Requirements of Tranche 1 due 30 June 23

Notice of planned and unplanned interruptions (Q1A)

- 1. Narrative disclosure in accordance with **clause 17.1** on planned and unplanned interruptions. Provide explanatory comments in the boxes below.
 - 1.1 EDBs are required to disclose this narrative information by 30 June 2023 in a separate document on the EDB's website.
 - 1.2 There is no requirement for director certification for this disclosure for 2023 but is subject to the same director certification requirements as the AMP in 2024 forward.
 - 1.3 From 2024, this information can be included in the AMP or a separate document.
- 2. Where this information is already included in other disclosed documents, for example the AMP, use a specific reference/link back to published document and include the information as an extract in the boxes below.

Box 1: Description of how the EDB provides notice to and communicates with consumers regarding planned interruptions, including any changes or plans for changes to the EDBs processes and communications in respect of planned interruptions.

Planned outages are scheduled in advance and are created in Advanced Distribution Management System (ADMS) by our network controllers, these are published to Top Energy's outage centre server, which displays outages on a map on our website: <u>https://outages.topenergy.co.nz</u> (note the tab for planned outages), as well as the Top Energy Outage App which can be uploaded from the Google play or Apple Stores if customers elect to do that. This map draws polygons around affected outages, users can click on these for additional information. From the Outage Centre website, customers can also elect to receive outage updates via text and or email if they subscribe using their address or ICP number.

Our outage centre also sends planned outage information via post and email using EIEP5A protocol directly to customers retailers.

For large, planned outages Top Energy may decide to advertise via Radio, Social Media and Newspapers. Where feasible, for smaller planned outages our contractors drop cards in letterboxes of affected customers.

Box 2: Description of how the EDB provides notice to and communicates with consumers regarding unplanned interruptions, including any changes or plans for changes to the EDBs processes and communications in respect of unplanned interruptions.

Top Energy's network controllers manage all unplanned outages in our control room via ADMS, once a fault is confirmed a fault is raised in ADMS. The outage is raised and published to Top Energy's outage centre website on the active outages tab <u>https://outages.topenergy.co.nz</u>. If a user has subscribed with their address or ICP, they will get notified of outages which affect their registered location.

Top Energy is constantly looking at ways to improve its communication with customers and any upgrades to webservices and Apps get pushed through automatically via the different platforms.

Voltage Quality (Q2)

- 3. Narrative disclosure in accordance with clause **17.2** on a description of the practices for connecting consumers. Provide explanatory comments in the boxes below.
 - 3.1 EDBs are required to disclose this narrative information by 30 June 2023 in a separate document on the EDB's website.
 - 3.2 There is no requirement for director certification for this disclosure for 2023 but is subject to the same director certification requirements as the AMP in 2024 forward.
 - 3.3 From 2024, this information can be included in the AMP or a separate document.
- 4. Where this information is already included in other disclosed documents, for example the AMP, use a specific reference/link back to published document and include the information as an extract in the boxes below.

Box 3: Description of the EDB's practices for monitoring voltage quality on its low voltage network, including any plans for any improvements to this practice.

We currently have targeted low voltage data loggers installed at various transformers on the network with online visibility. These sites cover commercial, industrial, hospitals and certain high density housing transformers and transformers with a high density of solar DER installed. This also assists by giving us typical demand profiles and allows for better understanding the characteristics of the network.

Additional monitoring of the quality of the low voltage network occurs as a response to a call from a customer or a field PM inspection taking place.

We are also in the process of gathering more accurate information on the connectivity of the low voltage network so the functionality of the new advanced distribution management system (ADMS) can be extended, and the tool can be used more effectively. (See AMP 1.9 Emerging Technologies and AMP 2.8.2 Small Scale Photovoltaics).

We believe that access to smart meter data will provide the best opportunity to monitor voltage quality of our customers. We are currently exploring opportunities for gaining access to smart meter data together with conducting a trial for assessing and analysing the data for use in the future.

INTRODUCTION (topenergy.co.nz)

Box 4: Description of work the EDB is doing on its low voltage network to address any known noncompliance with the applicable voltage requirements of the Electricity (Safety) Regulations 2010, including any plans for any improvements to this practice.

As highlighted in our AMP 8.3 Asset Management Improvement Programme, we are busy with our LV visibility project that involve personnel actively on site accessing every LV asset and circuit. This will confirm any noncompliance issue and defects are raised to rectify these issues. This improves our systems as our records get updated with accurate information.

INTRODUCTION (topenergy.co.nz)

Box 5: Description of how the EDB responds to and reports on voltage quality issues when the EDB identifies them or when they are raised by a stakeholder, including any plans for any improvements to this practice.

