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SUBJECT: NOVA ENERGY TWIZEL SOLAR PROJECT – CUMULATIVE EFFECTS ASSESSMENT

1. INTRODUCTION

This memorandum (memo) provides a supplementary assessment of cumulative effects associated with Nova Energy Limited's proposed Twizel Solar Project (Twizel Solar) – EPA unique ref. no FTAA-2604-1217, which is currently being considered under the Fast-track Approvals Act 2024 (FTAA). The purpose of this assessment is to provide an updated cumulative effects assessment accounting for the recent granting of consents for Lodestone Energy's Haldon Solar Farm Project¹ (Haldon Solar Project) on 10 August 2026.

Nova's substantive application included an assessment of cumulative effects having regard to other existing or authorised and reasonably foreseeable developments in the wider Mackenzie Basin (at section 5.16)². When Nova's substantive application was prepared, Haldon Solar had not been granted consent and therefore did not form part of the existing environment. The subsequent approval of Haldon Solar Project has altered the receiving environment and necessitates reconsideration of cumulative effects associated with Nova's application.

This memo draws upon supplementary cumulative effects assessments prepared by the Project's relevant specialist technical experts which take into account the Haldon Solar Project. The relevant cumulative effects considered are acoustic, transport, economic, stormwater and flooding, ecology and landscape effects. The following assessments are appended to this memo:

Appendix 1: Acoustic Effects

Appendix 2: Transport Effects

Appendix 3: Economic Effects

Appendix 4: Stormwater and Flooding Effects

Appendix 5: Ecological Effects

Appendix 6: Landscape Effects

In consideration of these assessments, this memo provides an overall assessment of cumulative effects and considers whether the updated assessments require additional mitigation measures,

¹ Haldon Solar Farm (Expert Panel Decision under the Fast-track Approvals Act 2024, 10 August 2026).

² Nova Energy Twizel Solar Project - FTAA Substantive Application, (BTW Company Ltd, 2026)

changes to conditions of consent or impact on any of the planning policy conclusions reached within the substantive application.

2. BACKGROUND

The concept of cumulative effects is well established³. The assessment by the Expert Panel in the Haldon Solar decision provides useful guidance that cumulative effects include the effects of a proposed activity together with the effects of activities already forming part of the existing environment. The Panel noted that the existing environment includes the future environment as modified by activities authorised under the relevant planning framework, together with activities that may be undertaken pursuant to resource consents that have been granted and are likely to be implemented. The position taken by the Panel is consistent with that which has been established by case law under the RMA.

The AEE accompanying Nova's substantive application considered cumulative effects that were likely to arise as part of the overall assessment of environmental effects². In undertaking that assessment, consideration was given to the effects of the Project in combination with other existing or authorised and reasonably foreseeable activities within the wider Mackenzie Basin.

The substantive application concluded that cumulative effects were unlikely to arise. Furthermore, where those potential cumulative effects were identified, they were not anticipated to be significant².

³ Queenstown Lakes DC v Hawthorn Estate Ltd (2006) 12 ELRNZ 299; [2006] NZRMA 424 (CA)

3. SUPPLEMENTARY TECHNICAL ASSESSMENTS

In order to understand cumulative effects associated with the combined effects of the Twizel Solar Project and the consented Haldon Solar Project, supplementary technical assessments have been prepared (where relevant). These assessments have been undertaken by the same technical experts who prepared the corresponding assessments lodged with the substantive application. Table 1 (below) provides a summary of the findings from those assessments.

