

Targeted Information Disclosure Review – Tranche 2 Technical Elements Workshop

27 March 2023

Commerce Commission, Level 9, 44 The Terrace, Wellington



Welcome – opening Karakia



Whāia ngā pae o te māramatanga
Te pae tata, te pae tawhiti
Kia puta ki te whaiāo ki Te Ao Mārama

Pursue the thresholds of understanding
The near and distant horizons
And so emerge into The World of Light



Nau mai, haere mai



Workshop Purpose

Important issues were raised by stakeholders in submissions on our Targeted Information Disclosure Review (TIDR) Tranche 1. A number of stakeholders requested a workshop to discuss these issues in more detail.

The purpose of this workshop is to inform our approach to developing information disclosure (ID) requirements in the following areas:

- Asset Management Plan Requirements;
- New Connection Measures;
- Breaking Down SAIDI and SAIFI Values;
- Network Visibility and Information; and
- Vegetation Management.



Workshop Scope

- The focus of this workshop is on disclosure requirements for EDBs, allowing for both EDB and consumer examples and experiences to help further the conversation and our understanding.
- The information gathered today will feed into our future processes and into our analysis for setting ID requirements that best promote the Part 4 purpose. We understand that the industry faces a number of changes related to climate change and decarbonisation and our ID requirements will likewise have to evolve to best reflect the information that is most relevant to both industry stakeholders and consumers. This is an ongoing process.
- Our next round of proposed changes in the Tranche 2 review:
 - may not include all issues discussed today; and
 - is likely to include other topics / changes that we consider would not benefit from a workshop style discussion.
- The topics discussed today are complex and some may be consulted on further through a separate process outside the Tranche 2 review and/or as part of future reviews of ID requirements.

Agenda

Time	Agenda issue	Lead
11:30 – 12:00	Registration and lunch	
12:00 – 12:35	Asset Management Plan Requirements – feedback from industry on AMP requirements	Joe O’Sullivan
12:35	Break to stretch	
12:45 – 13:20	New Connection Measures – discuss and identify key process steps for new connections, who is responsible and measures	Robert Gordon
13:20	Break to stretch	
13:30 – 14:10	Breaking Down SAIDI/SAIFI Values – disaggregating SAIDI and SAIFI values	Tim Hewitt
14:10	Coffee and muffin break	
14:30 – 15:00	Network Visibility and Information – workshop the challenges in presenting network information to achieve greater visibility	Tim Hewitt
15:00 – 15:40	Vegetation Management – discussion on how vegetation is managed and relevant metrics for vegetation managed	Sean McCready
15:40 – 16:00	Parking lot review & close	Sean McCready

Issue 1 – Asset Management Plan Requirements

Joe O’Sullivan – Senior Analyst

Sean McCready – Principal Advisor, Engineer



AMP Requirements

Background

Section 2.6.2, Electricity Disclosure Information Determination states that: (pg 69)

1) AMPs must provide sufficient information for interested persons to assess whether-

(a) assets are being managed for the long term;

(b) the required level of performance is being delivered; and

(c) costs are efficient and performance efficiencies are being achieved.

2) Must be capable of being understood by interested persons with a reasonable understanding of the management of infrastructure assets; and

3) should provide a sound basis for the ongoing assessment of asset-related risks, particularly high impact asset-related risks.

AMP requirements were set under Part 4 of the Commerce Act in 2012, many EDBs are now following ISO 55001 standard.

We are also aware of the challenges facing EDBs around maintaining resilience and managing increased weather-related impacts with many facing significant growth on their networks. It is therefore important we adapt our ID disclosures to capture new information relevant to the changing operating environment facing the electricity distribution sector.

AMP Requirements

We are looking to achieve...

- An increased understanding of the areas of the AMP that work well and the areas that could be improved to provide greater transparency to stakeholders.



AMP Requirements

Mandatory Requirements (Attachment A of the ID Determination)

Contents of the AMP – outlines what must be included:

- Details of Assets covered;
- Network assets - by category;
- Service levels - identify or define a set of performance indicators;
- Network development planning - detailed description of plans;
- Lifecycle Asset Management Planning (Maintenance and renewal);
- Non-Network Development, Maintenance and Renewal;
- Risk Management - risk policies, assessment, and mitigation etc;
- Evaluation of performance - measurement, evaluation, and improvement; and
- Capability to deliver – describe the processes used.



