and allows the community to be resilient and adapt appropriately to change.	*Natural hazard risks have been assessed in the Flood Hazard Risk Assessment and the NPS-Natural Hazards Assessment, taking in to account the effects of climate change, and the Project will not impact on the community's ability to be resilient or to adapt appropriately to change.*
Objective ATC-O6 Incompatible Activities The location and effects of activities are managed to: (1) minimise conflicts between incompatible activities; and (2) protect important existing activities from reverse sensitivity effects.	*The Assessment of Environmental Effects has not identified any reverse sensitivity issues or conflict between the Project and existing activities. Nova's consultation with adjoining landowners has not identified any conflict or reverse sensitivity issues that cannot be mitigated through the proposed conditions.*

Mana Whenua	Assessment
Objective MW-O1 Mana Whenua Values The role of mana whenua is recognised and their historic and contemporary relationship with the District's land, water bodies, indigenous species and other sites and areas of significance are recognised and provided for.	*Nova has recognised the role and relationship of mana whenua through the engagement undertaken to date and its commitment to continue to work with mana whenua to ensure the matters in MW-O1 are recognised and provided for. Conditions are proposed by Nova to provide for mana whenua to exercise kaitiakitanga and Nova will continue to work with mana whenua post application submission to agree on conditions.*
Objective MW-O2 – Mana Whenua Involvement Mana whenua are able to: (1) Be actively involved in decision making that affects their values and interests; (2) Exercise their kaitiakitaka responsibilities; and (3) Carry out customary activities in accordance with tikanga.	*As per the above assessment.*
Natural Environment	**Assessment**
Objective NE-O1 Natural Environment The values of the natural environment, including those that make the District unique, contribute to its character, identity and well-being, or have significant or outstanding intrinsic values, are recognised and provided for, and where appropriate protected and enhanced. This includes, but is not limited to, values associated with the following important natural resources: (1) mahika kai resources; (2) night sky darkness; (3) outstanding natural features and landscapes; (4) significant indigenous biodiversity; and (5) water bodies and their margins.	*The project has been developed with the important natural resources identified in NE-O1 at the front of mind. Nova has worked with experts and mana whenua to identify areas on the site with important values and has designed the project to avoid adverse effects on these values. In particular, setbacks are proposed from all water bodies and from areas of significant ecological value. Areas for ecological enhancement, including ecological corridors and nodes throughout the site, are proposed to provide habitat for indigenous species on the site. Setbacks from waterbodies and earthworks and stormwater controls will ensure Mahika kai resources are not adversely affected and therefore recognised and provided for.* *The proposal will not result in any significant adverse landscape effects or adverse effects on indigenous biodiversity that are more than minor.* *It is proposed that construction and operational activities will take place in daytime, so lighting can be limited to the minimum required (only security lighting.)*
Urban Form and Development	**Assessment**
Objective UFD-O1 Urban Form and Development The District's townships and settlements grow and develop in a consolidated way that: 1. is integrated into, and respects the values of the surrounding natural and physical environment; 2. achieves good connectivity with other parts of the urban area; 3. is integrated with the provision of infrastructure and facilities which support the functioning of the community; 4. maintains the anticipated character of each township, and its attractiveness to residents, businesses and visitors;	*The project is not located in an urban zone or urban environment. This objective is not relevant.*

5. responds to the needs of the community, including diversity in housing and business opportunities; and 6. protects highly productive land.	

Contaminated land

The introduction to this chapter records that the District Plan does not include any rules relating to contaminated land, because these are included in the National Environmental Standard for Assessing and Managing Contaminants in Soil to Protect Human Health (NESCS). This chapter contains objective and policy guidance for assessing resource consents which are required under the NESCS. Nova is not seeking resource consent under the NESCS, but nevertheless, an assessment is provided against these provisions as directed by Table 1 of the REG Chapter.

Contaminated Land	Assessment
Objective CL-O1 Contaminated Land Human health and the environment are protected from the adverse effects of the subdivision, development or use of contaminated land.	*Nova has investigated the potential for contaminated land on the application site and the risk to human health and the environment is considered to be low.*
Policy CL-P1 Managing Effects of Contaminated Land Require any proposal for subdivision, development, or use of contaminated land or potentially contaminated land to apply a best practice approach to investigate the risks, and either remediate the contamination or manage activities on contaminated land to protect health of people and the environment.	*A best practice approach has been applied by Nova. Nova has commissioned a Preliminary Site Investigation which has concluded there are no contaminated land risks on the site that need to be managed.*
Policy CL-P2 Remediation Works (1) The remediation or mitigation works for contaminated land shall be undertaken in such a way to not pose increased risk to human health or the environment compared to if remediation had not occurred; and (2) Use and development of remediated contaminated land does not damage or destroy any containment works, unless comparable or better containment is provided.	*No contaminated land remediation works are proposed or required.*

Natural hazards

This chapter manages the following natural hazards: flood hazard, surface fault rupture as a result of earthquakes, liquefaction as a result of earthquakes and wildfire hazards.

Natural Hazards (NH)	Assessment
Objective NH-O1 Risk from Natural Hazards New subdivision, land use and development (excluding critical infrastructure): (1) is avoided in areas where the risks from natural hazards to people, property and infrastructure are assessed as being unacceptable; and	*The solar project infrastructure constitutes critical infrastructure so is excluded from consideration under this objective.*

(2) in all other areas, is undertaken in a manner that ensures that the risks of natural hazards to people, property and infrastructure are avoided or appropriately mitigated.	
Objective NH-O2 Critical Infrastructure, Major Hazard Facilities and Specific Buildings in Natural Hazard Overlays (1) Critical infrastructure is not located in areas of high natural hazard risk unless there is a functional need or operational need to be at the location; (2) If there is a functional need or operational need to be within areas of high natural hazard risk the critical infrastructure must, as far as practicable, be designed to be resilient to the effects of natural hazards, while achieving the objectives of the critical infrastructure; (3) New critical infrastructure avoids increasing the risks of natural hazards to people, property and infrastructure or, where avoidance is not practicable, mitigation measures minimise such risks; and (4) Major hazard facilities, healthcare facilities, emergency services facilities, education facilities or visitor accommodation activities avoid locating in areas of high natural hazard risk associated with surface fault rupture where the effects on occupants and neighbours are assessed as being unacceptable.	*The Flood Hazard Risk Assessment has identified that less than 0.1% of the solar panel array footprint is located within High Flood Hazard Areas.* *The benefits and justification for the site's suitability are detailed in the substantive application. There is a functional and operational need to be at the location.* *The design of the infrastructure within the high flood hazard area mitigates against impacts on the infrastructure through ground clearances and minimum floor levels. In terms of geohazard risk, the site has been assessed as generally having a low risk with design setbacks from slope crests ensuring risk is reduced to an acceptable level.* *The Flood Hazard Risk Assessment and NPS-Natural Hazards Assessment find that subject to mitigation measures being implemented the project will not result in an increase of natural hazard risk to people, property and infrastructure.* *Clause 4 of the objective is not relevant to the project.*
Objective NH-O3 Natural Hazard Mitigation Methods to mitigate the effects of natural hazards do not create or exacerbate adverse effects on other people, property, infrastructure, or the environment.	*Methods to mitigate natural hazard risk from flooding will only involve minor earthworks and drainage work and will not create or exacerbate adverse effects on other people, property, infrastructure, or the environment.*
NH-O4 Natural Hazard Mitigation Works Natural hazard mitigation works and systems are enabled and maintained to reduce the impact of natural hazards on people, communities, property and infrastructure.	*The proposed natural hazard mitigation works have this purpose and will achieve this objective.*
Policy NH-P1 Identification of Natural Hazards Identify areas of natural hazards risk through the use of natural hazard overlays and natural hazard assessments, and use the most up to date information available to provide site specific natural hazard assessments.	*This policy is in part a directive for MDC which is not directly relevant to the Project. The natural hazard assessments undertaken by Nova have used the most up to date information available to provide site specific natural hazard assessments.*
Policy NH-P2 Climate Change Recognise that climate change will alter the frequency and severity of some natural hazards, and ensure that natural hazard assessments, and any mitigation works, take into account the effects of climate change.	*The Flood Hazard Risk Assessment undertaken by Nova has factored climate change predictions into the modelling and the natural hazard work proposed will also be designed to account for climate change.*
Policy NH-P3 Risk Based Approach Take a risk-based approach to natural hazards commensurate with the sensitivity and scale of development, whereby the level of risk is assessed as the combination of the likelihood of a natural hazard event occurring and the consequences of that event, for people and communities, property, infrastructure and the wider environment.	*The natural hazard risk assessments undertaken by Nova have applied the risk-based approach required by the NPS-NH. While the NPS-NH was published after the Mackenzie District Plan, it is considered that the risk-based approach aligns with this policy.*
Policy NH-P4 Flood Hazards Within the Flood Hazard Assessment Overlay (except High Flood Hazard Areas), enable:	*The site is located within the Flood Hazard Assessment Overlay.* *The vast majority of the solar plant is located outside the High Flood Hazard Areas on the site.*