TABLE 1: SUMMARY OF SUPPLEMENTARY CUMULATIVE TECHNICAL ASSESSMENTS

Effect	Potential Cumulative Adverse Effect	Magnitude of Cumulative Effect following Mitigation	Additional Mitigation Required
Economic	Concurrent construction activity resulting in temporary pressure on the availability of skilled labour and worker accommodation within the district. Loss of pastoral production.	Nil. The assessment identifies that the ongoing operational effects of the two projects would be complementary. Loss of pastoral production is considered to be economically immaterial, arising primarily from the Twizel solar project (because the Haldon site has been rarely grazed). Any loss is largely reversible at the end of the projects' operational lives.	No
Acoustic	Concurrent construction activity such as simultaneous piling activities.	Negligible. The assessment identifies no significant cumulative construction or operational noise effects arising from the two projects.	No
Transport	Both Haldon and Twizel solar projects using SH8 and being constructed simultaneously.	Negligible. The assessment concludes that the cumulative effects on the safety, capacity and operation of the road network would be within the network's operating capacity.	No
Stormwater and Flood Hazards	Cumulative changes to local overland flow paths, increased erosion and sediment generation during construction, and potential stormwater quality effects within the wider Lake Benmore catchment.	Negligible. The assessment concludes that the Twizel Solar Project and Haldon Solar Project will result in negligible cumulative adverse stormwater and flood hazard effects.	No
Landscape and Visual	Visual amenity effects resulting from simultaneous and sequential views from a limited number of viewpoints, and effects on the Mackenzie Basin's local and wider landscape character and its ONL values.	Very low to low degree of adverse cumulative visual effects, except for in relation to some locations along McAughtries Road from where the level of effects is low to low-moderate. Low to low-moderate degree of adverse cumulative landscape character and values. Having regard to the Landscape Assessment Guidelines set out in section 1.3 of the Landscape and Visual Effects Assessment included with the substantive application, this equates to a minor level of effect.	No
Ecological	Loss of indigenous vegetation	Negligible. Indigenous vegetation is limited to the margins of the Twizel Solar Project site and will be avoided as part of the design.	No
	Habitat fragmentation	Negligible. Cumulative effects are likely to be negligible for all taxa, after effects management due to the avoidance and habitat restoration around the edges of the site where most of the ecological values are	
	Habitat loss	Minor. While the direct effects of habitat loss at Haldon are expected to be significant, due to the	

		Very High habitat values, the cumulative effects of this project alongside the Twizel Solar Project after management are expected to be negligible, having regard to the low quality of the habitat on the Twizel Project site.	
	Habitat modification	Less than minor. The habitat within the Twizel development area is already considered to be of low to very low quality. To the extent that the habitat within the development area may be used by fauna species, it is not unique in the Mackenzie Basin and will be less attractive than other adjacent areas. Areas of high value habitat on the site such as areas of dryland stonefield and stoney scarps has been avoided. While the values of the Haldon Solar Project site are higher, risks to these values are managed via mechanisms such as the enhancement of the Compensation Area.	
	Predation by introduced mammals	Negligible or Net positive. The two projects are not likely to raise pest mammal numbers significantly, and effects will mostly be non-cumulative. Pest mammal control could potentially benefit many species.	
	Direct mortality of fauna and flora resulting from human and vehicle activity	Minor. The cumulative effect of direct mortality after management can be controlled to minor, as the Twizel Project avoids key habitat, and effects management includes a range of measures including pre-works surveys during the avifauna breeding season and setbacks from site boundaries and avifauna breeding areas. The Haldon Solar Project also provides for similar management measures.	
	Fauna disruption during construction	Effects on avifauna are considered to be less than minor. Effects on lizards are expected to be negligible given the low density of lizards in the Twizel Solar Project area. Effects on terrestrial invertebrates could be more than minor, but effects are temporary, localised and managed by way of invertebrate management plans. There is also unlikely to be interaction between the two sites. Overall, effects are assessed as potentially more than minor without management (but not significant) and could be less than minor.	
	Water quality degradation	Negligible. Appropriate erosion and sediment controls, stormwater management measures, and vegetation buffers implemented at each site will ensure that there is a low cumulative effect on waterways.	
	Displacement of fauna from within the solar panel area	Minor. Most ecological values at the Twizel Solar Project are concentrated around the perimeters of the site, outside of the panel areas.	
	Avifauna collisions with solar panels	Minor. Planned mitigation is designed to limit the overall cumulative effect. Nova and Haldon intend to install tracking array solar panels with anti-reflective panel surfaces, which are expected to significantly reduce avifauna collision risk. The Avifauna Management Plan (Wildland	