AMP Requirements

New requirements from Tranche 1

In Tranche 1 we introduced new requirements for AMPs to improve the quality of information disclosed on certain topics:

- Approach to vegetation management-related maintenance (AM7A);
- Approach to capital expenditure forecasts (AM7B);
- Use of asset management data (AM8A);
- Approach to modelling non-network solutions (AM8B);
- Reporting on EDBs' innovation practices (D4); and
- New connections (D2).



AMP Requirements

We are interested in...

- Areas of the AMP that work well and those that are not relevant and why?
- What is missing from AMP requirements that demonstrate good asset management?



Issue 2 – New Connection Measures

Robert Gordon – Chief Advisor



New Connection Measures

Background

- In the past five years Utilities Disputes Limited (UDL) has recorded 102 complaints from consumers about delays in setting up new connections: 33 were about EDB (UDL submission – 20 April 2022).
- The ENA’s Customer Reference Panel ranked timeliness with new connections as the least important measure of the quality of service noting that it was “not that useful or understandable; lacking benchmark for timeliness, low consumer experience of the connection process, multiple players involved in the connection process.” (ENA submission on.. – 31 Aug 2022).
- Changes in consumer demand for electricity services are expected to result in a growing demand for new or changed connections. Connection time statistics may provide an effective metric to assess and incentivise EDB service and responsiveness.



New Connection Measures

We are looking to achieve...

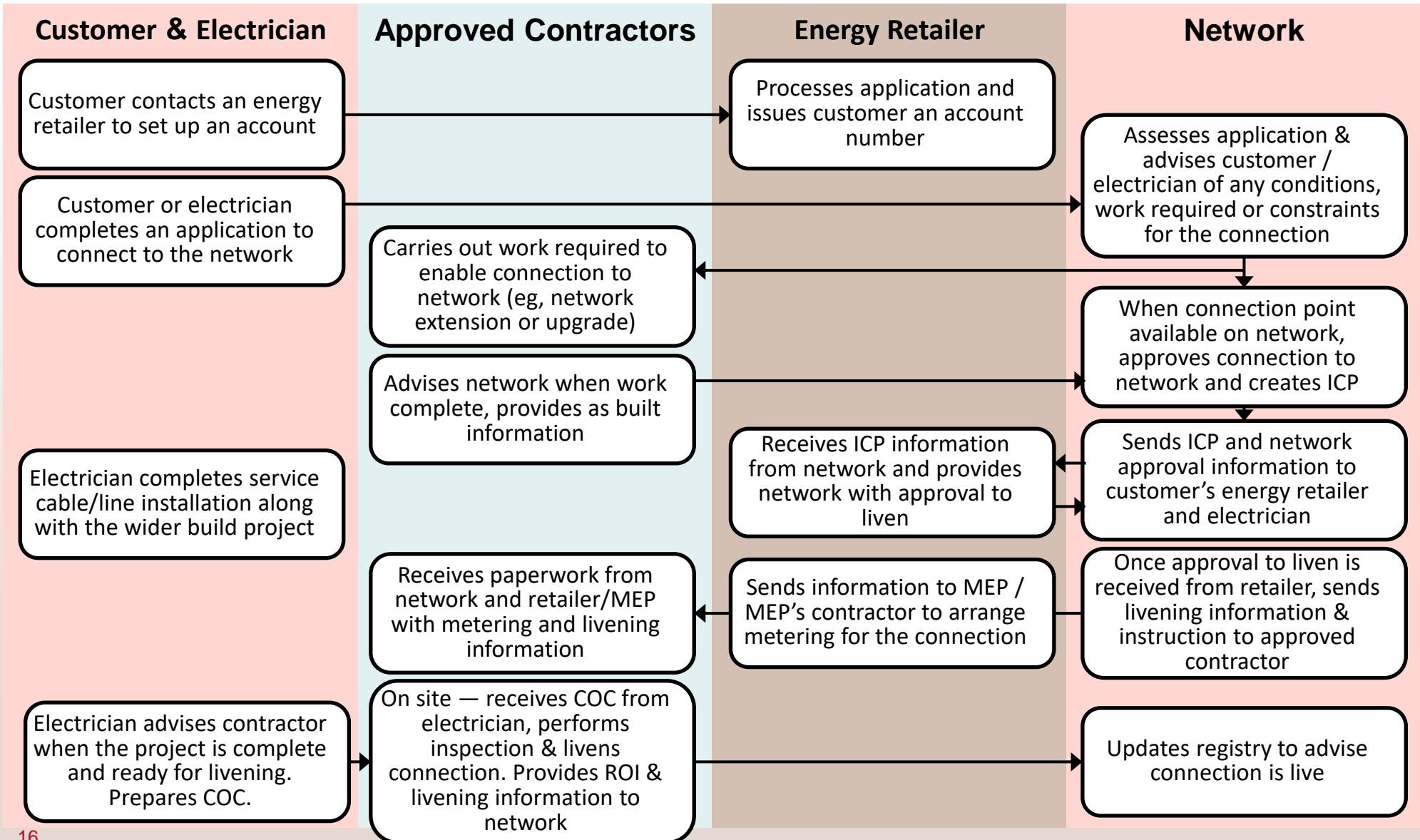
- possible quantitative metrics to report EDB's speed of provision of new electricity connections.