(1) new non critical infrastructure, or the operation, maintenance, repair, replacement, upgrading of non critical infrastructure where the infrastructure does not increase flood risk on another site or property; and (2) the development, operation, maintenance, repair, replacement, upgrading of critical infrastructure where the infrastructure does not increase flood risk on another site or property; and (3) any other new subdivision, use and development only where every new natural hazard sensitive building has an appropriate floor level above the 500 year ARI design flood level	*The policy enables the development of critical infrastructure within the Flood Hazard Assessment Overlay where it does not increase flood risk on another site or property. The Flood Hazard Risk Assessment prepared to support Nova's application confirms that the project will not increase flood risk on another site or property.*
Policy NH-P4A Critical Infrastructure in High Flood Hazard Area Enable the operation, maintenance, repair, replacement and upgrading of critical infrastructure within High Flood Hazard Areas where the infrastructure does not increase flood risk on surrounding properties.	*Only very small parts of the solar plant will be located in the High Flood Hazard Area.* *This policy enabling the operation of the infrastructure where it does not increase flood risk to surrounding properties. The Project will not increase flood risk on surrounding properties.*
Policy NH-P5 High Flood Hazard Area Within any High Flood Hazard Area avoid any: (1) extensions to existing natural hazard sensitive buildings unless: a. minimum floor levels, as determined by a Flood Hazard Assessment are incorporated into the design of the development to ensure buildings are located above the flood level so that the risk to life and potential for property damage from flooding is mitigated; b. the risk to surrounding properties is not significantly increased; and c. the development is not likely to require new or upgraded public natural hazard mitigation works to be undertaken by a local authority. (2) subdivision and new natural hazard sensitive buildings unless it is: a. not likely to result in loss of life or serious injuries; and b. not likely to suffer significant damage or loss; and c. not likely to require new or upgraded public natural hazard mitigation works to be undertaken by a local authority to mitigate or avoid the natural hazard; and d. not likely to exacerbate the effects of the natural hazard. (3) subdivision unless it is: a. managed to ensure land use enabled by subdivision does not result in an unacceptable risk to people and property that cannot be mitigated to an acceptable level. (4) new critical infrastructure unless: a. there is a functional need or operational need to locate in that environment; and b. the infrastructure is designed to be resilient to flood hazard as far as is practicable; and c. the infrastructure is designed so as not to increase flood risk to people and property.	*The Project proposes new natural hazard sensitive buildings in the form of the workshop and operations and maintenance buildings and temporary construction office buildings. The locations of these buildings have been informed by the Flood Hazard Risk Assessment to avoid areas of high flood hazard risk.* *The substantive application demonstrates the operational need for the project's critical infrastructure to be in the location proposed – please see section 1.3.4 of the substantive application.* *The elements of critical infrastructure that are located within High Flood Hazard Areas are limited to small sections of the internal access road and less than 0.1% of the overall solar array footprint. Solar panels are mounted on piles with a minimum ground clearance of 800 mm and can be remotely tracked to increase clearance up to 1.85 m during severe weather events, significantly reducing exposure to flood depths. Flood risk on the internal access road poses limited risk to infrastructure. The design and nature of the infrastructure will not increase flood risk to people and property.*
Policy NH-P6 Natural Hazard Mitigation Works Enable natural hazard mitigation works which must consider:	*The Flood Hazard Risk Assessment has identified that in the very few areas that high flood hazard areas intersect with the project footprint risk can be mitigated by:*

(1) approaches to risk management that reduce the need for physical works and engineering interventions; (2) the nature of the natural hazard risk and how it might change over at least a 100-year timeframe, including the potential effects of climate change; (3) the potential for adverse effects on the values of outstanding natural landscapes and features, areas of significant indigenous vegetation and significant habitats of indigenous fauna, SASM, or HH-SCHED2 sites and heritage areas; and (4) the physical works necessary to ensure that the form and location of any structure is designed to minimise adverse effects on the environment.	• *Minor regrading of historic river braids to spread concentrated flows, reducing flood depths and velocities. Installation of culverts, pipes, and drainage channels to maintain existing overland flow paths and safely convey stormwater through infrastructure corridors.* • *Regrading and drainage upgrades at the access road, particularly through the borrow pit area, to reduce flood hazard to vehicles and ensure landform stability.* • *Use of erosion protection where required, noting that modelled velocities are generally below levels expected to cause significant scour* *The physical works have been recommended with consideration for the effects of climate change. These physical works are relatively minor in the context of the overall project and will avoid adverse effects on outstanding natural landscapes and features, areas of significant indigenous vegetation and significant habitats of indigenous fauna, SASM, or HH-SCHED2 sites and heritage areas, and will be designed to minimise adverse effects on the environment generally.*
Policy NH-P7 Fault Hazard Subdivision, land use and development, except as provided for by policy NH-P8, is: (1) managed in the Fault Hazard (Subdivision) Assessment Overlay to ensure land use enabled by subdivision does not result in an unacceptable risk to people and property; and (2) avoided in the Ostler Fault Hazard Area Overlay if the subdivision, use or development increases risks associated with the surface fault rupture that cannot be mitigated to an acceptable level.	*The application site is not located within the Fault Hazard Assessment Overlay.*
Policy NH-P8 Fault Hazard Risk to Critical Infrastructure and Specific Buildings (1) Critical Infrastructure only locates within the Fault Hazard (Critical Infrastructure) Assessment Overlay where: a. there is a functional need or operational need to locate in that environment; and b. the infrastructure is designed to be resilient to surface fault rupture hazard as far as is practicable. (2) Any buildings used for critical infrastructure, major hazard facilities, education facilities or visitor accommodation activities only locate within the Fault Hazard (Critical Infrastructure) Assessment Overlay where: a. the building can be designed to manage the risks resulting from a surface fault rupture hazard to people and property, and buildings on adjoining sites, to an acceptable level.	*The application site is not located within the Fault Hazard Assessment Overlay.*
Policy NH-P9 Subdivision within the Liquefaction Assessment Overlay Manage subdivision within the Liquefaction Assessment Overlay to ensure it does not result in an unacceptable risk to people and property.	*No subdivision is proposed.*
Policy NH-P10 Wildfire Control planting at the urban-rural interface to assist with reducing the spread of wildfire	*No planting is proposed at the urban-rural interface.*

Hazardous substances

Hazardous Substances (HAZS)	Assessment
Objective HAZS-O1 Storage and Use of Hazardous Substances The benefits of the use and storage of hazardous substances are recognised while protecting human health and the environment from risks associated with these activities to an appropriate level.	*All hazardous substances will be managed in accordance with the Hazardous Substances and New Organisms Act 1996 (HSNO) and relevant New Zealand standards, with controls also implemented through certified management plans e.g. the Construction Environmental Management Plan*
Objective HAZS-O2 Sensitive Activities in Proximity to Major Hazard Facilities Reverse sensitivity effects of sensitive activities on existing major hazard facilities are managed, and unacceptable risks to the sensitive activity are avoided.	*Not applicable*
Policy HAZS-P1 Storage and Use of Hazardous Substances Enable activities (excluding major hazard facilities) involving the use and storage of hazardous substances in all zones while managing the residual risk to people, property and the environment to acceptable levels	*Hazardous substances will be limited in type and quantity to diesel fuel, engine oil and lubricants during construction activities and transformer oil, detergents and lubricants during operation of the project. They will be securely contained and managed through certified management plans such as the ESCP and engineered controls, with strict setbacks from waterways and compliance with HSNO and relevant standards. On this basis, adverse effects on the environment from hazardous substances will be avoided and residual risk to people, property and the environment will be managed to acceptable levels.*
Policy HAZS-P2 New Major Hazard Facilities and Additions or Alterations to Existing Major Hazard Facilities Require major hazard facilities to be appropriately located and designed so as to: (a) Mitigate potential cumulative effects of locating within proximity to another major hazard facility; and (b) Protect the health and safety of the community to an acceptable level by internalising effects through site location, layout and design.	*Not applicable*

Historic heritage

Historic Heritage (HH)	Assessment
Objective HH-O1 Protection of Historic Heritage Historic heritage items are protected from inappropriate subdivision, use and development.	*The application site does not contain any scheduled historic heritage items. An archaeological discovery protocol will be in place during construction to ensure any items of historic heritage discovered are appropriately managed.*
Objective HH-O2 Church of the Good Shepherd Heritage Overlay The historic heritage values of the Church of the Good Shepherd and Sheep Dog Statue are maintained.	*Not applicable*
Objective HH-O3 Te Kopi-o-Ōpihi / Burkes Pass Heritage Overlay	*Not applicable*