		Consultants 2026e) and Avifauna Carcass Monitoring Programme (Wildland Consultants 2026f) include post-construction monitoring, with adaptive management to manage the potential effects of collision if trigger levels are met.	
	Changes in herbicide use	Negligible or Net positive. The use of agrichemicals may be lower than if the land were used for agriculture, noting that sheep can be used to graze grass around the solar arrays.	
	Increased disturbance associated with solar farm operation	Negligible. The levels of vehicle use, noise, and human disturbance during the solar farm operation is expected to be limited and sporadic and is therefore expected to have a minimal impact on flora and fauna compared to what is already occurring across both sites.	
	Modification and loss of inland, outwash gravel ecosystem	Negligible. Project site has been cultivated (drilled and tilled), which has disrupted the soils and the outwash plain habitat is significantly modified from its original state.	

In summary, the supplementary technical assessments conclude that the cumulative effects arising from the combined implementation of the Twizel Solar Project and the consented Haldon Solar Project are generally nil, negligible or minor in magnitude following the mitigation and management measures already proposed and are none of the effects are significant. The specialist assessments do not identify a need for additional mitigation measures or amendments to the proposed consent conditions.

4. ASSESSMENT OF PLANNING POLICY FRAMEWORK

This section considers the original assessment of cumulative effects in the substantive application together with the supplementary assessments undertaken following the approval of Haldon Solar Project. It assesses the change in the magnitude of cumulative acoustic, transport, economic, stormwater and flood hazard, landscape and ecological effects, and whether those combined effects alter the conclusions reached in the substantive application regarding the Project's consistency with the relevant statutory and planning framework.

4.1. POTENTIAL CUMULATIVE EFFECTS OF TWIZEL SOLAR PROJECT - ORIGINAL ASSESSMENT

The substantive application included an assessment of the relevant legal and planning framework in Attachment 3.7. That assessment considered whether the Project's potential cumulative effects would be appropriately managed, having regard to the existing and reasonably foreseeable environment at the time the application was lodged. As Haldon Solar Project had not then been approved, the assessment was undertaken against the receiving environment characterised by the existing Waitaki hydro-generation scheme, the Twizel Substation, the National Grid and associated infrastructure.

The provisions identified below informed the assessment of the Project's potential cumulative landscape and visual, ecological and cultural effects within that receiving environment. They also provided the basis for determining whether those effects would affect the Project's overall consistency with the relevant statutory and planning framework as set out below:

National Policy Statement for Renewable Electricity Generation:

Policies A, B, C1–C2 and F1–F5 address the benefits and cumulative increase of renewable electricity generation, its locational requirements, the management of environmental effects, adaptive management, and residual effects.

Canterbury Regional Policy Statement

Provisions of the CRPS that are of relevance for cumulative effects that were considered include:

- land use and regionally significant infrastructure under Objectives 5.2.1 and 5.2.2 and Policies 5.3.2 and 5.3.9;
- freshwater and biodiversity under Objectives 7.2.1 and 7.2.3 and Policies 7.3.3 and 7.3.5–7.3.7;
- indigenous biodiversity under Objective 9.2.3 and Policy 9.3.2;
- natural hazards under Objective 11.2.1 and Policies 11.3.1 and 11.3.5;
- outstanding natural landscapes under Objective 12.2.1 and Policies 12.3.2 and 12.3.4; and
- renewable electricity generation under Objective 16.2.2 and Policies 16.3.3 and 16.3.5.

