



HUB REVIEW CONSULTATION: CALL FOR NOMINATIONS

MAY 2026

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1. EMS, as FTR Manager, will only accept a person as an FTR participant, and will only offer and issue FTRs to that person, if the person meets all of the following requirements:
 - (a) Meets the prudential requirements in relation to FTRs set out in Part 14 of the Electricity Industry Participation Code 2010 (**Code**), as determined by the Clearing Manager under the Code.
 - (b) Is a natural person resident in New Zealand, a body corporate that is incorporated in New Zealand, or a person with a branch office or other substantial physical presence in New Zealand through which it conducts its FTR participation.
 - (c) Has provided EMS as FTR Manager with either:
 - (i) a current and valid eligible investor certificate under clause 41 of Schedule 1 of the Financial Markets Conduct Act 2013 (FMCA) in respect of the issue or sale of FTRs; or
 - (ii) a current and valid wholesale investor certificate under clause 44 of Schedule 1 of the FMCA.
 - (d) Is registered by the Electricity Authority as an Industry Participant under section 9 of the Electricity Industry Act 2010 as a trader in electricity.
 - (e) Agrees to the standard FTR participation agreement, **(authorised persons)**.
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 - (b) an offer or solicitation by EMS to issue or deal in FTRs or any other investment, financial product or risk management arrangement; or
 - (c) directed to any person who is not an authorised person.
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1 Introduction

1.1 Background

Energy Market Services (EMS), a business unit of Transpower, is the FTR Manager appointed by the Electricity Authority (Authority).

The current FTR Allocation Plan 2018 was approved by the Authority Board in February 2018. The latest version of the FTR Allocation Plan (the Plan) is available at <https://www.ftr.co.nz/ftr-manager-policies/ftr-allocation-plan/>

The FTR Hub Review Consultation in 2020/21 proposed by the FTR Manager was deferred at the request of the Authority due to its FTR Market review, which was completed in 2023. The FTR Manager started a new Hub Review Consultation in 2024 but was requested to put the process on hold as managing the dry winter of 2024 took priority.

The FTR Manager has conferred with the Authority and the FTR Hub review has commenced for 2026, with a view to making a decision on the number of hubs to be added or removed based on the outcome of the consultation which includes an evaluation of costs and benefits to the market.

The FTR Allocation Plan 2018 provides (in section **4.10 Adding new FTR Hubs**) that:

The FTR Manager will at least once every two years conduct a process to offer FTR Participants the possibility to add up to five new FTR Hubs. Non-FTR participants can request new FTR Hubs at any time, and these requests will be considered as part of this process. In conducting the process, the FTR Manager will:

- Confer with the Authority regarding the number of FTR hubs to make available, taking into consideration the Authority's work-plan and appropriations
- Determine which nodes have sufficient levels of interconnection and capacity to act as effective FTR hubs
- Seek FTR Participants' nominations for which hub or hubs each FTR Participant would prefer were added (if any), with a limit on the number of proposed hubs per participant
- Consolidate a list of nominated hubs, including up to five 'non-hubs'
- Invite FTR Participants to vote on their preferences for nominated hubs using a single transferable vote method
- Use both the votes and any hubs requested by non-FTR participants and the Authority to select a subset of all nominated hubs (the nominated subset)
- Invite FTR Participants and non-FTR participants to advise their costs and views on market benefits should new hubs be selected to be added
- If one or more new FTR Hubs are selected to be added, and a positive cost-benefit can be demonstrated, propose to the Authority a corresponding variation to sections 2.2 and 2.3 of the FTR Allocation Plan.

The Authority's decision on whether to approve the variation will include consideration of the cost-benefit analysis and the funds available through the Authority's appropriations. The timing of any additions will also be influenced by the time and effort required to complete the necessary changes to the FTR Manager and clearing manager systems.