Feedback (from Tranche 1 submissions)

- EDB's "contracting" or "connection" model affects consistency between EDBs;
- EDB's influence on other parties' timeframes can vary considerably;
- Service level agreements might provide a performance baseline;
- Connections range in complexity, cost, scale, and capacity requirements;
- The measured duration must be clearly defined;
- Consider customer satisfaction ratings as an alternative metric; and
- Report only on new standard connections.



New Connection Measures



New Connection Measures

We are interested in...

Ideas for a straightforward disclosure approach to connection times:

- What is the appropriate disaggregation by party responsible? (as with airport delay reporting below)

On-time departure delay	Number	Total Duration	
		Hours	Minutes
The total number of flights affected by on time departure delay and the total duration of the delay during disclosure year by party primarily responsible			
Airports			
Airlines/Other			
Undetermined reasons			
Total	-	-	-

- Should the connection type be disaggregated ?
- What type of connections should be reported? New, Standard, Commercial, Distributed?
- What is the best visibility for consumers? Network tasks only or total duration of the customer experience?



Issue 3 – Breaking Down SAIDI / SAIFI Values

Tim Hewitt – Principal Advisor

Ananya Shamihoke – Senior Analyst



Breaking Down SAIDI / SAIFI Values

Background

- SAIDI and SAIFI are primary measures of quality.
- SAIDI/SAIFI is disclosed at a very high level in ID – network/subnetwork.
- In the past we have requested disaggregated outage data to set price-quality paths for price-quality regulated businesses.
- We currently require Aurora to disclose SAIDI/SAIFI by pricing regions due to the need for increased transparency under a customised price-quality path.

We recognise that:

- Consumers have varying needs and expectations of reliability;
- Environmental factors affect reliability in different geographic areas; and
- Network design and maintenance strategies are a factor affecting network reliability.

We are looking to achieve...

- Improved transparency about the difference in quality outcomes between groups of consumers.

Breaking Down SAIDI / SAIFI Values

Feedback

- Utilities Disputes supported work on this issue in order to improve transparency on quality outcomes.
- Some EDBs supported work on this issue in principle, and noted:
 - Clear definitions and consistency are necessary;
 - More detail and engagement is required; and
 - Implementation may be very costly to EDBs.
- Some EDBs did not support this work because:
 - Urban/rural breakdowns are very difficult to define and implement; and
 - Likely cost of implementation is higher than value add.



Breaking Down SAIDI / SAIFI Values

We are interested in...

- How do you use any breakdowns of interruption data in your decision making? *Eg, identifying priorities for asset replacement/repair/worse performing feeders*
- How would you establish a consistent and comparable way (across EDBs) of breaking down interruption data?
- How else would you improve transparency about the difference in quality outcomes between groups of consumers?
- What do you understand are the differences in expectations of quality outcomes for different consumers? How do you separate consumers, rural, urban, commercial?



Issue 4 – Network Visibility and Information

Tim Hewitt – Principal Advisor

Rhys Williams - Analyst



Network Visibility and Information



Background

- In the past, there has been limited visibility to stakeholders on network capacity and network power quality. This is especially true of the low voltage network component.
- We expect that decarbonisation may affect EDBs' networks in terms of increased power flow, potentially, resulting in localised congestion and power quality issues, caused by EV uptake and new DER connections.
- Improved visibility of network constraints may help those providing new technology or services plan and/ or offer efficient solutions or make decision on investing in new business growth (eg, expand or build a new production facility).

We are looking to achieve...

- Greater understanding for stakeholders on the current and likely future constraints on EDB networks;
- National level consistent reporting of constraints that does not impose an unnecessary regulatory burden on EDBs; and
- An understand of whether and how EDBs are making future constraints public.