Canterbury Land and Water Regional Plan

Provisions of the CLWRP considered included Objectives 3.1–3.8, 3.13–3.19, 3.23 and 3.24 and Policies 4.13, 4.14, 4.14A, 4.14B, 4.17–4.19, 4.22, 4.25 and 4.101. These provisions address integrated land and water management, regionally significant infrastructure, freshwater and groundwater quality, indigenous biodiversity, natural character, soil stability, stormwater, sediment

and contaminant discharges, and critical habitat. The substantive application was also assessed against the objective and Policies 1–6 of the National Policy Statement for Natural Hazards, relating to proportionate risk assessment, avoidance of very high natural hazard risk.

Mackenzie District Plan

Objectives REG-O1 and REG-O2 and Policies REG-P1 and REG-P6 of the Mackenzie District Plan, together with Strategic Objectives ATC-O1–ATC-O6 and NE-O1 were considered. These provisions address increased renewable electricity generation, management of adverse effects, the benefits and locational constraints of renewable generation, regionally significant infrastructure, economic and community wellbeing, natural hazard resilience, landscape values and significant indigenous biodiversity.

Substantive Application Conclusion on Cumulative effects

At the time the substantive application was lodged, no other solar projects in the vicinity had been approved. The cumulative effects assessment therefore focused on the Project's interaction with the existing Waitaki hydro-generation scheme and associated transmission infrastructure. Within that receiving environment, the substantive application concluded that the Project would not result in significant cumulative landscape and visual effects, materially add to existing ecological pressures following implementation of the proposed effects management measures, or make a significant incremental contribution to cumulative cultural effects.

These findings supported the conclusion that the Project would appropriately manage adverse effects on landscape, indigenous biodiversity, freshwater, cultural and amenity values, while providing for the benefits and locational requirements of renewable electricity generation. Accordingly, cumulative effects were considered unlikely to arise and, where potential cumulative effects were identified, they were not anticipated to be significant or to alter the Project's consistency with the relevant statutory and planning framework.

4.2. POTENTIAL CUMULATIVE EFFECTS OF TWIZEL SOLAR PROJECT POST-HALDON SOLAR APPROVAL

The following assessment considers the cumulative effects conclusions reached in the substantive application alongside the updated assessment of cumulative effects following the approval of Haldon Solar Project and evaluates whether the change in the receiving environment materially alters the conclusions previously reached regarding the Project's consistency with the relevant statutory and planning framework.

Acoustic Effects

The substantive application concluded that operational noise from the Twizel Solar Project would comply with the relevant permitted activity standards, remain compatible with the anticipated character of the General Rural Zone, and maintain the health and wellbeing of people and communities. This informed the conclusion that the Project was consistent with Objective NOISE-O1 and Policy NOISE-P1 of the Mackenzie District Plan, which require noise to be compatible with the receiving environment and managed to maintain its anticipated character and amenity.

The supplementary assessment considers the combined acoustic effects of the Twizel Solar Project and Haldon Solar Project during construction and operation. Glencairn Lodge was identified as the receiver most likely to experience noise from both projects. Operational noise from Haldon Solar Project is predicted to be below audibility at this receiver and would not alter the operational noise effects previously assessed for the Twizel Solar Project. If piling for both projects occurred concurrently at their closest respective locations to Glencairn Lodge, the combined noise level could be momentarily perceptibly louder but would remain well below the applicable daytime construction noise limit. The assessment therefore concludes that there will be no cumulative operational noise effects and no significant cumulative construction noise effects, with the overall cumulative acoustic effects assessed as negligible.

The approval of Haldon Solar Project therefore does not alter the acoustic conclusions reached in the substantive application. The negligible magnitude of cumulative acoustic effects means that the combined effects of both projects remain compatible with the anticipated character and amenity of the receiving environment. No additional mitigation or changes to the proposed noise conditions are required. Accordingly, the Project's consistency with Objective NOISE-O1 and Policy NOISE-P1 of the Mackenzie District Plan remains unchanged.