The historic heritage values of Te Kopi-o-Ōpihi / Burkes Pass are maintained.	
Policy HH-P1 Identification and Scheduling of Historic Heritage Items Identify historic heritage items and sites, and heritage areas, in accordance with the criteria in HH-SCHED1	*Not applicable*
Policy HH-P2 Works on Historic Heritage Items Enable the repair, alteration, addition to and maintenance of scheduled historic heritage items to facilitate their continued use, provided the works do not result in unacceptable adverse effects on the historic heritage values.	*Not applicable – the application site does not contain any scheduled historic heritage items*
Policy HH-P3 Use, Development and Re-use of Historic Heritage Items Enable the appropriate use and development, including adaptive re-use, of scheduled historic heritage items.	*Not applicable – the application site does not contain any scheduled historic heritage items*
Policy HH-P4 Subdivision Enable subdivision of a site containing a scheduled historic heritage item where the resultant lot containing the historic heritage item is of a size and shape that accommodates the whole of the heritage item, provides sufficient space to provide an appropriate setting for the building, maintains access to enable the maintenance of the heritage item(s), and does not adversely affect the historic heritage values of the heritage item.	*Not applicable – no subdivision is proposed*
Policy HH-P5 Relocation of Historic Heritage Items Avoid the relocation of scheduled historic heritage items unless it is necessary for:public safety; orto facilitate the ongoing use or protection of the heritage item; or for location of infrastructure for a public benefit, if there is a functional need or operational need for infrastructure to be in that location	*Not applicable*
Policy HH-P6 Demolition and Partial Demolition of Historic Heritage Items Avoid the demolition and partial demolition of a scheduled historic heritage item, unless: (1) there is a risk to human health and/or property which cannot be removed or reduced by interim protection measures; or (2) there are no other reasonable options to conserve, adapt or relocate the item; or (3) the extent of the work required to retain and/or repair the item is of such a scale that the heritage values and integrity of the item would be significantly compromised.	*Not applicable*
Policy HH-P7 Church of the Good Shepherd Heritage Overlay Manage new buildings, structures, earthworks within the heritage overlay area to ensure that these works: (1) do not detract from the historic heritage values of the scheduled heritage items including the open space surrounding these items which contribute to the visual prominence of the Church; and (2) will contribute to the long-term viability, retention or ongoing use of the heritage item.	*Not applicable*
Policy HH-P8 Te Kopi-o-Ōpihi / Burkes Pass Heritage Overlay	*Not applicable*

Maintain the historic heritage values and legibility of Te Kopi-o-Ōpihi / Burkes Pass township as a surviving early colonial settlement township, including by maintaining the existing visibility to Te Kopi-o-Ōpihi / Burkes Pass's heritage buildings from State Highway 8 by: (1) managing the location of new buildings and alterations to existing buildings within the heritage overlay; (2) managing fence design on the State Highway 8 frontages; and (3) requiring new buildings and alterations to existing buildings to be designed in a way that complements the historic heritage values of Te Kopi-o-Ōpihi / Burkes Pass.	

Lighting

Lighting	Assessment
Objective LIGHT-O1 Lighting Outdoor lighting allows activities to occur beyond daylight hours and provides safety and security for activities, while: (1) Protecting views of the night sky; and (2) Managing light spill to maintain amenity values, health and safety and the safe operation of the transport network.	*See assessment below.*
Policy LIGHT-P1 Outdoor Lighting Manage the location, design and operation of outdoor lighting to ensure: 1. It does not distract or interfere with the safety of road users; and 2. It is compatible with the zone in which any lightspill is received.	*No lighting is proposed within the solar plant. Any service work at night will be conducted with minimal localised lighting (for health and safety purposes) with appropriate diffusers / screens etc to minimise any effects. The Project is located a significant distance from SH8 so any lighting will not distract or interfere with the safety of road users and will be compatible with the general rural zone and surrounding zones.*
Policy LIGHT-P2 Night sky Darkness Require outdoor lighting and skylights to minimise, as far as practicable, the potential for upward light spill that would adversely affect the ability to view the night sky.	*As per the above assessment.*

Noise

Noise	Assessment
Objective NOISE-O1 Noise Noise is compatible with the purpose, and anticipated character and qualities of the receiving environment, and maintains the health and well-being of people and communities.	*The Noise Assessment demonstrates that noise effects will comply with permitted activity standards and will be compatible with the anticipated character and qualities of the receiving environment. They will therefore maintain the health and well-being of people and communities.*
Policy NOISE-P1 Noise Effects Manage noise effects to maintain the character and amenity anticipated in the area in which the effects are received, taking into account the nature, frequency, duration and benefit to the community of the activity generating the noise	*The Noise Assessment demonstrates that noise effects will comply with permitted activity standards, will be compatible with the general rural zone and will maintain the character and amenity of the area.*
Policy NOISE-P2 Reverse Sensitivity	*No noise sensitive activities are proposed.*

Manage noise sensitive activities in proximity to State Highways and Airports, and within the Town Centre Zone, to protect activities within State Highways, Airports and the Town Centre Zone from reverse sensitivity effects	

Signs

Signs (SIGN)	Assessment
Objective SIGN-O1 Benefits of Signs Signs in Te Manahuna / Mackenzie District contribute to the community's social, economic, and cultural wellbeing, while maintaining health and safety, and the character and amenity values of the area in which they are located.	*Proposed signage will primarily relate to signs to manage construction activities. Signage will include construction-site management and safety signage as part of the temporary construction facilities and traffic and access control signage to be set out in the Construction Traffic Management Plan (CTMP) — including sign-in points, speed limits and vehicle priority measures.* *The signage will contribute to the efficient operation of the project and ensure health and safety requirements are met and at the same time.* *The signage will be limited to only signage that is strictly necessary and will therefore maintain the character and amenity values of the area.*
Policy SIGN-P1 Signs Integral to Activities Enable signs that: (1) are an integral component of activities anticipated within a zone; (2) provide important community information; or (3) are associated with temporary events or activities; or (4) provide for public safety	*This is an enabling policy that supports the installation of the proposed signage for operational and safety purposes.*
Policy SIGN-P2 Amenity and Character Control the size, design, location, and number of signs to maintain the anticipated character and amenity of the surrounding environment.	*Signage will be limited in scale, number and purpose, and will primarily be:* *Operational and safety signage, such as site identification, emergency information, asset numbering, and health and safety notices; and* *Temporary construction signage (where required), associated with construction management, access control and traffic safety.* *The proposed signage will maintain the anticipated character and amenity of the surrounding environment.*
Policy SIGN-P3 Safety Manage signs to protect the health and safety of users of the transport network.	*Proposed signage will assist in protecting the health and safety of users of the transport network by alerting them to construction traffic movements.*

CANTERBURY REGIONAL POLICY STATEMENT

Objective / Policy	Assessment
Chapter 5 – Land Use and Infrastructure	
Objective 5.2.1 - Development is located and designed so that it functions in a way that: (1) achieves consolidated, well designed and sustainable growth in and around existing urban areas as the primary focus for accommodating the region's growth; and (2) Enables people and communities, including future generations, to provide for their social, economic and cultural well-being and health and safety; and which: (a) Maintains and where appropriate, enhances the overall quality of the natural environment of the Canterbury region, including its coastal environment, outstanding natural features and landscapes, and natural values; (b) Provides sufficient housing choice to meet the region's housing needs; (c) Encourage sustainable economic by enabling business activities in appropriate locations; (d) Minimises energy use and /or improves energy efficiency; (e) Enables rural activities that support the rural environment including primary production; (f) Is compatible with, and will result in the continued safe, efficient and effective use of regionally significant infrastructure; (g) Avoids adverse effects on significant natural and physical resources including regionally significant infrastructure, and where avoidance is impractical, remedies or mitigates those effects on those resources and infrastructure; (h) Facilities the establishment of papakainga and marae; and (i) Avoids conflict between incompatible activities.	
Objective 5.2.2 - Integration of land-use and regionally significant infrastructure (Wider Region) In relation to the integration of land use and regionally significant infrastructure: 1. To recognise the benefits of enabling people and communities to provide for their social, economic and cultural well-being and health and safety and to provide for infrastructure that is regionally significant to the extent that it promotes sustainable management in accordance with the RMA. 2. To achieve patterns and sequencing of land-use with regionally significant infrastructure in the wider region so that: (a) development does not result in adverse effects on the operation, use and development of regionally significant infrastructure. (b) adverse effects resulting from the development or operation of regionally significant infrastructure are avoided, remedied or mitigated as fully as practicable. (c) there is increased sustainability, efficiency and liveability.	
Policy 5.3.2 Development conditions (Wider Region) To enable development including regionally significant infrastructure which: 1. ensure that adverse effects are avoided, remedied or mitigated, including where these would compromise or foreclose: (a) existing or consented regionally significant infrastructure; (b) options for accommodating the consolidated growth and development of existing urban areas; (c) the productivity of the region's soil resources, without regard to the need to make appropriate use of soil which is valued for existing or foreseeable future primary production, or through further fragmentation of rural land; (d) the protection of sources of water for community supplies; (e) significant natural and physical resources; 2. avoid or mitigate: (a) natural and other hazards, or land uses that would likely result in increases in the frequency and/or severity of hazards; (b) reverse sensitivity effects and conflicts between incompatible activities, including identified mineral extraction areas; and 3. integrate with:	*The proposal will enable regionally significant infrastructure. The proposal will not have any adverse impacts on existing or consented regionally significant infrastructure, any urban areas or community water supplies. The proposal will appropriately avoid or mitigate adverse effects and will integrate with the existing substation and transmission infrastructure and the SH8 transport network.*