Generally, there are two ways these issues could be raised. Either internally or externally via a customer. When a customer calls the call centre and reports a power quality concern, the control room is then notified. The control room then assesses the nature of the complaint and dispatches a fault man who investigates the voltage quality issue. Depending on the level of work involved, the Fault-man can either rectify the problem on site or request engineering for support.

Voltage quality issues that are identified via internal inspection processes or by our contracting personal gets escalated to either the maintenance or planning departments for investigation and rectification.

Voltage quality issues gets recorded in control room logs as well as internal workflow applications, namely Salesforce. Once an engineering solution is completed the customer is notified.

Box 6: Description of how the EDB communicates with affected consumers regarding the voltage quality work it is carrying out on its low voltage network, including any plans for any improvements to this practice.

For planned works this follows our control rooms notification process that is highlighted in 17.1 above.

Any communication to and from a customer gets recorded in Salesforce which is monitored for timely responses. Further enhancements to Salesforce and communication protocols with customers are ongoing.

Practices for connecting new consumers and altering existing connections (Q3)

- 5. Narrative disclosure in accordance with **clause 17.4** on a description of the practices for monitoring voltage. Provide explanatory comments in the boxes below.
 - 5.1 EDBs are required to disclose this narrative information by 30 June 2023 in a separate document on the EDB's website.
 - 5.2 There is no requirement for director certification for this disclosure for 2023 but is subject to the same director certification requirements as the AMP in 2024 forward.
 - 5.3 From 2024, this information can be included in the AMP or a separate document.
- 6. Where this information is already included in other disclosed documents, for example the AMP, use a specific reference/link back to published document and include the information as an extract in the boxes below.

Box 7: Description of the EDB's approach to planning and management of connecting new consumers (offtake and injection connections) and overcoming commonly encountered issues.

Top Energy have comprehensive processes for the connection of new offtake and injection customers to manage the process of connecting to the Top Energy network. An outline of the process is as follows:

- Customer completes the application and pays the application fee; a quote will be provided within 10 working days upon receipt of the fee.
- For a simple connection, once the quote is accepted and paid, an ICP number will be provided and once the service is ready to connect to the Top Energy Network, we will connect the service within 10 working days.
- For a complex connection where a design is required to meet the requirements, timeframes will be advised to the customer for both the design and estimates on construction start dates.
- Once installation is complete, the customer calls an Electricity Retailer to request a new connection. This retailer will send a request to Top Energy to install a meter.

Refer to Top Energy Website for the which provides customers with information that supports this process.

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Salesforce is used as a software tool for managing the connection from application to completion.

Top Energy identifies the issues through bimonthly feedback and annual surveys which feed into a program of work around customer experience, and this builds our 3-year plan and work initiatives to ensure those issues are addressed.

Box 8: Description of the EDB's approach to planning and management of alterations to existing connections (offtake and injection connections).

The alterations process is in line with the new connection process where the customer must complete the same application and fee.

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Salesforce is used as a software tool for managing the connection from application to completion including any alterations to connections.

Box 9: Description of how the EDB is seeking to minimise the cost to consumers of new or altered connections.

Standard connections are prices on a fixed fee schedule. Where a customer is connecting to an existing asset that needs upgrading the customer pays a capacity charge towards to cost of the work based on the capacity requested. Any Capital Contribution extension, upgrade or alteration to the network not covered by the capacity charge fees is priced to the customer at cost.

Should a customer pay a Capital contribution to extend/upgrade or alter the network they are eligible for a pro rata refund should another customer connect to that customer funded work.

We use standardised equipment and look for the most cost-effective designs for complex connections. Standardisation helps keep the costs lower and consistent across consumers.

Box 10: Description of the EDB's approach to planning and managing the communication with consumers about new or altered connections.

Any communication to and from a customer gets recorded in Salesforce which is monitored for timely responses. Further enhancements to Salesforce and communication protocols with customers are ongoing.

Box 11: Commonly encountered delays, issues, and potential timeframes for different connections.

The current global shipping delays of materials, adverse weather, and availability of contracting resources, all have an impact on delays to connection projects.

Customer service practices (Q4)

Complaint – means an expression of dissatisfaction made to or about an EDB where a response or a resolution is explicitly or implicitly expected. For example, a complaint may be made by letter, email, phone call, text message or a post on a social media page maintained by the EDB, but not on the social media page maintained by the complainant or a third party.

- 7. Narrative disclosure in accordance with clause **17.3** on a description of the customer service practices. Provide explanatory comments in the boxes below.
 - 7.1 EDBs are required to disclose this narrative information by 30 June 2023 in a separate document on the EDB's website.
 - 7.2 There is no requirement for director certification for this disclosure for 2023 but is subject to the same director certification requirements as the AMP in 2024 forward.
 - 7.3 From 2024, this information can be included in the AMP or a separate document.
 - 7.4 There maybe a degree of overlap between this information and that required for 2.5.3, EDBs should disclose the information in both places.
 - 7.5 Definition of the term 'complaint' is consistent with the definition used by Utilities Disputes Limited in the Energy Complaints Scheme rules.
- 8. Where this information is already included in other disclosed documents, for example the AMP, use a specific reference/link back to published document and include the information as an extract in the boxes below.