Transport Effects

The substantive application concluded that the transport effects of the Twizel Solar Project would be appropriately managed. Safe and efficient access would be provided from State Highway 8, operational vehicle movements would be infrequent, and construction traffic would be managed through a Construction Traffic Management Plan. These findings informed the conclusion that the Project would integrate appropriately with the State Highway 8 transport network and was consistent with CRPS Objectives 5.2.1 and 5.2.2 and Policy 5.3.2, which seek the safe and efficient integration of development, regionally significant infrastructure and transport networks.

The supplementary assessment considers a conservative scenario in which the Twizel Solar Project and Haldon Solar Project are constructed concurrently. Although both projects would use sections of State Highway 8, there is substantial separation between the sites and the combined construction traffic would remain within the capacity of the road network. The Haldon Road and State Highway 8 intersection, being the principal shared intersection, is expected to continue operating at Level of Service A. Operational and maintenance traffic associated with both projects would be substantially lower than construction traffic. The resulting cumulative transport effects are assessed as low.

The approval of Haldon Solar Project therefore does not materially alter the transport conclusions reached in the substantive application. The low magnitude of cumulative transport effects means that the road network would continue to operate safely and efficiently if the projects were constructed concurrently. The existing requirement for the Construction Traffic Management Plan to identify preferred travel routes and appropriate delivery times, having regard to other construction projects, remains sufficient. No additional mitigation or amendments to the proposed transport conditions are required. Accordingly, the conclusions regarding the Project's consistency with CRPS Objectives 5.2.1 and 5.2.2 and Policy 5.3.2 remain unchanged.

Economic Effects

The substantive application concluded that the Twizel Solar Project would generate substantial economic benefits at district, regional and national levels, including construction-related employment and expenditure, ongoing operational activity, and increased renewable electricity generation. These findings informed the conclusion that the Project was consistent with the enabling direction of the

NPS-REG, including Policies A1–A2 and B1, CRPS Objective 16.2.2 and Policy 16.3.3, and Mackenzie District Plan Objectives ATC-O1–ATC-O4, REG-O1 and Policy REG-P1, which recognise the economic and wider benefits of renewable electricity generation and regionally significant infrastructure.

The supplementary assessment considers whether the combined development of the Twizel Solar Project and Haldon Solar Project would result in cumulative economic effects. If the projects were constructed concurrently, temporary pressure could arise in relation to the availability of skilled labour and worker accommodation. However, these matters may affect project timing or delivery costs rather than diminish the economic benefits generated by either project. The operational effects of the projects are expected to be complementary, while the combined loss of pastoral production is economically immaterial and largely reversible at the end of the projects' operational lives. Overall, the magnitude of cumulative adverse economic effects is assessed as nil, while the combined economic benefits remain positive.

The approval of Haldon Solar Project therefore does not materially alter the economic conclusions reached in the substantive application. The nil magnitude of cumulative adverse economic effects, together with the complementary operational effects and combined renewable electricity generation benefits of the projects, reinforces the economic and strategic benefits previously identified. No additional mitigation or amendments to the proposed conditions are required. Accordingly, the conclusions regarding the Project's consistency with the purpose of the Fast-track Approvals Act 2024, the National Policy Statement for Renewable Electricity Generation, Canterbury Regional Policy Statement, and Mackenzie District Plan remain unchanged.

Stormwater and Flooding Effects

The substantive application concluded that stormwater runoff, flood risk, erosion and sediment effects associated with the Twizel Solar Project would be appropriately managed through project design, site-specific mitigation works and certified management plans. These findings informed the conclusion that the Project was consistent with the National Policy Statement for Natural Hazards, including Policies 1–6; CRPS Objective 11.2.1 and Policies 11.3.1 and 11.3.5; the Mackenzie District Plan natural hazard provisions, including Objectives NH-O2–NH-O4 and Policies NH-P1–NH-P6; and CLWRP Policies 4.13, 4.14, 4.17–4.19 and 4.22. These provisions seek to manage natural hazard risk, avoid increasing flood risk on other sites, maintain water quality, and manage stormwater and sediment discharges.