Objective / Policy	Assessment
(a) the efficient and effective provision, maintenance or upgrade of infrastructure; and (b) transport networks, connections and modes so as to provide for the sustainable and efficient movement of people, goods and services, and a logical, permeable and safe transport system.	
Policy 5.3.9 Regionally significant infrastructure (Wider Region) In relation to regionally significant infrastructure (including transport hubs): 1. avoid development which constrains the ability of this infrastructure to be developed and used without time or other operational constraints that may arise from adverse effects relating to reverse sensitivity or safety; 2. provide for the continuation of existing infrastructure, including its maintenance and operation, without prejudice to any future decision that may be required for the ongoing operation or expansion of that infrastructure; and 3. provide for the expansion of existing infrastructure and development of new infrastructure, while: (a) recognising the logistical, technical or operational constraints of this infrastructure and any need to locate activities where a natural or physical resource base exists; (b) avoiding any adverse effects on significant natural and physical resources and cultural values and where this is not practicable, remedying or mitigating them, and appropriately controlling other adverse effects on the environment; and (c) when determining any proposal within a sensitive environment (including any environment the subject of section 6 of the RMA), requiring that alternative sites, routes, methods and design of all components and associated structures are considered so that the proposal satisfies sections 5(2)(a) – (c) as fully as is practicable.	*The proposal is strategically located next to an existing substation and grid connection. Rather than constraining infrastructure it compliments it and provides for its operation and continuation. The proposal is also strategically located in an area and on land that is suitable for large scale solar. The proposal will appropriately avoid or mitigate adverse effects on significant natural and physical resources and cultural values, as demonstrated in the Substantive Application Report.* *The Project has been located and designed to avoid sensitive environments identified through the ecological assessment. No specific alternatives assessment has been included in the application; however, the application materials explain how the design of the project has been considered and refined to respond to the sensitive features of the site.* *The Project has been assessed against section 5 RMA based on the findings of all of the assessments that have been undertaken for the Project and will:* *(a) sustain the potential of natural and physical resources (excluding minerals) to meet the reasonably foreseeable needs of future generations; and* *(b) safeguard the life-supporting capacity of air, water, soil, and ecosystems; and* *(c)avoid, remedy, or mitigate any adverse effects of activities on the environment.* *Refer to Sections 5 and 7 of the substantive application for more detailed assessment.*
Chapter 7 Fresh Water	
Objective 7.2.1 The region's fresh water resources are sustainably managed to enable people and communities to provide for their economic and social well-being through abstracting and/or using water for irrigation, hydro-electricity generation and other economic activities, and for recreational and amenity values, and any economic and social activities associated with those values, providing: 1. the life-supporting capacity ecosystem processes, and indigenous species and their associated freshwater ecosystems and mauri of the fresh water is safe-guarded; 2. the natural character values of wetlands, lakes and rivers and their margins are preserved and these areas are protected from inappropriate subdivision, use and development and where appropriate restored or enhanced; and 3. any actual or reasonably foreseeable requirements for community and stockwater supplies and customary uses, are provided for.	
Objective 7.2.3 The overall quality of freshwater in the region is maintained or improved, and the life supporting capacity, ecosystem processes and indigenous species and their associated fresh water ecosystems are safeguarded.	
Policy 7.3.3 - Enhancing fresh water environments and biodiversity	*Detailed Ecological Assessments and a Manawhenua report have been undertaken in order to identify and protect the areas of value identified in the policy and promote opportunities for restoration and improvement.*

Objective / Policy	Assessment
To promote, and where appropriate require the protection, restoration and improvement of lakes, rivers, wetlands and their riparian zones and associated Ngāi Tahu values, and to: (1) identify and protect areas of significant indigenous vegetation and significant habitats, sites of significant cultural value, wetlands, lakes and lagoons/Hapūa, and other outstanding water bodies; and (2) require the maintenance and promote the enhancement of indigenous biodiversity, inland basin ecosystems and riparian zones; and (3) promote, facilitate or undertake pest control.	*Through proposed conditions of consent and management plans, incorporating monitoring and adaptive management, restoration and improvement will be achieved through:* *Improving ecological function in retained areas;* *Enhancing habitat quality and connectivity particularly for lizards and terrestrial invertebrates; and* *Reducing existing pressures (e.g. pests, weeds).*
Policy 7.3.5 To avoid, remedy or mitigate adverse effects of land uses on the flow of water in surface water bodies or the recharge of groundwater by: 1. controlling the diversion of rainfall run-off over land, and changes in land uses, site coverage or land drainage patterns that will, either singularly or cumulatively, adversely affect the quantity or rate of water flowing into surface water bodies or the rate of groundwater recharge; and 2. managing the planting or spread of exotic vegetation species in catchments where, either singularly or cumulatively, those species are or are likely to have significant adverse effects on flows in surface water bodies.	*The proposal will not adversely affect the flow of water in surface waterbodies or the recharge of groundwater due to the minimal changes it will have on existing rainfall run off and drainage patterns and the setbacks of the project from nearby waterbodies. The planting of exotic vegetation species is not proposed, and the proposal will control the spread of exotic vegetation species through implementation of the Biosecurity Management Plan.*
Policy 7.3.6 Fresh Water Quality In relation to water quality: (1) to establish and implement minimum water quality standards for surface water and groundwater resources in the region, which are appropriate for each water body considering: a. the values associated with maintaining life supporting capacity, ecosystem processes and indigenous species including their associated ecosystems, and natural character of the water body; b. any current and reasonably foreseeable requirement to use the water for individual, marae or community drinking water or stockwater supplies, customary uses or contact recreation; c. the cultural significance of the fresh water body and any conditions or restrictions on the discharge of contaminants that may be necessary or appropriate to protect those values; and d. any other current or reasonably foreseeable values or uses; and (2) to manage activities which may affect water quality (including land uses), singularly or cumulatively, to maintain water quality at or above the minimum standard set for that water body; (3) where water quality is below the minimum water quality standard set for that water body, to avoid any additional allocation of water for abstraction from that water body and any additional discharge of contaminants to that water body, where any further abstraction or discharges, either singularly or cumulatively, may further adversely affect the water quality in that water body: a. until the water quality standards for that water body are met; or b. unless the activities are undertaken as part of an integrated solution to water management in the catchment in accordance	*Clause 1 of the policy is a direction to ECan.* *In terms of clause 2, the project has been designed and will be managed to avoid adverse effects on water quality. No discharges to waterbodies are proposed and the project incorporates 20 m setbacks from the Whakatipu/Twizel River and the Ōhau River which border the application site. The project incorporates controls through the certified ESCP and SMP to mitigate the potential for sediment runoff into waterbodies. Therefore, water quality will be maintained at the minimum standard within both the Whakatipu/Twizel River and the Ōhau River.* *In terms of clause 3, the project does not seek consent for additional water takes and does not involve any point source discharges into waterbodies.*

Objective / Policy	Assessment
with Policy 7.3.9, which provides for the redress of water quality within that water body within a specified timeframe.	
Policy 7.3.7 To avoid, remedy or mitigate adverse effects of changes in land uses on the quality of fresh water (surface or ground) by: 1.identifying catchments where water quality may be adversely affected, either singularly or cumulatively, by increases in the application of nutrients to land or other changes in land use; and 2. controlling changes in land uses to ensure water quality standards are maintained or where water quality is already below the minimum standard for the water body, it is improved to the minimum standard within an appropriate timeframe.	*The proposal will not result in an adverse effect on water quality. Construction earthworks will be managed in accordance with best practice sediment and erosion control as specified in the project ESCP.*
Chapter 9 Ecosystems and Indigenous Biodiversity	
Objective 9.2.3 Areas of significant indigenous vegetation and significant habitats of indigenous fauna are identified and their values and ecosystem functions protected	
Policy 9.3.2 – To recognise the following national priorities for protection: (1) Indigenous vegetation in land environments where less than 20% of the original Indigenous vegetation cover remains. (2) Areas of indigenous vegetation associated with sand dunes and wetlands. (3) Areas of indigenous vegetation located in "originally rare" terrestrial ecosystem types not covered under (1) and (2) above. (4) Habitats of threatened and at risk indigenous species.	*This policy is primarily addressed to the Regional Council.* *In terms of the consistency of the project with the policy, ecologically significant flora and fauna on the site, as described in the policy, has been identified in the Assessment of Potential Ecological Effects and has been avoided by the Project with any residual effects mitigated so they are no more than minor. The approach is considered to be consistent with the policy.*
Chapter 10 - Beds of Rivers and Lakes and their Riparian Zones	
Objective 10.2.1 Provision for activities in beds and riparian zones and protection and enhancement of bed and riparian zone values	
Objective 10.2.4 Maintenance and enhancement of public and Ngāi Tahu access to and along rivers and lakes.	
Policy 10.3.1 Activities in river and lake beds and their riparian zones To provide for activities in river and lake beds and their riparian zones, including the planting and removal of vegetation and the removal of bed material, while: (1) recognising the implications of the activity on the whole catchment; (2) ensuring that significant bed and riparian zone values are maintained or enhanced; or (3) avoiding significant adverse effects on the values of those beds and their riparian zones, unless they are necessary for the maintenance, operation, upgrade, and repair of essential structures, or for the prevention of losses from floods, in which case significant adverse effects should be mitigated or remedied.	*The proposal does not involve any activities within river or lake beds and their riparian zones and will maintain public and Ngāi Tahu access to and along rivers and lakes.*
Policy 10.3.2 Protection and enhancement of areas of river and lake beds and their riparian zones. To preserve the natural character of river and lake beds and their margins and protect them from inappropriate subdivision, use and development, and where appropriate to maintain and/or enhance areas of river and lake beds and their margins and riparian zones where: (1) they exist in a degraded state and enhancement will achieve long-term improvement in those values; (2) they have ecological values for which protection and/or enhancement will assist in the establishment or re-establishment of indigenous biodiversity	*As per the above assessment, the project will protect river and lake beds and their riparian zones largely through avoidance and setbacks of activities and natural character will be preserved. Habitat corridors and nodes will be created on site for lizards and terrestrial invertebrates.*

