| under:            | the Resource Management Act 1991                                                                                        |
|-------------------|-------------------------------------------------------------------------------------------------------------------------|
| in the matter of: | Submissions and further submissions in relation to the proposed Waimakariri District Plan, Variation 1 and Variation 2  |
| and:              | Hearing Stream 4: Natural Features and Landscapes,<br>Coastal Environment and Natural Character of<br>Freshwater Bodies |
| and:              | MainPower New Zealand Limited<br>Submitter 249                                                                          |

Statement of Evidence of Mark Appleman

Dated: 30 June 2023

Reference: J M Appleyard (jo.appleyard@chapmantripp.com) A M Lee (annabelle.lee@chapmantripp.com)

chapmantripp.com T +64 3 353 4130 F +64 3 365 4587



### STATEMENT OF EVIDENCE OF MARK APPLEMAN

- 1 My full name is Mark Henry Appleman.
- 2 I am the General Manager of Network Strategy and Planning at MainPower New Zealand Limited (*MainPower*) (submitter number 249).
- 3 In this role I am responsible for developing the strategy for managing MainPower's network assets and then delivering the annual work plan to develop and maintain the MainPower network.
- 4 I am authorised to provide evidence on behalf of MainPower for the proposed Waimakariri District Plan (*proposed Plan*) review.
- 5 I have previously prepared a brief of evidence for Hearing Stream 1 of the proposed Plan. I adopt that evidence for the purposes of this hearing and provide supplementary detail relevant to the proposed Natural Features and Landscapes, Coastal Environment and Natural Character of Freshwater Bodies chapters below.
- 6 My qualifications and experience are set out in full in my Hearing Stream 1 evidence.
- 7 While I am an employee of MainPower, I have expertise in the field of electrical engineering and confirm that I have read and agree to comply with the "Code of Conduct for Expert Witnesses" contained in the Environment Court Practice Note 2023. In particular, unless I state otherwise, the technical matters on which I give evidence are within my area of expertise and I have not omitted to consider material facts known to me that might alter or detract from the opinions I express.

## SCOPE OF EVIDENCE

- 8 This brief of evidence will address:
  - 8.1 MainPower's existing network within areas containing natural features and landscapes, the coastal environment and / or freshwater bodies; and
  - 8.2 The importance of enabling the efficient maintenance, use, development and upgrade of electricity infrastructure in these areas.

#### EVIDENCE

9 As explained in my Hearing Stream 1 evidence, MainPower is responsible for the establishment, operation, maintenance and upgrade of the electricity distribution network in North Canterbury. MainPower's work frequently involves installing, maintaining/repairing and upgrading of our electricity infrastructure (including lines, towers, poles, cables, transformers and kiosks). In some instances, it is necessary for our infrastructure to be located, and therefore maintained and repaired, in areas with natural environmental values.

10 MainPower seek that the proposed Plan recognise that important infrastructure, such as that required for electricity distribution, may need to be located within these areas due to locational, operational and technical requirements.

# MainPower's network in areas with natural environmental values

11 The pictures below show instances where MainPower infrastructure is located in areas with natural environmental values.

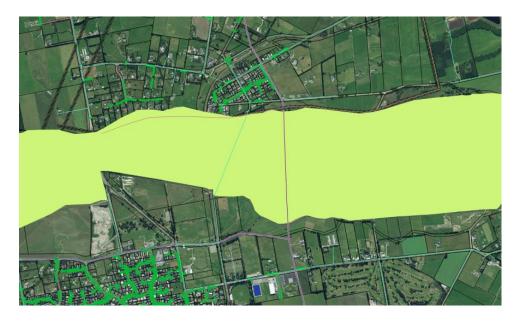
Overhead line Ashley Gorge Road:



Overhead line into Lees Valley:



Distribution and Sub-Transmission lines crossing the Ashley/Rakahuri River:





Distribution lines crossing the Waimakariri River

Overhead and underground assets and cabinets in Waikuku





Overhead and underground assets and cabinets in Kairaki

12 There is a functional and operational need for all of these locations as they provide power to residential and commercial customers throughout these areas.

## The need to provide for repair, maintenance and upgrade works

- 13 MainPower also needs to repair, maintain and upgrade its assets in these locations and repairs may be required urgently in fault situations.
- 14 MainPower completes asset inspections in line with our Strategic Asset Management Plan. This informs future Asset Maintenance Plans. This includes strategic asset replacement which is undertaken when an asset is determined to be "end of life". Further, network reinforcement is required when network constraints due to load growth are identified through MainPower's Network Development plans.
- 15 It is important that MainPower is able to conduct both, and other types of works on the network, in accordance with Asset Maintenance Plans and Network Development plans without restraint.

## CONCLUSION

16 In summary, MainPower's electricity network is critical to the Waimakariri District and there are functional, operational and locational requirements that drive where MainPower's assets must be located. MainPower therefore seeks that the proposed Plan provides a permissive framework in relation to the operation, maintenance, repair and upgrade of its existing electricity distribution infrastructure.

30 June 2023

Mark Appleman