The supplementary assessment considers the combined effects of the Twizel Solar Project and Haldon Solar Project on catchment hydrology, downstream flood levels, erosion and sedimentation, and water quality. Both projects are located within the wider Lake Benmore catchment and the highly modified Waitaki hydroelectric scheme. While each development may result in minor changes to overland flow paths and local flood behaviour within its respective site, these effects will be localised and managed through site-specific design controls, erosion and sediment controls, stormwater management measures and consent conditions. Neither project, individually or cumulatively, is expected to alter downstream flood levels or result in adverse cumulative water-quality effects. The overall cumulative stormwater and flood hazard effects are therefore assessed as negligible. This is also reflected in the Ecology supplementary cumulative effects assessment which similarly concludes that cumulative effects on water quality will be negligible.

The approval of Haldon Solar Project therefore does not materially alter the stormwater and flood hazard conclusions reached in the substantive application. The negligible magnitude of cumulative effects means that the combined projects will not materially alter catchment hydrology, increase

downstream flood risk, or adversely affect water quality. The design controls, management measures and proposed conditions for the Twizel Solar Project remain sufficient, and no additional mitigation or amendments to the proposed conditions are required. Accordingly, the conclusions regarding the Project's consistency with the relevant NPS-NH, CRPS, Mackenzie District Plan and CLWRP provisions remain unchanged.

Ecological Effects

The substantive application concluded that, following implementation of the proposed avoidance, mitigation, enhancement, monitoring and adaptive management measures, the ecological effects of the Twizel Solar Project would be no more than minor and would not materially add to existing ecological pressures. Most areas of significant ecological value are located around the site margins and are avoided by the Project. Effects on ecologically significant indigenous vegetation and wetlands were assessed as less than minor and, in many cases, negligible, while effects on avifauna, including bird-strike risk, were assessed as no more than minor. These findings informed the conclusions reached for CRPS Objective 9.2.3 and Policy 9.3.2, CLWRP Policy 4.101, and Mackenzie District Plan Objective NE-O1 and Policy REG-P6 concerning the protection and management of significant indigenous vegetation, significant habitats of indigenous fauna and other indigenous biodiversity values.

The supplementary assessment considers the combined effects of the Twizel Solar Project and Haldon Solar Project across a range of ecological matters, including indigenous vegetation loss, habitat fragmentation, habitat loss and modification, pest mammal predation, direct mortality, construction disturbance, water quality, fauna displacement, avifauna collision, herbicide use and operational disturbance. The supplementary assessment adopts a conservative approach to assessment of effects levels, to address uncertainty arising in respect of some potential effects. Following the effects management proposed for both projects, the assessment identifies cumulative effects ranging from negligible to potentially more than minor (in relation to construction effects on invertebrates only). Habitat loss, direct mortality, fauna displacement and avifauna collision are assessed as minor; habitat modification is assessed as less than minor; and remaining effects are assessed as negligible. Overall, the combined ecological effects are assessed as less than minor and, in most cases, negligible.

A key issue in terms of potential effects is the potential for avifauna to collide with solar panels or associated infrastructure, the substantive application recognised the possibility that birds could (theoretically) perceive the panels as water, commonly referred to as the "lake effect", and assessed bird-strike effects as no more than minor with monitoring and adaptive management in place. The Project design responds to this risk through tracking arrays, spacing between panel rows and anti-reflective panel surfaces, which break up the apparent panel area and reduce reflectivity. The proposed conditions also require setbacks from significant indigenous vegetation, rivers and wetlands; construction setbacks during the avifauna breeding season; an Avifauna Management Plan; indigenous bird mortality thresholds; and pre-works avifauna surveys where construction occurs during the breeding season.

The supplementary assessment identifies avifauna collision as a minor cumulative effect, after effects management. Both projects will use tracking panel arrays with anti-reflective surfaces, which are intended to reduce collision risk. The Twizel Solar Project will also implement an Avifauna Carcass Monitoring Programme to detect bird collisions with the arrays and ancillary infrastructure, supported by carcass detection and persistence trials. The monitoring results will inform adaptive management if specified trigger levels are reached. Haldon Solar Project is subject to its own avifauna collision monitoring and adaptive management requirements.