Objective / Policy	Assessment
or ecosystems, particularly for ecosystems that are threatened or unrepresented in protected areas; (3) they have existing significant trout or salmon habitat; (4) maintenance and/or enhancement will improve or establish connections between habitats and create corridors for indigenous species and trout and salmon and their movement between areas; (5) riparian zones provide a buffer from activities that may adversely affect bed values; (6) opportunities exist to create habitat corridors for plants and animals; or (7) riparian zones provide spawning or other significant habitats for at risk or threatened species, (8) such as inanga or Canterbury mudfish.	
Policy 10.3.3 Management for flood control and protecting essential structures To manage activities in river and lake beds and their banks or margins to: (1) avoid or, where this is not practicable, to remedy or mitigate adverse effects on vegetation that controls flood flows or protects river banks or lake margins from erosion; and (2) avoid adverse effects on the stability, performance, operation, maintenance, upgrade and repair of essential structures that are located in, on, under or over a river or lade bed or its bank or margin.	*The proposal does not involve any activities within river or lake beds and their riparian zones.*
Chapter 11– Natural Hazards	
Objective 11.2.1 Avoid new subdivision, use and development of land that increases risks associated with natural hazards	
Policy 11.3.1 - Avoidance of inappropriate development in high hazard areas To avoid new subdivision, use and development (except as provided for in Policy 11.3.4) of land in high hazard areas, unless the subdivision, use or development: (1) is not likely to result in loss of life or serious injuries in the event of a natural hazard occurrence; and (2) is not likely to suffer significant damage or loss in the event of a natural hazard occurrence; and (3) is not likely to require new or upgraded hazard mitigation works to mitigate or avoid the natural hazard; and (4) is not likely to exacerbate the effects of the natural hazard; or (5) Outside of greater Christchurch, is proposed to be located in an area zoned or identified in district plan for urban residential, industrial or commercial use, at the date of notification of the CRPS, in which case the effects of the natural hazard must be mitigated; or (6) Within greater Christchurch, is proposed to be located in an area zoned in a district plan for urban residential, industrial or commercial use, or identified as a "Greenfield Priority Area" on Map A of Chapter 6, both at the date the Land Use Recovery Plan was notified in the Gazette, in which the effect of the natural hazard must be avoided or appropriately mitigated; or 7. Within greater Christchurch, relates to the maintenance and/or upgrading of existing critical or significance infrastructure.	*Elements of project infrastructure that are located within High Flood Hazard Areas are limited to small sections of the internal access road and less than 0.1% of the overall solar array footprint. Solar panels are mounted on piles with a minimum ground clearance of 800 mm and can be remotely tracked to increase clearance up to 1.85 m during severe weather events, significantly reducing exposure to flood depths. Flood risk on the internal access road poses limited risk to infrastructure. Development in high hazard areas is largely avoided including setbacks from crest slopes in respect of geohazard risks. The design and nature of the infrastructure will not increase risks from natural hazards and risk to people will be managed by operational controls.*
Policy 11.3.2 - Avoid development in areas subject to inundation In areas not subject to Policy 11.3.1 that are subject to inundation by a 0.5% AEP flood event; any new subdivision, use and development (excluding critical	*Not applicable. The policy excludes critical infrastructure.*

Objective / Policy	Assessment
infrastructure) shall be avoided unless there is no increased risk to life, and the subdivision, use or development: (1) is of a type that is not likely to suffer material damage in an inundation event; or (2) is ancillary or incidental to the main development; or (3) meets all of the following criteria: a. new buildings have an appropriate floor level above the 0.5% AEP design flood level; and b. hazardous substances will not be inundated during a 0.5% AEP flood event; provided that a higher standard of management of inundation hazard events may be adopted where local catchment conditions warrant (as determined by a cost/benefit assessment). When determining areas subject to inundation, climate change projections including sea level rise are to be taken into account.	
Policy 11.3.5 - General risk management approach For natural hazards and/or areas not addressed by policies 11.3.1, 11.3.2, and 11.3.3, subdivision, use or development of land shall be avoided if the risk from natural hazards is unacceptable. When determining whether risk is unacceptable, the following matters will be considered: (1) the likelihood of the natural hazard event; and (2) the potential consequence of the natural hazard event for: people and communities, property and infrastructure and the environment, and the emergency response organisations. Where there is uncertainty in the likelihood or consequences of a natural hazard event, the local authority shall adopt a precautionary approach. Formal risk management techniques should be used, such as the Risk Management Standard (AS/NZS ISO 31000:2009) or the Structural Design Action Standard (AS/NZS 1170.0:2002).	*This policy applies to areas of the project footprint outside high hazard areas. The Flood Hazard Risk Assessment and NPS-Natural Hazards Assessment, which have applied a likelihood x consequence risk assessment approach in accordance with the NPSNH, have not identified any natural hazard risks which are unacceptable.*
Chapter 12 – Landscape	
Objective 12.2.1 – Outstanding natural features and landscapes within the Canterbury region are identified and their values are specifically recognised and protected from inappropriate subdivision, use and development.	
Policy 12.3.2 – To ensure management methods in relation to subdivision, use or development, seek to achieve protection of outstanding natural features and landscapes from inappropriate subdivision, use and development.	*The Mackenzie Basin ONL is acknowledged and respected through the project's location and design. The project is located in part of the basin where energy infrastructure is already an established part of landscape character, and the design avoids sensitive ecological and landscape features and maintains key views. Additional management methods are proposed through the suite of ecological management plans which seek to avoid and mitigate effects on ecological components of the landscape.*
Policy 12.3.4 - Consistency of identification and management of outstanding natural features and outstanding natural landscapes Seek to achieve regional consistency in the identification of outstanding natural features and landscape areas and values by:	*This policy is a direction to councils for matters they should consider when identifying and managing outstanding natural features and outstanding natural landscapes. The*

Objective / Policy	Assessment
(1) considering the following assessment matters which address biophysical, sensory and associative values when assessing landscapes in the Canterbury region: a. Natural science values b. Legibility values c. Aesthetic values d. Transient values e. Tāngata whenua values f. Shared and recognised values g. Historic values (2) requiring methods for landscape management to be developed and considered, having regard to the management methods in adjoining districts or regions, and the extent to which these may, in combination, protect outstanding natural features and landscapes.	*application includes a detailed Landscape Assessment that considers the full suite of (1)(a-g) of this policy.*
Chapter 15 - Soils	
Objective Prevention of new significant induced soil erosion, and the reduction of significant existing induced erosion.	
Policy 15.3.2 To avoid significant new induced soil erosion resulting from the use of land and as far as practicable remedy or mitigate significant induced soil erosion where it has occurred. Particular focus is to be given to the desirability of maintaining vegetative cover on nonarable land.	*Earthworks on the site will be minimised and managed in accordance with the project ESCP with a focus being maintaining vegetative cover as much as possible. Significant new induced soil erosion will be avoided.*
Chapter 16 – Energy	
Objective 16.2.2 – Reliable and resilient generation and supply of energy for the region, and the wider contributions beyond Canterbury, with a particular emphasis on renewable energy, which: 1. provides for the appropriate use of the region's renewable resources to generate energy; 2. reduces dependency on fossil fuels; 3. improves the efficient end-use of energy; 4. minimises transmission losses; 5. is diverse in the location, type and scale of renewable energy development; 6. recognises the locational constraints in the development of renewable electricity generation activities; and a. avoids any adverse effects on significant natural and physical resources and cultural values or where this is not practicable, remedies or mitigates; and b. appropriately controls other adverse effects on the environment.	
Policy 16.3.3 – To recognise and provide for the local, regional and national benefits when considering proposed or existing renewable energy generation facilities, having particular regard to the following: (1) Maintaining or increasing electricity generation capacity while avoiding, reducing or displacing greenhouse gas emissions; (2) Maintaining or increasing the security of supply at local and regional levels, and also wider contribute beyond Canterbury by diversifying the type and/or location of electricity generation; (3) using renewable natural resources rather than finite resources; (4) the reversibility of the adverse effects on the environment of some renewable electricity generation facilities; (5) avoiding reliance on imported fuels for the purposes of generating electricity; and (6) assisting in meeting international climate obligations.	*This is an enabling policy. The project is entirely consistent with it because it will increase electricity generation capacity, increase security of supply, utilise renewable energy resources (which will avoid reliance on imported fuels for the purpose of generating energy and will assist in meeting international climate obligations). The effects of the solar farm are also reversible because the infrastructure can be removed at the end of the project's life.*