Box 12: Description of the EDB's customer engagement protocols and customer service measures – including the customer satisfaction with the EDB's supply of electricity distribution services.

Every year Top Energy engages an external company to phone 350 customers in October from across the Top Energy network.

We ask customer satisfaction questions around:

- Value for money
- Reliability of service
- Image and reputation
- Communication
- Price vs Quality

We also survey customers every second month who have contacted us to connect to the network or log a fault.

We ask them to rate on:

- Customer satisfaction
- Net promoter score
- Customer effort score

Box 13: Description of the EDB's approach to planning and managing customer complaint resolution.

When a customer: Displays any dissatisfaction or concern about a service or goods provided by Top Energy, this is treated as a complaint.

If at any time a customer has a complaint, we must advise the Executive Assistant (EA) of the complaint immediately with as much information as possible including:

- Date of complaint
- ICP number (if possible)
- Street address
- Contact number/s
- Customer / invoice number (if relevant)
- Details of the complaint
- Desired outcome if requested

We advise the customer that if for any reason we can't agree on a solution, they can contact Utilities Disputes on 0800 22 33 40 which is a free service which resolves complaints about utilities providers.

The EA then acknowledges the complaint with the customer by phone or email (depending on their initial contact) and ensures a complaint case is raised in Salesforce. The EA then investigates the complaint and tried to reach a resolution with the customer within 20 working days (within UDL guidelines).

If no resolution is reached within 20 working days, and more time is required for further investigation, we advise the customer an extension of a further 20 working days is required.

If no resolution can be reached, the customer is reminded of their right to contact Utilities Disputes.

All correspondence including call records are recorded in the Salesforce case.

New connections likely to have a significant impact on network operations or asset management priorities (D2)

- 9. Narrative disclosure in accordance with clause **17.5** on a description of how new connections are assessed. Provide explanatory comments in the boxes below.
 - 9.1 EDBs are required to disclose this narrative information by 30 June 2023 in a separate document on the EDB's website.
 - 9.2 There is no requirement for director certification for this disclosure for 2023 but is subject to the same director certification requirements as the AMP in 2024 forward.
 - 9.3 From 2024, this information can be included in the AMP or a separate document.
 - 9.4 The following requirements focus on the EDB's capability and risk management regarding demand, generation, or storage capacity that the EDB considers are likely to have a significant impact on its network operations or asset management priorities. The EDB may consider voltage, network location, or other factors in making this assessment.
- 10. Where this information is already included in other disclosed documents, for example the AMP, use a specific reference/link back to published document and include the information as an extract in the boxes below.

Box 14: How the EDB assess the impact that <u>new demand</u> will have on the EDB's network, including:

- how the EDB measures the scale and impact
- how the EDB takes the timing and uncertainty into account
- how the EDB takes other factors into account e.g., location

Top Energy assess the impact of new loads on its network by conducting studies and investigations that the new step load changes will create on its network. We also monitor existing loads at substations and field equipment to help us understand future impacts in advance.

The regular interaction and co-ordination between the customer works team and the planning team regarding complex connection applications and developing projects helps mitigate any uncertainties with the planning process.

From time-to-time Top Energy has Meetings with FNDC or liaisons re: future developments, population growth, building consents as well as district plans, this also guides us with our network planning.

Box 15: How the EDB assess the impact that generation will have on the EDB's network, including:

- how the EDB measures the scale and impact
- how the EDB takes the timing and uncertainty into account
- how the EDB takes other factors into account e.g., location

Engineering staff conduct Targeted data logging at transformers with known solar penetration. Top Energy has a heat map that tracks all known solar installations as applications are submitted and approved.

Top Energy is currently working on securing access to smart meter data with the view to integrate data into a system planning tool. This could prove challenging based on the costs of the smart meter data. This information is normally controlled and owned by Metering Equipment Providers(MEP), e.g. SmartCo.

An opportunity we identified to mitigate or address the for impacts of DER at different locations is to established standard LV designs to maximise the interconnection of the network as a response to increased demand for voltage control on the network.

Box 16: How the EDB assess the impact that <u>storage capacity</u> will have on the EDB's network, including:

- how the EDB measures the scale and impact
- how the EDB takes the timing and uncertainty into account
- how the EDB takes other factors into account e.g., location

One option to assess the impact that storage capacity has on our network is: Top Energy is currently engaged with a company called Shape to install a BESS system, this is a pilot project with Shape. The battery will be monitored and used for peak shaving. The system will then be studied and monitored to assess its peak shaving operations, cycles per year and battery life together with the overall economics of the trial.