Network Visibility and Information

Feedback on D1 – LV network information (from Tranche 1 subs)

- Clear that EDBs recognise the importance of this issue and many EDBs are planning or undertaking measures to improve the visibility of their LV networks.
- Limited access to LV network data for some EDBs eg, Access to SmartMeter data.
- Importance of assessing the current state of LV network performance before developing measures.
 - New requirements on voltage quality will assist with this.
- Want a less prescriptive approach in the short-term to align with industry and system capabilities. Added risk of investment in LV monitoring being disproportionate to the uptake of EVs and DER (in the short term).



Feedback on D3 in Tranche 1– Proposed changes to add ID requirements for EDBs to provide information on current and expected network constraints (from process and issues paper)

- Multiple parties support work on this to achieve consistency, transparency, and help the sector as a whole respond to emerging trends in a timelier way.
- ENA and some EDBs say this work is of high value but should be separated out of existing information disclosures because it is really its own thing.
- Some EDBs are concerned about implementation of a solution to this issue, because of data availability limitations within the EDBs and complexity for the Commission in designing a solution that works for everyone.
- Some stakeholders (both EDB and others) suggest we look at international practices, eg, in Australia.

Network Visibility and Information



We are interested in...

- What are the challenges EDBs face with improving network monitoring due to the design of their networks?
- MV networks:
 - What practices are EDBs undertaking to improve the visibility of their networks and how successful/promising are they?
 - What would help consumers and other stakeholders get an understanding of the current situation and future plans for these networks?
- LV networks:
 - What practices are EDBs undertaking to improve the visibility of their networks and how successful/promising are they?
 - What would help consumers and other stakeholders get an understanding of the current situation and future plans for these networks?

Issue 4 – Vegetation Management

Sean McCready – Principal Advisor, Engineer

Ali Scholes – Senior Analyst



Vegetation Management

Background

- Across the industry 18% of network opex is spent on vegetation management, around \$54m (DY22 ID).
- 14% of unplanned interruptions (SAIFI) are caused by vegetation (DY22 ID).
- The occurrence and severity of vegetation-related interruptions on a network can be influenced by, environmental, weather, landowners, land use and asset management practices.
- The importance of effective vegetation management will increase as climate change causes more severe and frequent storm events with greater potential for assets to be damaged by nearby vegetation.

We are looking to achieve...

- Transparency for consumers and stakeholders on effective vegetation management.

Vegetation Management

Issues for consideration in Tranche 2

AM6 – proposed changes to amend the definition of 'overhead circuit requiring vegetation management'.

- Further consultation following from Tranche 1.

Q13 - refine ID requirements on third party interference interruptions by breaking down into more specific categories, such as vehicle damage, 'dig-in', overhead contact, and vandalism.

- Similarly, we may consider further disaggregating the vegetation category as part of Tranche 2.



Vegetation Management

Tranche 1 issue

AM6 – proposed changes to amend the definition of 'overhead circuit requiring vegetation management'.

Category	Asset Management
Outcome we are seeking to achieve	Key asset management information is more accurate and/or accessible to stakeholders, and better accounts for the challenges facing EDBs, around maintaining resilience and managing increased weather-related impacts on their networks.
Problem with current ID regulation	Clarification is required on the definition to allow for more accurate and comparable data for the metric.
Draft decision (Tranche 1)	Defined as: <i>those circuits around which vegetation falls within the 'notice zone' as defined in the Electricity (Hazards from Trees) Regulations 2003.</i>

- We decided to defer this issue for consideration as part of Tranche 2 of the review.

Vegetation Management

Tranche 1 feedback

AM6 – proposed changes to amend the definition of 'overhead circuit requiring vegetation management'.

Submitter feedback on the proposed definition included:

- 'Notice zone' definition:
 - High cost to continually survey vegetation growth;
 - Potentially promotes a short-term focus as it does not account for fall-zone trees outside of the notice zone; and
 - Metric could be misleading if used for efficiency analysis, since such trees are included in vegetation management opex.
- Submitters outlined there is ambiguity related to what length of overhead lines report as being affected by vegetation in the situation where only a portion of a circuit is affected by vegetation.



Vegetation Management

Tranche 1 feedback continued

AM6 – proposed changes to amend the definition of 'overhead circuit requiring vegetation management'.

In its feedback on our draft decision, Aurora proposed:

- The definition retains the notice zone definition and include **not only vegetation that falls within the notice zone, but also vegetation that would be expected to encroach within this zone if it were not cut.**
- This addresses submitters' concerns that significant cost would be incurred having to re-survey their vegetation each year to determine what vegetation is in/out of the notice zone.