The plan also provides for removing a hub under section 4.11:

The FTR Manager will [at least once every two years] conduct a process to offer FTR Participants the possibility to remove up to [one] existing FTR Hub. In doing so, the FTR Manager will:

- Seek FTR Participant proposals for which hub each FTR Participant would prefer were removed (if any), with a limit on the number of proposed hubs per participant
- Consolidate a list of nominated hubs, including [two] 'non-hubs'
- Invite FTR Participants to vote on their preferences for nominated hubs using a single transferable vote ranking system
- Use the votes to select the [one] hub (or non-hub) using the single transferable vote method
- Invite FTR Participants to advise their costs and views on market benefits should the hub be removed
- If one existing FTR Hub is selected to be removed, and a positive cost-benefit can be demonstrated, propose to the Authority a corresponding variation to section 2.2 of the FTR Allocation Plan.

The Authority's decision on whether to approve the variation will include consideration of the cost benefit analysis and the funds available through the Authority's appropriations. The timing of any removals will also be influenced by the time and effort required to complete the necessary changes to the FTR Manager and Clearing Manager systems

1.2 Coordination of the process with the Clearing Manager

If this Hub Consultation results in new hubs being added to the FTR Allocation Plan, the Clearing Manager will be responsible¹ for providing the daily Maximum Initial Margin (MIM) and Daily Settlement Price (DSP) data that matches the new hubs, and will be required to receive auctions results and settle FTR periods that include the resulting new paths.

The FTR Manager will endeavour to work closely with the Clearing Manager to minimise the risk of scheduling conflicts.

1.3 Hub review process and timetable

The timetable below provides an overview of the hub review process. This document represents Step 4 of the sequence, the publication of a call to participants and identified non-participants asking for hub nominations for adding to or removal from the FTR Market. The FTR Manager has already established hubs that have sufficient interconnection and capacity to act as FTR nodes and sought feedback from the Authority on any relevant limitations to the hub review considering the costs involved.

¹ Under the Clearing Manager's prudential security assessment methodology with respect to the FTR market, as approved from time to time by the Authority under clause 14.19B of the Code, available at <https://www.nzx.com/services/energy-markets/clearing-manager>.

1.4 Hub review timetable

The timetable for the hub review process is as follows (**dates are subject to change**):

Sequence Ref. #	Process step	Indicative date	Other
1	FTRM informs EA of intent to conduct hub consultation. FTRM prepares indicative costs for technical changes included.	2-Feb-26	Complete
2	Authority Responds to the FTRM information	17-Mar-26	Complete
3	FTR Manager to determine the hub long list	19-Mar-26	Complete
4	Hub Review Consultation 2026 call for nominations paper released (this document)	1-May-26	In progress
5	Deadline for hub nominations	1-June-26	
6	Ranked short list published and voting requested	16-Jun-26	
7	Deadline for voting on short list	23-Jun-26	
8	STV Algorithm applied to determine ranked/prioritised shortlist suitable for CBA	8-Jul-26	
9	Costs and Benefits Analysis (CBA) begun with participant input	16-Jul-26	
10	FTR Manager creates a “final set” of hubs with accompanying CBA. Authority to determine hubs to be added or removed.	3-Aug-26	
11	Any proposed variation to the Allocation Plan with additional or removed hubs released for formal consultation	7-Sep-26	

Sequence Ref. #	Process step	Indicative date	Other
12	Deadline for Allocation plan submissions	25-Sep-26	
13	Publication of Allocation Plan if approved by Authority board.	16-Oct-26	
14	FTR Manager prepares a change request and seeks approval to implement the change to the system.	16-Oct-26	
15	FTR Manager begins technical changes to the system	TBC	

2 The Hub Long List

95	68 220kV	27 110kV
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The *hub long list* contains 95 unique nodes, of which 68 nodes are 220kV, 27 nodes are 110kV on the electrical system.

The criteria used by the FTR Manager to determine the long list are as follows:

- All nodes are from the 220kV or 110kV electrical system
- All nodes have a relevant pnode in WITS
- All nodes have a network model bus name mapped in the FTR Grid PSS/E and Asset Map files provided by the Grid Owner
- The node list contains no Tees.