With regards to Storage capacity due to DER spread out across the Network: - There would be several uncertainties, factors and scenarios that could exist. Assuming our network demand growth is heavily pegged to population or customer growth, and we then have a proportional uptake or spike in battery storage uptake, this could result in an offset of our peak demands in certain areas as customers switch to their battery storage systems for supply during the evening or morning peaks.

Box 17: How the EDB assess and manages the risk to the network posed by uncertainty regarding <u>new</u> <u>demand.</u>

The Network has visibility via ADMS and SCADA systems and can monitor loads in real time as well via historian or stored data. Engineers analyse this data by looking at trends and load profiles to identify any anomalies. We use engineering software such as Digsilent to model the network for new demand. We also employ the services of consulting firms to monitor the impacts new demand has on the network.

Top Energy has Meetings with FNDC or liaisons re: future developments, population growth, building consents as well as district plans, this also guides us with our network planning.

Box 18: How the EDB assess and manages the risk to the network posed by uncertainty regarding <u>generation.</u>

The network looks at lessons learned from other EDB's and countries. We participate in industry workshops to understand the impact of generation on the network. We expect voltage control to become a wider issue on all EDB's as distributed generation grows and expect that the industry needs to adopt some method of control of generation to protect the network.

With large scale generation we work closely with the generator to set up controls and integration for signalling to manage any constraints.

Box 19: How the EDB assess and manages the risk to the network posed by uncertainty regarding <u>storage capacity.</u>

Top Energy has published on its website is its Distributed Generation Connection Standard, approved inverter list, congestion management policy and specification and connection standard. These documents provide rules and guidelines around what generation and storage.

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Innovation practices (D4)

Innovation practice – means an activity or practice, in respect of the supply of electricity lines services, that is focussed on the creation, development, or application of a new or improved technology, process or approach and includes an innovation project as defined in the IM determination.

- 11. Narrative disclosure in accordance with clause **17.6** on a description on innovation practices. Provide explanatory comments in the boxes below.
 - 11.1 EDBs are required to disclose this narrative information by 30 June 2023 in a separate document on the EDB's website.
 - 11.2 There is no requirement for director certification for this disclosure for 2023 but is subject to the same director certification requirements as the AMP in 2024 forward.
 - 11.3 From 2024, this information can be included in the AMP or a separate document.
 - 11.4 As per clause 17.7, an EDB is not required to include commercially sensitive or confidential information.
- 12. Where this information is already included in other disclosed documents, for example the AMP, use a specific reference/link back to published document and include the information as an extract in the boxes below.

Box 20: Any innovation practices the EDB has planned or undertaken since the last AMP or AMP update was publicly disclosed, including case studies and trials.

Electricity and its distribution have changed little since its inception. Poles, wires, and cables still carry electricity from generator to consumer, as they always have. However, the technologies used by EDBs to manage this function have changed and continue to change rapidly.

We are actively engaged in trials for smart fault passage indicators, Battery Energy Storage Systems. We are also looking at innovative ways we manage our assets by developing a new Asset Risk Management Model; integrating GIS and Digsilent for accurate model updates and network planning. We are exploring Sophisticated protection systems that isolate faults quickly and safely and pinpoint their location.

Smart grids enable automatic recovery from faults and restore power to customers in shorter periods of time, with this we are integrating our ADMS to being bedded into our real-time network control.

Box 21: The EDB's desired outcomes of any innovation practices, and how they may improve outcomes for consumers.

We are actively involved with industry groups such as the Electricity Networks Association (ENA), the Electricity Engineers' Association (EEA), WorkSafe New Zealand, and the Business Health and Safety Forum to better understand our regulatory and legislative environment and work collaboratively towards the achievement of shared objectives. We also engage with other lines companies and digital technology providers where this helps us better serve our consumers, with better response times, power quality and network resilience.

Box 22: How the EDB measures success and makes decisions regarding any innovation practices, including how the EDB decides whether to commence, commercially adopt, or discontinue these practices?

Each trial or activities success is based on its own merits and criteria that we identify with at the start of a project. We would compare outcomes achieved by other lines companies to ensure our expectations are met before financially adopting an idea.

Box 23: How the EDB's decision making, and innovation practices depend on the work of other companies, including other EDBs and providers of non-network solutions.

We generally consider ourselves to be a fast follower and participate in technology workshops and other industry activities relating to innovation practices. We partner or work closely with private groups or companies or other networks to conduct trials and investigate the use of new technology.

Box 24: The types of information the EDB uses to inform or enable any innovation practices, and the EDB's approach to seeking that information.

Generally, the key information would be around the suitability of a product or item for use on our network, keeping in mind the terrain, topography, ease of integration into current systems together and the capital investment and maintenance required.