Vegetation Management

Tranche 1 feedback

Q13 – refine ID requirements on third party interference interruptions by breaking down into more specific categories, such as vehicle damage, 'dig-in', overhead contact, and vandalism.

- A final decision was made on this issue in Tranche 1 of the review, require EDBs to break down reporting of interruptions caused by third-party interference to include commonly occurring interruptions resulting from external contractors or members of the public
 - We received submitter feedback on this issue that **there is merit in further disaggregating the vegetation category to help identify controllable and uncontrollable interruption causes.**
- How valuable do you see this approach?



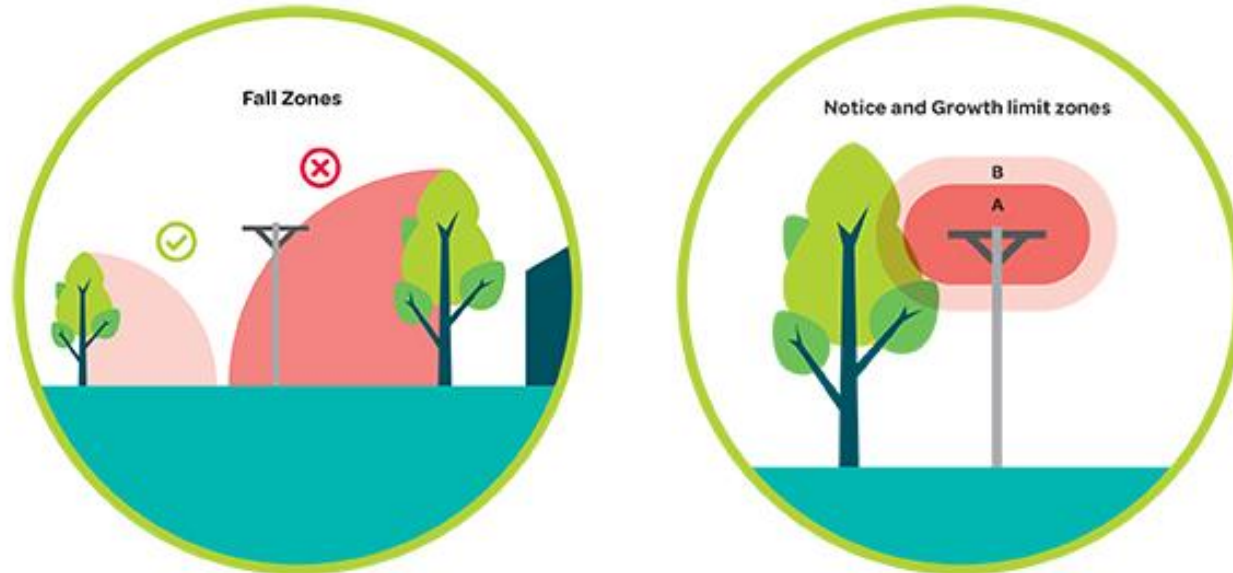
Vegetation Management

We are interested in...

- How do EDBs currently assess vegetation risk around overhead lines?
- How do EDBs currently measure vegetation management performance?
 - Measures that demonstrate to consumers that vegetation is being managed well?
- What is the current split of 'proactive' vs 'reactive' vegetation management costs?
 - Do EDBs record these costs separately?
- What is the current split of vegetation caused interruptions between in-zone and out-of-zone trees?
 - How do EDBs currently measure interruptions caused by out-of-zone trees?
- Regarding Aurora's proposed change to the definition of 'overhead circuit requiring vegetation management' (slide 31)
 - Does this seem like a reasonable approach to amending the definition?
 - If not, any further suggestions for improving the definition to make it more workable for EDBs?

Vegetation Management

Notice, Growth Limit, and Fall Zones



Power line voltage	A. Growth limit zone	B. Notice zone
66,000 volts	4.0m	5.0m
33,000 volts	2.5m	3.5m
11,000 volts	1.6m	2.6m
400/230 volts	0.5m	1.5m

Karakia Whakamutunga

Unuhia, unuhia
Unuhia ki te uru tapu nui
Kia wātea, Kia māmā te
ngākau, te tinana, te wairua
i te ara takatū
Koia rā e Rongo whakairia,
ake ki runga
Kia tina! Tina! Hui e! Tāiki e!

Draw on, draw on
Draw on the supreme sacredness
To clear, to free the heart,
the body, and the spirit
of mankind
Rongo, suspended high above us,
Draw together! affirm!



Thank you for attending

