Attachment 16 to Memorandum #7: Statement of Erik Westergaard

Date	21 January 2026
To	Jon Bright, Project Director – Waitaha Hydro Scheme Westpower Ltd
From	Erik Westergaard
Project advice provided for	*Waitaha Hydro Scheme*
Document referred to	*Waitaha Hydro Scheme Substantive Application Appendix 16 Electricity Resilience Report*
Signature	[redacted]

1. At Westpower's request, I have quantified the Value of Lost Load, of the 23 October 2025 major outage in the West Coast.

Electricity resilience benefits

2. The 23 October 2025 outages in the Upper South Island reflected the circumstances outlined in paragraph 142 of my technical report and the regional benefit of continued supply from the Waitaha Hydro Scheme is described below.

3. Paragraph 142 described a transmission outage causing loss of load and the significant economic benefit Waitaha would provide to local consumers. A Value of Lost Load (**VoLL**) calculation was used to estimate the benefit of Waitaha generation following a transmission outage impacting the whole region. Using the $20,000/MWh value of load set out in Part 13 of the Electricity Industry Participation Code (the Code), the value of Waitaha generation is in the order of $300,000 per hour – assuming a 67% load factor.

4. On 23 October 2025 some customers in the West Coast lost power during severe weather.[1] This affected 8993 customers who are served by three Transpower Grid Exit Points (**GXP**), the Reefton GXP, Dobson GXP, and Greymouth GXP. This is over 60% of Westpower's customers.

[1] Over 6000 without power as winds lash Canterbury; West Coast cut off following closures on State Highways amid severe weather | RNZ News.

5. Using publicly available data from the Electricity Authority website, I estimated that approximately 43 MWhs of lost load was incurred. This estimate was determined by comparing the actual half-hour reconciled energy demand at the three GXPs over the period of the outage with the actual demand on the same day of the week in the previous three weeks.

6. I estimate the economic cost of the 23 October outages was:

   (a) at the most conservative, $860,000 using a VoLL of $20,000 per MWh as currently set out in the Code; and

   (b) more realistically, $1.37 million using an inflation adjusted VoLL of $32,000 per MWh. Using an inflation adjusted figure is appropriate as the Code figure was last reviewed in 2010 – the Electricity Authority is looking to complete a review of VoLL in 2026. Greater reliance on a reliable electricity system through increased electrification and digitalisation of the economy would also tend to support higher figure for VoLL.

7. The Amethyst Hydro Station continued generating on 23 October 2025 and contributed to ensuring supply to the remaining network. This included supplying Westland Milk Products and Hokitika township, thereby reducing the economic consequences for the region.

Erik Westergaard