The importance of this monitoring and adaptive management framework reflects the noted uncertainty concerning avifauna collision risk. Accordingly, post-construction monitoring is proposed to establish whether collisions are occurring in the local environment and to inform any management response.

Notwithstanding that uncertainty, the supplementary assessment concludes that the proposed design measures, monitoring, mortality thresholds and adaptive management regime are sufficient to limit the cumulative avifauna collision effect to a minor magnitude. No further effects management is recommended for the Project as a consequence of Haldon Solar Project's approval. The approval of Haldon Solar Project therefore does not materially alter the ecological conclusions reached in the substantive application. The existing ecological management framework remains sufficient, and the Project's consistency with the relevant CRPS, CLWRP and Mackenzie District Plan provisions remains unchanged.

Landscape Effects

The substantive application concluded that the Twizel Solar Project would result in low-moderate to moderate adverse landscape effects that were more than minor but not significant. Although the Project would reduce the perceived openness and naturalness of the site and its immediate surroundings, these effects would be geographically contained, and the defining values of the Te Manahuna/Mackenzie Basin Outstanding Natural Landscape would be retained. This informed the conclusion that the Project was consistent with CRPS Objective 12.2.1 and Policies 12.3.2 and 12.3.4, together with Mackenzie District Plan Objective NE-O1 and Policy REG-P6, which provide for renewable electricity generation while managing effects on outstanding natural landscape values.

The supplementary assessment considers the combined landscape and visual effects of the Twizel Solar Project and Haldon Solar Project, including simultaneous and sequential views of the developments and their effects on the local and wider landscape character and values of the Mackenzie Basin. The assessment concludes that the Twizel Solar Project will result in a low to low-moderate degree of adverse cumulative effects at a local scale within the southern part of the Mackenzie Basin. At the wider Mackenzie Basin scale, the adverse cumulative effects will be very low.

The approval of Haldon Solar Project therefore does not materially alter the landscape and visual conclusions reached in the substantive application. While the two developments will increase the presence of solar infrastructure within the Mackenzie Basin, their combined effects remain localised and do not materially affect the wider character or values of the Outstanding Natural Landscape. No additional landscape mitigation or amendments to the proposed conditions are required. Accordingly, the conclusions regarding the Project's consistency with CRPS Objective 12.2.1 and Policies 12.3.2 and 12.3.4, Mackenzie District Plan Objective NE-O1 and Policy REG-P6 remain unchanged.

5. CONCLUSION

The supplementary assessments undertaken following the approval of Haldon Solar Project confirm that the cumulative adverse effects associated with the Twizel Solar Project will not be significant and range from nil or negligible to minor in magnitude. These effects remain appropriately managed through the mitigation and management measures and proposed conditions included in the substantive application. No additional mitigation or changes to the proposed conditions are required as a result of Haldon Solar Project's approval.

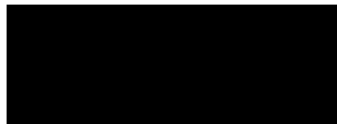
Accordingly, the updated assessment does not alter the conclusions reached in the substantive application regarding the appropriateness of the Project or its consistency with the relevant legal and planning framework. In particular, the Project continues to provide for the benefits and locational requirements of renewable electricity generation while appropriately managing effects on indigenous biodiversity, landscape values, freshwater, natural hazards, transport safety and amenity.

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APPENDIX 1: ACOUSTIC EFFECTS

APPENDIX 2: TRANSPORT EFFECTS

APPENDIX 3: ECONOMIC EFFECTS

APPENDIX 4: STORMWATER AND FLOODING EFFECTS

APPENDIX 5: ECOLOGICAL EFFECTS

APPENDIX 6: LANDSCAPE EFFECTS