A full nodal assessment of indicative capacity was determined with the help of the Authority.

Should you believe there are hubs not included on the long list that should be considered, please name them using the in the form in section 2.5.

2.1 Maximum number of hubs to be added

5

The maximum numbers of hubs that will be added to the market in the next Allocation Plan is five. This is provided for in the current Allocation Plan, and is dependent on passing a net positive cost-benefit analysis.

2.2 Maximum number of nominations for hubs to be added

6

The maximum number of nominations per participant for adding a new hub is six. Participants should list their nominated hubs in order preference. Allowing six nominations enables a clearer hub selection for moving to the next stage of the process.

2.3 Maximum number of hubs to be removed

1

The maximum numbers of hubs that will be removed from the market in the next Allocation Plan is one. This is provided for in the current Allocation Plan, and is dependent on passing a net positive cost-benefit analysis.

2.4 Hub long list

Hub Code	Hub Name	3LC SITE	Bus Name
ALB1101	Albany	ALB	ALB/ALB110A1
ALB2201	Albany	ALB	ALB/ALB220A1
ASB2201	Ashburton	ASB	ASB/ASB220A1
ATI2201	Atiamuri	ATI	ATI2/ATI220A
AVI2201	Aviemore	AVI	AVI/AVI220A1
BHL2201	Brownhill Road	BHL	BHL/BHL220A
BOB1101	Bombay	BOB	BOB/BOB110A1
BOB2204	Bombay	BOB	BOB/BOB220_1
BPE1101	Bunnythorpe	BPE	BPE/BPE110A1
BPE2201	Bunnythorpe	BPE	BPE220A1a
BRB2201	Bream Bay	BRB	BRB2/BRB220A
BRK2201	Brunswick	BRK	BRK2/BRK220B
BRY2201	Bromley	BRY	BRY2/BRY220A
CML1101	Cromwell	CML	CML1/CML110A
CML2201	Cromwell	CML	CML2/CML220A
CST1101	Carrington Street	CST	CST1/CST110A
CYD2201	Clyde	CYD	CYD2/CYD220A
DRY2201	Drury	DRY	DRY2/DRY220A
EDG2201	Edgumbe	EDG	EDG/EDG220A2
GLN2201	Glenbrook	GLN	GLN/GLN220
GOR1101	Gore	GOR	GOR110_A1
GOR2201	Gore	GOR	GOR2/GOR220A
HAM1101	Hamilton	HAM	HAM/HAM110A2
HAM2201	Hamilton	HAM	HAM/HAM220A2
HEN1101	Henderson	HEN	HEN/HEN110A1
HEN2201	Henderson	HEN	HEN220A1a
HEP1101	Hepburn Road	HEP	HEP1/HEP110A
HLY2201	Huntly	HLY	HLY/HLY220B1
HOB1101	Hobson Street	HOB	HOB/HOB110A1
HOB2201	Hobson Street	HOB	HOB2/HOB220C
HPI2201	Huapai	HPI	HPI2/HPI220A
HRP2201	Harapaki	HRP	HRP2/HRP220A
HTU2201	Hautapu	HTU	HTU2/HTU220A
HWB1101	Halfway Bush	HWB	HWB1/HWB110A
HWB2201	Halfway Bush	HWB	HWB2/HWB220A
KAW1101	Kawerau	KAW	KAW/KAW110A3
KAW2201	Kawerau	KAW	KAW/KAW220A1
KMO1101	Kaitimako	KMO	KMO1/KMO110A