Objective / Policy	Assessment
Policy 16.3.5 — To recognise and provide for efficient, reliable and resilient electricity generation within Canterbury by: 1. avoiding subdivision, use and development which limits the generation capacity from existing or consented electricity generation infrastructure to be used, upgraded or maintained; 2. enabling the upgrade of existing, or development of new electricity generation infrastructure, with a particular emphasis on encouraging the operation, maintenance and upgrade of renewable electricity generation activities and associated infrastructure: (a) having particular regard to the locational, functional, operational or technical constraints that result in renewable electricity generation activities being located or designed in the manner proposed; (b) provided that, as a result of site, design and method selection: (i) the adverse effects on significant natural and physical resources or cultural values are avoided, or where this is not practicable remedied, mitigated or offset; and (ii) other adverse effects on the environment are appropriately controlled. 3. providing for activities associated with the investigation, identification and assessment of potential sites and energy sources for renewable electricity generation; 4. maintaining the generation output and enabling the maximum electricity supply benefit to be obtained from the existing electricity generation facilities within Canterbury, where this can be achieved without resulting in additional significant adverse effects on the environment which are not fully offset or compensated.	*The project provides for efficient, reliable and resilient electricity generation within Canterbury and will not limit the generation capacity from existing or consented electricity generation infrastructure. The locational, functional, operational and technical constraints and requirements of the proposal have been outlined which support the proposal being located on the application site. It has been demonstrated in the application that adverse effects on the environment will be appropriately avoided or mitigated such that no significant adverse effects will result.*
Chapter 18 – Energy	
Objective 18.2.1 Avoid, remedy or mitigate adverse effects on the environment from the storage, use, disposal and transportation of hazardous substances are avoided, remedied or mitigated.	
Objective 18.2.2 New contamination of land	
Policy 18.3.1 Protection of sensitive areas and activities Avoid actual or potential adverse effects, resulting from the use, storage or disposal of hazardous substances, in the following locations: (1) High hazard areas (2) Within a community drinking water protection zone, or within such a distance from a community drinking water supply that there is a risk of contamination of that drinking water source (3) In areas of unconfined or semi-confined aquifer, where the depth to groundwater is such that there is a risk of contamination of that groundwater (4) Within the coastal marine area and in the beds of lakes and rivers (5) Within any area identified by a district or regional plan as being sensitive to the potential effects of hazardous substances, which may include, but are not limited to, areas such as wāhi tapu, urupā, institutions and residential areas.	*Hazardous substances will not be stored, used or disposed of in any of the locations referred to in the policy.*
Policy 18.3.2 Avoid, remedy or mitigate adverse effects To avoid, remedy or mitigate adverse effects on the environment, including contamination of land, air and water, associated with the storage, use, transportation or disposal of hazardous substances.	*Hazardous substances will be limited in type and quantity to diesel fuel, engine oil and lubricants during construction activities and transformer oil, detergents and lubricants during operation of the project, in the minimum quantities required. , They will be securely contained and managed through certified management plans such as the ESCP,*

Objective / Policy	Assessment
	and engineered controls, with strict setbacks from waterways and compliance with HSNO and relevant standards. On this basis, adverse effects on the environment from hazardous substances will be appropriately avoided and mitigated.
Policy 18.3.3 Integration and coordination To promote an integrated approach to hazardous substance management within the region.	*This policy is directed at councils to take an integrated approach to hazardous substances management.*
Policy 18.3.4 Reduction, Awareness and Promotion To promote hazardous substances management practices that prevent or mitigate adverse effects on the environment, including practices that, wherever possible, reduce the use of hazardous substances.	*Nova only proposes the use and storage of essential substances and in minimum quantities required which will be managed in accordance with HSNO and all relevant standards. The project avoids use and storage of hazardous substances in sensitive areas and provides setbacks from these areas to ensure risks are effectively mitigated.*

CANTERBURY LAND AND WATER REGIONAL PLAN

The Project does not involve any direct discharges to surface water bodies or groundwater, damming or diversion of water bodies, new water takes or new farming activities, activities within wetland boundaries or riparian margins, activities within the beds of lakes or rivers, fine sediment removal or new gravel extraction, managed aquifer recharge, remediation related to natural hazard events and will not impact on sources of drinking water. Water use will be within permitted rules/standards as per the Rules Assessment. For these reasons objectives and policies relating to the above matters have not been assessed any further.

Objective / Policy	Assessment
Objective 3.1 Land and water are managed as integrated natural resources to recognise and enable Ngāi Tahu culture, traditions, customary uses and relationships with land and water.	
Objective 3.2 Water management applies the ethic of ki uta ki tai – from the mountains to the sea – and land and water are managed as integrated natural resources recognising the connectivity between surface water and groundwater, and between fresh water, land and the coast.	
Objective 3.3 Nationally and regionally significant infrastructure is enabled and is resilient and positively contributes to economic, cultural and social wellbeing through its efficient and effective operation, on-going maintenance, repair, development and upgrading.	
Objective 3.5 Land uses continue to develop and change in response to socio-economic and community demand.	
Objective 3.6 Water is recognised as essential to all life and is respected for its intrinsic values.	
Objective 3.7 Fresh water is managed prudently as a shared resource with many in-stream and out-of- stream values.	
Objective 3.8 The quality and quantity of water in fresh water bodies and their catchments is managed to safeguard the life-supporting capacity of ecosystems and ecosystem processes, including ensuring sufficient flow and quality of water to support the habitat and feeding, breeding, migratory and other behavioural requirements of indigenous species, nesting birds and, where appropriate, trout and salmon.	
Objective 3.13 Groundwater resources remain a sustainable source of high quality water which is available for abstraction while supporting base flows or levels in surface water bodies, springs and wetlands and avoiding salt-water intrusion.	
Objective 3.14 High naturalness waterbodies and hāpua and their margins are maintained in a healthy state or are improved where degraded.	
Objective 3.16 Freshwater bodies and their catchments are maintained in a healthy state, including through hydrological and geomorphic processes such as flushing and opening hāpua and river mouths, flushing algal and weed growth, and transporting sediment.	

Objective / Policy	Assessment
Objective 3.17 The significant indigenous biodiversity values of rivers, wetlands and hāpua are protected.	
Objective 3.18 Wetlands that contribute to cultural and community values, biodiversity, water quality, mahinga kai, water cleansing and flood mitigation are maintained.	
Objective 3.19 Natural character values of freshwater bodies, including braided rivers and their margins, wetlands, hāpua and coastal lagoons, are protected.	
Objective 3.23 Soils are healthy and productive, and human-induced erosion and contamination are minimised.	
Objective 3.24 All activities operate at good environmental practice or better to optimise efficient resource use and protect the region's fresh water resources from quality and quantity degradation	
Policy 4.13 Discharges of Contaminants to Land or Water	

For other discharges of contaminants into or onto land where it may enter water or to surface water bodies or groundwater (excluding those passive discharges to which Policy 4.26 applies), the effects of any discharge are minimised by the use of measures that: (a) first, avoid the production of the contaminant; (b) secondly, reuse, recovers or recycles the contaminant; (c) thirdly, minimise the volume or amount of the discharge; or (d) finally, wherever practical utilise land-based treatment, a wetland constructed to treat contaminants or a designed treatment system prior to discharge; and (e) in the case of surface water, results in a discharge that after reasonable mixing meets the receiving water standards in Schedule 5 or does not result in any further degradation in water quality in any receiving surface waterbody that does not meet the water quality standards in Schedule 5 or any applicable water conservation order .	*Discharges to land associated with construction and operation of the project will be minimised in the manner anticipated by the policy through adherence to project setbacks from waterbodies and groundwater resources, and by adherence to a project CEMP and ESCP during construction. The project infrastructure involves tracking panels which ensure that stormwater runoff is not concentrated at any location avoiding erosion and sedimentation effects during the operation of the project*.

Policy 4.14 Discharges of Contaminants to Land or Water	
Any discharge of a contaminant into or onto land where it may enter groundwater (excluding those passive discharges to which Policy 4.26 applies): (a) Will not exceed the natural capacity of the soil to treat or remove the contaminant; and (b) will not exceed available water storage capacity of the soil; and (c) where meeting (a) and (b) is not practicable, the discharge will: (i) meet any nutrient limits in Schedule 8 or Sections 6 to 15 of this Plan; and (ii) utilise the best practicable option to ensure the size of any contaminant plume is as small as is reasonably practicable; and (iia) ensure there is sufficient distance between the point of discharge, any other discharge and drinking-water supplies to allow for the natural decay or attenuation of pathogenic micro-organisms in the contaminant plume; and (iii) not result in the accumulation of pathogens, or a persistent or toxic contaminant that would render the land unsuitable for agriculture, commercial, domestic, cultural or recreational use or water unsuitable as a source of potable water or for agriculture; and (iv) not raise groundwater levels so that land drainage is impeded.	*The management measures proposed will ensure the proposed discharges will not exceed the natural capacity of the soil to treat or remove the contaminant or exceed the available water storage capacity of the soil.*
Policy 4.14A Discharges of Contaminants to Land or Water	
The disposal of domestic effluent and wastewater shall be managed so as to avoid any adverse effect that is more than minimal on surface and ground waters. Where residential density exceeds 1.5 dwellings per hectare and the total population is greater than 1000 persons, community reticulated systems should be promoted. Alternatively, other measures should be promoted to reduce adverse effects on water bodies from effluent disposal systems, including secondary treatment systems and septic tank warrants of fitness.	*All wastewater treatment and disposal from the proposed operations and maintenance building will be designed in accordance with NZBC G13/AS1 and G13/VM4 Foul Water On-Site Disposal and AS/NZS 1547:2012 On-Site Domestic Wastewater Management (see Concept Design Drawings) which will ensure effective treatment and avoidance of adverse effects. The discharge location is located well away from surface waterbodies, wells and adjoining properties.*
Policy 4.14B Discharges of Contaminants to Land or Water	
Ensure that when considering applications for discharges which may adversely affect statutory acknowledgement areas, nohoanga sites, surface waterbodies, silent file areas, culturally significant sites, Heritage New Zealand sites, any listed archaeological sites, and cultural landscapes, regard is taken of Ngāi Tahu values. In particular, those expressed within the LWRP, any iwi management plan, and any relevant district plan.	*The management measures proposed, such as the measures in the ESCP, are designed to ensure project discharges do not result in adverse effects sites of significance to mana whenua. Nova is working closely with mana whenua to ensure the proposal has regard to Ngāi Tahu values. Guidance has been taken from a Manawhenua report commissioned by Nova, as well as review of other statutory planning documents and iwi management plans.*

Policy 4.17 Stormwater and Community Wastewater Systems	
Stormwater run-off volumes and peak flows are managed so that they do not cause or exacerbate the risk of inundation, erosion or damage to property or infrastructure downstream or risks to human safety.	*The Flood Hazard Risk Assessment and SMP outline mitigating factors and measures proposed in the project design that will ensure that stormwater run-off volumes and peak flows are managed so not to cause or exacerbate the risk of inundation, erosion or damage to property or infrastructure downstream or risks to human safety. A condition of consent is proposed for a Natural Hazard/Stormwater Mitigation Works Plan to be submitted and certified by MDC prior to the commencement of construction, with works to be undertaken in accordance with this plan.*
Policy 4.18 Earthworks, Land Excavation and Deposition of Material into Land over Aquifers	
The loss or discharge of sediment or sediment-laden water and other contaminants to surface water from earthworks, including roading, works in the bed of a river or lake, land development or construction, is avoided, and if this is not achievable, the best practicable option is used to minimise the loss or discharge to water.	*The effects of the construction related discharges to land of the proposal will be avoided and minimised by adherence to a project ESCP to be certified by ECan prior to commencement of construction.*
Policy 4.19 Earthworks, Land Excavation and Deposition of Material into Land over Aquifers	
The discharge of contaminants to groundwater from earthworks, excavation, waste collection or disposal sites and contaminated land is avoided or minimised by ensuring that: (a) activities are sited, designed and managed to avoid the contamination of groundwater; (b) existing or closed landfills and contaminated land are managed and monitored where appropriate to minimise any contamination of groundwater; and (c) there is sufficient thickness of undisturbed sediment in the confining layer over the Coastal Confined Aquifer System to prevent the entry of contaminants into the aquifer or an upward hydraulic gradient is present which would prevent aquifer contamination.	*Discharge of contaminants to groundwater is not anticipated given the proposed depth of excavations are unlikely to encounter the known depth of the groundwater table. Discharges of contaminants during construction will be temporary and managed via adherence to a certified CEMP and ESCP which will contain measures to avoid and minimise the effects of discharges on groundwater resources.*
Policy 4.22 Soil Stability	
Sedimentation of water bodies as a result of land clearance, earthworks and cultivation is avoided or minimised by the adoption of control methods and technologies, such as maintaining continuous vegetation cover adjacent to water bodies, or capturing surface run-off to remove sediment and other contaminants or by methods such as direct drilling crops and cultivation that follows the contours of a paddock.	*The potential for sedimentation of waterbodies from project earthworks will be mitigated through 20 m setbacks from rivers and 100 setbacks from natural inland wetlands and through adherence to a certified ESCP Vegetation disturbance will be minimised, natural contour will be largely maintained and disturbed areas will be reinstated.*
Policy 4.25 Hazardous Substances and Hazardous Activities	
Unless the substance is approved under the Hazardous Substances and New Organisms Act 1996 to be applied onto land or into water, activities involving the use, storage or discharge of hazardous substances will be undertaken using the best practicable option to: (a) as a first priority, avoid the discharge (including accidental spillage) of hazardous substances onto land or into water, including reticulated stormwater systems; (b) and as a second priority, ensure, where there is a residual risk of a discharge of hazardous substances including any accidental spillage, it is contained on-site and does not enter surface water bodies, groundwater or stormwater systems.	*The Project does not propose to apply hazardous substances to land or water. Management of hazardous substances will be undertaken in accordance with HSNO and all relevant standards and in accordance with the certified CEMP.*

Policy 4.29 Hazardous Substances and Hazardous Activities	
Where an on-site effluent treatment and disposal system is to be installed to treat and dispose of human effluent the system proposed will: (a) effectively treat and dispose of human effluent, given the conditions of the site; (b) avoid adverse effects on people's health or safety, on human or stock water supplies and on surface water beyond the site boundary; (c) not restrict activities on adjoining properties; (d) allow sufficient distance between the discharge from the on-site system and other discharges, wells or groundwater to avoid elevation of groundwater levels to an extent that land drainage is impeded.	*As per the Concept Design drawings and section 4.4.8 of the substantive application, all wastewater treatment and disposal from the proposed operations and maintenance building will be designed in accordance with NZBC G13/AS1 and G13/VM4 Foul Water On-Site Disposal and AS/NZS 1547:2012 On-Site Domestic Wastewater Management which will ensure effective treatment and avoidance of adverse effects. The discharge location is located well away from surface waterbodies, wells and adjoining properties.*
Policy 4.101 Critical Habitat	
Avoid the damage or loss of any Critical Habitat caused by sediment discharges, vegetation clearance, excavation or deposition of material, or other disturbance in, or on the bed, banks or riparian margins of a river, lake or wetland unless: (a) it is not practicable to avoid adverse effects; and (b) where adverse effects cannot be avoided, they are minimised; and (c)where adverse effects cannot be minimised, they are remedied where practicable; and (d) where more than minor residual adverse effects cannot be avoided, minimised, or remedied, aquatic offsetting is provided where possible; and (e) if aquatic offsetting of more than minor residual adverse effects is not possible, aquatic compensation is provided.	*Damage or loss of critical habitat has been avoided by locating the project outside these areas and by providing project setbacks from rivers and wetlands and known areas of significant indigenous flora and fauna. Potential adverse effects will be minimised by adherence to a suite of consent conditions and management plans including monitoring and adaptive management, where appropriate. The Assessment of Environmental Effects concludes that with mitigation residual adverse effects will be no more than minor.*
Policy 4.102 Submission of Water Quality Data	
Any resource consent granted with a consent condition requiring the collection of water quality samples, shall also include a condition requiring the water quality sample data required by the consent condition to be submitted to the Canterbury Regional Council in a format suitable for automated upload to the Council's water quality database software.	*Nova is supportive of a consent condition requiring water quality sample data to be submitted to ECan in the required format if this is desirable to ECan.*

NATIONAL POLICY STATEMENT FOR NATURAL HAZARDS

Objective Natural hazard risk to people and property associated with subdivision use and development is managed using a risk-based proportionate approach.
Policy 1 When considering natural hazard risk associated with subdivision, use or development, the risk level must be assessed using the risk matrix.
Assessment: Both the Flood Hazard Risk Assessment and the NPS-Natural Hazards Assessment have assessed natural hazard risk associated with the project using the risk matrix in the NPSNH. *The NPS- Natural Hazards Assessment finds that liquefaction risk is low, seismic shaking risk is medium, fault rupture risk is low, erosion risk is low with higher risk during extreme flood events (primarily at river margins, which are avoided by the project) and slope instability/landslip risk is medium. The Flood Hazard Risk Assessment finds that flood risk is generally low with only very small highly localised areas assessed as having a medium to high risk.*
Policy 2 Natural hazard risk associated with subdivision, use and development must be managed using an approach that is proportionate to the level of natural hazard risk.
Assessment: Natural hazard risk associated with the project has been assessed and will be managed using an approach which is proportionate to the level of natural hazard risk. The primary mitigation for geohazard risks identified in the NPS-Natural Hazards Assessment is ensuring setbacks from slope crests to address slope stability. The project design provides for these setbacks. *In terms of flood risk, the Flood Hazard Risk Assessment identifies the need for mitigation measures to respond to flood risk, and finds that once mitigations are applied such as elevation of panels and buildings, drainage works, access road upgrades, and operational controls, the residual flood risk is reduced to low to low–medium.*
Policy 3 Where subdivision, use or development is assessed as having very high natural hazard risk, that risk must be avoided.
Assessment: Neither the Flood Hazard Risk Assessment nor the NPS-Natural Hazards Assessment have assessed the project as having a very high natural hazard risk that must be avoided.
Policy 4 Where subdivision, use or development, including any associated mitigation measures, will create or increase significant natural hazard risk on other sites, that risk must be avoided or mitigated using an approach that is proportionate to the level of natural hazard risk.
Assessment: Both the Flood Hazard Risk Assessment and the NPS-Natural Hazards Assessment find that the project, including mitigation measures, will not create or increase significant natural hazard risk on other sites.
Policy 5 Natural hazard risk assessment and decisions must be based on the best available information and must be made even when that information is uncertain or incomplete.
Assessment: Both the Flood Hazard Risk Assessment and the NPS-Natural Hazards Assessment have clear statements that the assessments are based on the best available information.
Policy 6 The potential impacts of climate change to at least 100 years into the future must be considered.
Assessment: Both the Flood Hazard Risk Assessment and the NPS-Natural Hazards Assessment have considered the potential impacts of climate change to at least 100 years into the future.