Hub Code	Hub Name	3LC SITE	Bus Name
KMO2201	Kaitimako	KMO	KMO2/KMO220A
LIV2201	Livingstone	LIV	LIV22/LIV220
LTN2201	Linton	LTN	LTN2/LTN220A
MAN2201	Manapouri	MAN	MAN2/MAN220A
MDN1101	Marsden	MDN	MDN/MDN110A1
MDN2201	Marsden	MDN	MDN/MDN220A1
MNG1101	Mangere	MNG	MNG/MNG110A1
MPE1101	Maungatapere	MPE	MPE1/MPE110A
MTI2201	Maraetai	MTI	MTI/MTI220A1
MVE1101	Morrinsville	MVE	MVE/MVE110A
NAP2201	Nga Awa Purua	NAP	NAP/NAP220A1
NMA2201	North Makarewa	NMA	NMA/NMA220b1
NSY2201	Naseby	NSY	NSY2/NSY220A
NWD2201	Norwood	NWD	NWD2/NWD220A
OHA2201	Ohau A	OHA	OHA/OHA220A1
OHB2201	Ohau B	OHB	OHB/OHB220A1
OHC2201	Ohau C	OHC	OHC/OHC220A1
OHK2201	Ohakuri	OHK	OHK/OHK220A1
OHW2201	Ohinewai	OHW	OHW2/OHW220B
OKI2201	Ohaaki	OKI	OKI/OKI220A1
PAK2201	Pakuranga	PAK	PAK2/PAK220B
PEN1101	Penrose	PEN	PEN1/PEN110A
PEN2201	Penrose	PEN	PEN2/PEN220A
RDF2201	Redclyffe	RDF	RDF/RDF220A1
ROS1101	Mt. Roskill	ROS	ROS/ROS110A1
ROX1101	Roxburgh	ROX	ROX1/ROX110A
ROX2201	Roxburgh	ROX	ROX2/ROX220A
RPO2201	Rangipo	RPO	RPO/RPO220A1
SDN2201	South Dunedin	SDN	SDN2/SDN220B
SFD1101	Stratford	SFD	SFD/SFD110A1
SFD2201	Stratford	SFD	SFD/SFD220A1
STK1101	Stoke	STK	STK/STK110A1
STK2201	Stoke	STK	STK220A1_1
SWN2201	Southdown	SWN	SWN22/SWN220
TAB2201	Tauhara	TAB	TAB2/TAB220A
TAK2201	Takanini	TAK	TAK2/TAK220A
THI2201	Te Mihi	THI	THI2/THI220B
TIM1101	Timaru	TIM	TIM/TIM110_A
TIM2201	Timaru	TIM	TIM2/TIM220A
TKB2201	Tekapo B	TKB	TKB/TKB220A1
TKR1101	Takapu Road	TKR	TKR/TKR110B1
TKU2201	Tokaanu	TKU	TKU/TKU220A1

Hub Code	Hub Name	3LC SITE	Bus Name
TMH2201	Three Mile Hill	TMH	TMH2/TMH220B
TMN2201	Taumarunui	TMN	TMN2/TMN220A
TNG2201	Tangiwai	TNG	TNG2/TNG220A
TRK1101	Tarukenga	TRK	TRK/TRK110A3
TRK2201	Tarukenga	TRK	TRK/TRK220A1
TWH2201	Te Kowhai	TWH	TWH2/TWH220A
TWI2201	Tiwai	TWI	TWI2/TWI220A
TWZ2201	Twizel	TWZ	TWZ/TWZ220A1
WHI2201	Whirinaki	WHI	WHI/WHI220A1
WHU1101	Waihou	WHU	WHU/WHU110A1
WIL1101	Wilton	WIL	WIL1/WIL110A
WIL2201	Wilton	WIL	WIL2/WIL220A
WRD2201	Wairau Road	WRD	WRD2/WRD220B
WRK2201	Wairakei	WRK	WRK2/WRK220A
WTK2201	Waitaki	WTK	WTK2/WTK220A

2.5 The Nomination response

Please fill out form below and return to ftmanager@ems.co.nz prior to 1 June 2026.

Question 1	Can you suggest other hubs not included on the <i>Hub Long List</i> that should be considered for adding to the FTR Market in the next Allocation Plan, and why?		
	Hub Code	Hub Name	Reason for inclusion
Question 2	Referring to the <i>Hub Long List</i> , use the table below to nominate up to six hubs (in priority order) to add to the FTR Market . These nominations will be used as the basis for the FTR Manager to determine a short list for later voting.		
	Nominated Position	Hub Code	Hub Name
	1		
	2		
	3		
	4		
	5		
6			
Question 3	Please use the table below to nominate one hub from the existing eight* to remove from the FTR Market . Nominations will be used as the basis for the FTR Manager to determine a short list for later voting.		
	Nominated Position	Hub Code	Hub Name
	1		

* The existing eight FTR Market hubs are: OTA2201, WKM2201, RDF2201, HAY2201, KIK2201, ISL2201, BEN2201 and INV2201.

Appendix 1: STV Methodology

The Single Transferable Voting system will use [Meek's Method](#). As described by Hill, Wichmann and Woodall (1987),

The basis of any STV system consists of the following.

- (1) Voting by order of preference of candidates, the first choice being marked 1, the second 2, and so on, on the ballot papers. (Meek also considered an alternative formulation in which voters would be allowed to indicate equal preference for some candidates instead of a strict ordering; we have not implemented this alternative.)
- (2) A quota for election, calculated from the number of votes and the number of seats to be filled.
- (3) A first counting by first preferences only, and the election of any candidate who equals or exceeds the quota (except in the special case of a multi-way tie).
- (4) Redistribution of surplus votes (above the quota) for any candidate, in accordance with the voters' further preferences, and election of any who now reach the quota.
- (5) When no further redistribution of surpluses is possible, the exclusion of the candidate who then has the fewest votes, and redistribution of those papers.
- (6) Further counting, election, redistribution of surpluses and exclusion as necessary, until all seats are filled.

In the Meek formulation the rule for redistributing surpluses is that, at every stage, if a candidate has votes totalling k times the quota, then he (or she) keeps $1/k$ of each of those votes and passes $(k-1)/k$ on to the next candidate on the voter's list. This same fraction applies also to portions of votes received as parts of other surpluses. This requires the iterative solution of nonlinear equations. It is proved below that a solution always exists and is unique.

Furthermore, the approach to Meek's Method will be that outlined by the [NZ Dept. of Internal Affairs](#). As stated by DIA, the general approach is:

Every Single Transferable Voting system for elections has the following features:

- voting by order of preference for the candidates
- a quota for election, calculated from the number of votes and the number of positions to be filled
- a first count of first preferences only, and the election of any candidate who equals or exceeds the quota (except in the special case of a multi-way tie)

- redistribution of surplus votes (above the quota) for any candidate in accordance with the voter's further preferences, and election of any candidate who then reaches the quota
- when no further distribution of surpluses is possible, the exclusion of the candidate who then has the fewest votes, and redistribution of those votes
- Further counting, election, redistribution of surpluses, and exclusion, as necessary, until all positions for election are filled

The following points explain in what ways Meek's method is different to other forms of STV:

Vote transfer

Votes are transferred to the next preference of the voter in the exact order indicated by the voter on the voting document unless the candidate has already been excluded.

Value of surpluses

The total value of a surplus or surpluses is shared in due proportion across both transferable and non-transferable voting documents.

Sharing of votes

If a candidate is elected later in the count, or an elected candidate receives further votes, the surplus to be transferred is shared across all voting documents credited to that candidate in due proportions, not just across the voting documents that gave immediate rise to the surplus.

Recalculation of quota

As votes become non-transferable (e.g., because the number of preferences recorded in the voting document is exhausted), the quota is recalculated to reflect the smaller total of votes remaining active. The new quota then applies to already elected candidates as well as others, giving them further surpluses to redistribute.

Need for computer technology

Because the procedure required to conduct a count using Meek's method of counting votes requires a candidate to be assigned a scaling factor (a keep value) representing the proportion of each vote that will actually be credited to each candidate, the number of calculations involved requires the count to be conducted using computer technology rather than by means of a manual count.