NATIONAL POLICY STATEMENT FOR RENEWABLE ELECTRICITY GENERATION

Objective The objective of this National Policy Statement is to: **(a) ensure the national, regional and local benefits of REG are provided for;** **(b) enable REG capacity and output to significantly increase;** **(c) enable REG to support the social, economic and cultural wellbeing of people and communities, and for their health and safety;** **(d) enable REG to provide greater security of electricity supply and resilience to supply disruptions to all people and communities;** **(e) enable REG to support achieving New Zealand's emission reduction target and implementation of the emissions reduction plan under the Climate Change Response Act 2002; and** **(f) ensure REG is developed and operated in a safe, efficient and effective manner while managing the adverse effects from or on REG activities.**
Policy A: National Significance and Benefits of Renewable Electricity Generation
Policy A1 Decision-makers on REG activities must recognise and provide for the national significance and the national, regional and local benefits of REG activities.
Assessment: The national, regional and local benefits of the project have been assessed and articulated in the Economic Assessment and the Assessment of Environmental Effects for the project and must be recognised and provided for in decision making on the application. In summary, the project is expected to deliver substantial and enduring economic benefits at both regional and national scales. These benefits include significant short-term employment and GDP gains, long-term operational employment, improved energy security, enhanced market resilience, and efficient use of land and infrastructure.
Policy A2 Decision-makers must recognise that the benefits of REG activities include: **(a) avoiding, reducing and displacing greenhouse gas emissions;** **(b) contributing to the security, resilience and independence of electricity supply at local, regional and national scales through diverse REG sources and electricity storage in diverse locations;** **(c) providing for the social, economic and cultural wellbeing of people and communities and for their health and safety;** **(d) using renewable rather than finite sources of energy;** **(e) avoiding reliance on imported and domestic fossil fuels for the purposes of generating electricity;** **(f) the temporary and reversible nature of adverse effects on the environment of some REG technologies;** **(g) reducing electricity losses by locating REG activities close to electricity demand and existing electricity networks; and** **(h) reducing adverse effects by:**

(i) co-locating REG with other appropriate REG assets and activities and other appropriate infrastructure and activities; and **(ii) locating REG activities to minimise adverse effects on other activities.**
Assessment: The national, regional and local benefits of the project have been assessed and articulated in the Economic Assessment and the Assessment of Environmental Effects for the project and must be recognised and provided for in decision making on the application. *The effects of the Twizel Solar Project are reversible at the end of project life with the infrastructure able to be easily decommissioned and removed and the land returned to its original condition if it is determined to do so. The project is co-located in close proximity to the Twizel Substation and the National Grid reducing electricity losses that result when electricity flowing along power lines meets resistance and loses heat in the wires i.e. the longer the line, the greater the losses. In terms of potential adverse effects on landscape values, the project is co-located with other hydro renewable electricity generation activities and infrastructure and the landscape and visual assessment concludes that the project will result in low-moderate to moderate adverse landscape effects that are more than minor but not significant. The location of the project minimises adverse effects on other activities primarily through buffer distances from surrounding activities.*
Policy B: Considering Cumulative Gains and Losses of Renewable Electivity Generation Capacity
Policy B1 Decision-makers on REG assets and activities must recognise and provide for the importance of: **(a) enabling cumulative increases of REG capacity and output at any scale and any location, including small-scale and community-scale REG assets and activities; and** **(b) avoiding, where practicable, any overall or cumulative losses of REG capacity and output from a region or district or existing REG assets and activities.**
Assessment: The project will result in a significant cumulative increase of REG capacity providing power generation for approximately 75,000 homes annually. The policy supports this capacity and output being in any location.
Policy B2 Decision-makers must have regard to any potential and reasonably foreseeable reduction in the utilisation of renewable electricity resources from inappropriate subdivision, use and development.
Assessment: The project will not result in reduction in the utilisation of renewable electricity resources.
Policy C: Operational Need or Functional Need for REG assets and Activities to be in Particular Locations and Environments
Policy C1 Decision-makers must recognise and provide for REG assets and activities that have an operational need or functional need to be in particular locations and environments.
Assessment: The operational needs of the Twizel Solar Project to be in the location proposed have been detailed in the substantive application (see section 1.3.4) and include proximity to the Twizel Substation and National Grid, access to a large site with high solar irradiation and flat contour et al.
Policy C2 Decision-makers must recognise that the operational need or functional need of REG assets and activities includes, but is not limited to, the need to: **(a) be located where a renewable electricity resource is located and available at a viable scale and quality to sustain the REG activity;** **(b) be accessible and to connect to electricity networks and be nearby to electricity demand; and** **(c) have sufficient and accessible land available to support all associated current and reasonably foreseeable future REG activities at that particular location.**

Assessment: As per the above assessment.
Policy C3 An assessment of alternative sites is not required to demonstrate that an operational or functional need exists.
Assessment: This policy directs that an assessment of the project does not need to consider alternative sites.
Policy D: Protecting Existing REG Assets and Activities from Other Activities
Policy D1 Decision-makers must protect existing REG assets and activities, to the extent reasonably possible, from the adverse effects of new activities, including by avoiding reverse sensitivity effects.
Assessment: The project will not result in adverse effects on existing REG assets and activities.
Policy E: Recognising and providing for Māori interests
Policy E1 Decision-makers must recognise and provide for Māori interests in relation to REG assets and activities, including by: **(a) taking into account the outcome of any engagement with tangata whenua on a relevant resource consent, notice of requirement or private plan change;** **(b) recognising the opportunities tangata whenua may have in developing and operating their own REG activities at any scale or in partnership; and** **(c) local authorities:** **(i) providing opportunities for tangata whenua involvement where REG assets and activities may affect a site of significance or issue of cultural significance to Māori; and** **(ii) operating in a way that is consistent with any relevant iwi participation legislation or Mana Whakahono ā Rohe.**
Assessment: Outcomes of Nova's engagement with tangata whenua are detailed in the substantive application including how information and feedback from tangata whenua has shaped the project.
Policy F Enabling and managing the effects of REG assets and activities on the environment
Policy F1 Decision-makers must enable REG assets and activities in all locations and environments.
Assessment: This policy is a strong directive to decision makers to enable the project.
Policy F2 Where REG assets and activities are proposed to locate in or are likely to have adverse effects on environments and values provided for in section 6 of the Act, the provisions of this policy must be read alongside other relevant national direction, regional policy statements and regional and district plans.
Assessment: An assessment of section 6 RMA (matters of national importance) is provided in the substantive application along with a full assessment of other relevant national direction, RPS and regional and district plans.
Policy F3 Where (2) does not apply, the adverse effects of REG assets and activities must be, where practicable, avoided, remedied or mitigated.
Assessment: Not applicable. Policy F2 applies.
Policy F4 Decision-makers must have particular regard to the use of adaptive management measures.
Assessment: Adaptive management measures are a key component of the ecological management plans proposed by Nova which decision makers must have particular regard to.
Policy F5 When considering any residual adverse effects of REG assets and activities that cannot be avoided, remedied or mitigated, decision-makers shall have regard to offsetting measures or environmental compensation, including measures or compensation that benefit the local environment and community affected.

Assessment: The Assessment of Environmental Effects concludes that all adverse effects can be appropriately avoided, remedied or mitigated. Environmental compensation is proposed as a backstop should certain ecological mitigation and management measures (including adaptive management) prove to be unsuccessful.
Policy G Providing for the operation and maintenance of existing REG assets and activities
Policy G1 Decision-makers must enable the efficient operation and maintenance of existing REG assets and activities in all locations and environments.
Assessment: Not applicable as the Twizel Solar Project is not an existing REG asset or activity.
Policy H Reconsenting, upgrading and repowering existing REG assets and activities
Policy H1 For reconsenting, upgrading and repowering of existing REG assets and activities, **decision-makers must:** **(a) recognise that existing REG assets form part of the existing environment;** **(b) take into account the extent to which the effects of the proposed REG assets and activities are different in scale, intensity, duration and frequency from the effects of existing REG assets and activities;** **(c) have particular regard to the efficiencies and environmental benefits of increasing REG capacity and output within the same REG site; and** **(d) provide flexibility for changes in consent conditions to enable the upgrading of existing REG assets and activities, including adapting to new technologies.**
Assessment: Not applicable as the Twizel Solar Project is not an existing REG asset or activity.