Appendix 2: Geographic Representations

Image 1: Existing 8 FTR Hubs - Otahuhu, Whakamaru, Redclyffe, Haywards, Kikiwa, Islington, Benmore and Invercargill

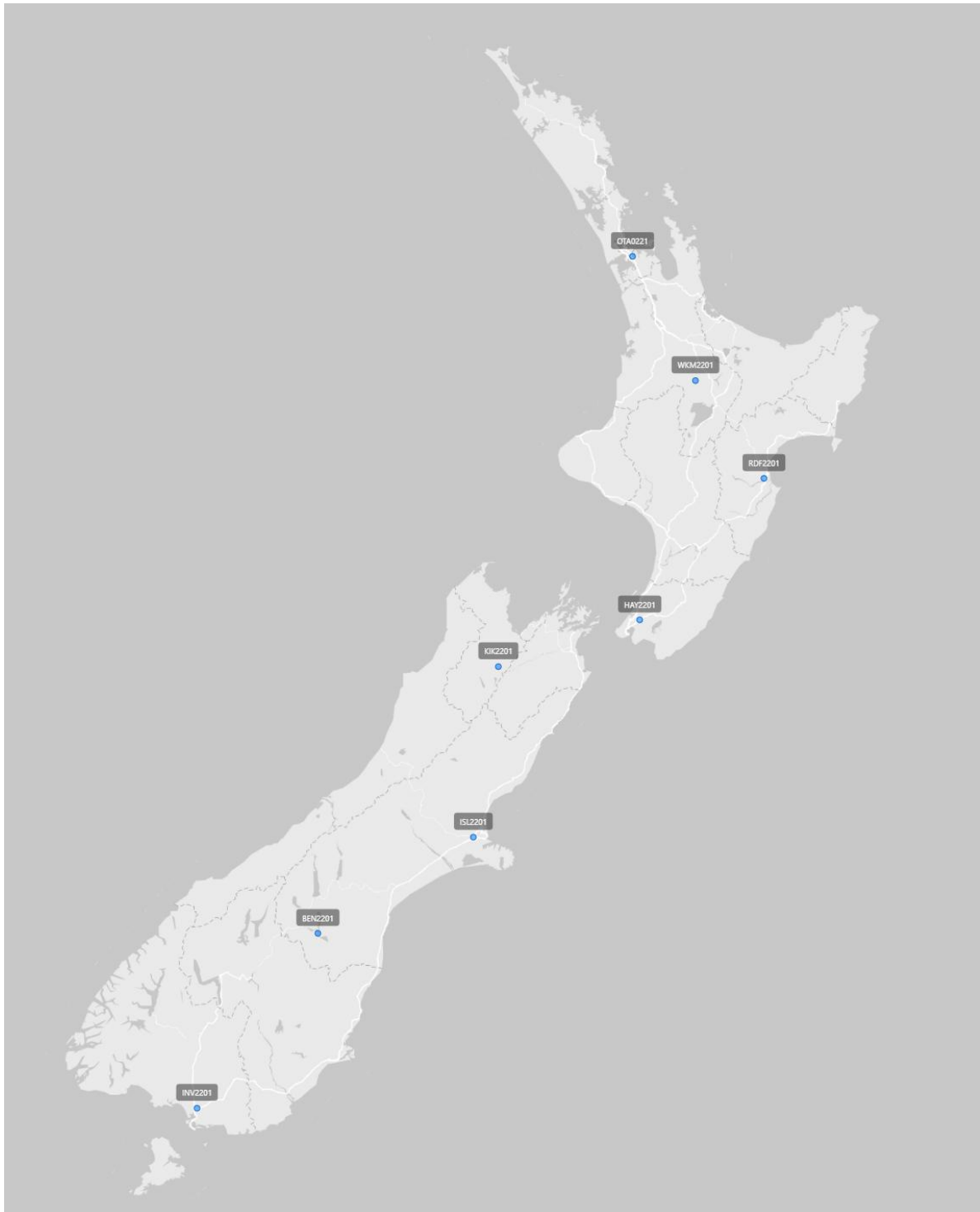


Image 2: Hub Long List Geographic Location

Each of the 95 nodes on the long list mapped geographically:

