TRANSPOWER

ELECTRICITY AUTHORITY
TE MANA HIKO

Industry Exercise 2025

Key insights and recommendations

11 August 2025

Contents

1. Purpose

1.1. The purpose of this report is to share the key insights and recommendations from the Industry Exercise 2025 that was delivered by the Electricity Authority Te Mana Hiko (Authority) and Transpower (in its role as System Operator) via two webinars during March and an exercise on 9 April 2025.

2. About the Industry Exercise

2.1. The industry exercise is an annual simulation exercise for electricity industry market participants to rehearse and reinforce processes and communications for managing and responding to a major power system event.

2.2. The Authority and Transpower committed to annual exercises after the grid emergency on 9 August 2021 that caused a significant power outage affecting more than 34,000 households in New Zealand. The first exercise was run in 2022.

2.3. We invite operations and communications/customer representatives to participate to support their readiness to respond in a crisis. Observers are also invited, for example industry bodies, central government agencies and the Minister for Energy's office.

2.4. The exercise aims to confirm, and build trust and confidence in, the industry's ability to appropriately manage an unexpected major power system event and minimise the impact on New Zealanders.

2.5. The exercise objectives are to:

- provide a safe environment to test a major power system event
- build familiarity with System Operator processes and communications
- rehearse industry operations and communications, including externally to consumers and other stakeholders
- build and demonstrate capability and collaboration across industry
- identify gaps or opportunities for improvement in process, tools, communications and/or capability.

3. Industry Exercise 2025

3.1. The Industry Exercise 2025 was a desktop exercise that simulated an extended electricity supply shortfall that resulted in rolling outages. The scenario did not reflect any known or credible risk for winter 2025 and modelling showed it would be extremely unlikely to occur in real life this year.

Preparing for the exercise

3.2. The Authority and Transpower planned and coordinated the exercise together, with Transpower presenting the exercise on the day.

3.3. The Authority contracted RiskLogic, a risk management consultancy, to support the exercise. This included:

- running a training session on crisis communications

- providing a social media simulator with communications injects for participants to respond to
- coordinating all communications responses
- facilitating 'hot debrief' sessions with participants half-way through the exercise
- conducting a post-exercise survey
- delivering an evaluation report.

3.4. Transpower and the Authority ran half-day webinars on 4 and 18 March for both operations and communications/customer representatives to provide them with the knowledge to take part in the practical simulated exercise on 9 April. These webinars covered:

- dry year processes - Official Conservation Campaigns, rolling outage plans, supply shortage notices, supply shortage declarations, savings targets, 35-day demand forecasts
- System Operator communications and information requests
- developing and providing a GXP demand forecast and rolling outage schedule to the System Operator
- testing rolling outage plans
- EIEP5A - the standardised data format for distributors to notify retailers of planned outages and changes to already notified planned outages
- communications plans and materials
- responsibilities under the Consumer Care Obligations
- what to expect during the exercise, timeline for the exercise.

3.5. On 18 March, for the purposes of the exercise, Transpower made a formal declaration of a supply shortage, setting the scene for rolling outages to commence during the exercise on 9 April. It provided lines companies and direct connects with a 35-day ahead GXP demand forecast (when a supply shortage was declared for the exercise) and requested them to submit 7-day ahead rolling outage plans and GXP demand forecasts. Transpower then reviewed, approved and integrated these plans into the National Coordination Centre rolling outage spreadsheet and advised participants to be ready to action their plans during the industry exercise.

3.6. We also asked lines companies to provide example EIEP5A files to a shared location which could be accessed by retailers during the industry exercise.

3.7. Transpower provided participants external communications to coincide with the formal declaration of a supply shortage and asked them to prepare messaging in the lead up to rolling outages.

Industry Exercise 2025 in action

3.8. This year's industry exercise was held on 9 April 2025, 9am-3pm. Attendees comprised 56 participant organisations and seven observers, including the Minister for Energy's Office, the National Emergency Management Agency (NEMA), and Utilities Disputes. (See Appendix A for a participant list.)

3.9. The exercise had four phases to simulate the timeline of an extended electricity supply shortage that resulted in rolling outages:

- Phase 1: Supply shortage declaration
- Phase 2: Rolling outages commence
- Phase 3: Day 1 outage restoration
- Phase 4: Week two of rolling outages

3.10. The exercise started with Transpower issuing a Customer Advice Notice to participants confirming the commencement of rolling outages at 06:00 on 12 August 2024 (exercise time). Transpower then provided real-time simulated operational injects and RiskLogic provided communications injects throughout the day to test operations and communications outputs.

3.11. We asked participants to complete and submit a workbook with questions relevant to each phase of the exercise. Operations and communications teams were encouraged to work together as a team to discuss and complete the workbooks.

3.12. There was one workbook per organisation to complete during the exercise, with questions on operations and communications. Workbooks could be completed after the exercise, for those who needed more time.

3.13. Lines companies and direct connects were asked to simulate the first two hours of their participant rolling outage plans. This included practicing operational communications with the National Coordination Centre (NCC) security coordinator and the National Grid Operating Centre (NGOC) grid asset controller.

3.14. We asked participants to respond to communications inputs in a social media simulator, as appropriate, to rehearse and test responses to simulated communications. Participants could see each other's posts, as they would in real life.

3.15. We also asked participants to submit any media releases and email communications throughout the day, either proactively or in response to communications inputs.

4. Key insights and opportunities for improvement

4.1. The industry exercise is an important opportunity to improve incident response, as well enhance the exercise itself.

4.2. We gathered feedback via multiple methods, including observing the exercise, analysing operations and communications outputs, 'hot debrief' sessions during the exercise, a post-exercise survey and evaluation report from RiskLogic. Below is a summary of the key insights from the feedback and opportunities for improvement.

Industry preparedness to respond to rolling outages

4.3. Overall, this year's exercise demonstrated a positive level of readiness to respond to a rolling outages event and communicate effectively to stakeholders and consumers. We observed active participation and high levels of engagement throughout all stages of the simulation.

4.4. **Importance of incident management practices**: 70% of participating organisations reported using a Coordinated Incident Management System (CIMS) to manage incidents. This highlights that electricity industry participants understand the need for strong incident management practices and are generally prepared to coordinate, command and control incident responses of any scale.

4.5. **Importance of collaboration:**

(a) Participants reported that they appreciated being able to collaborate with industry peers and learn from one another. Many used prepared templates and their own communication styles to distribute messages which provided ideas for others to adopt.

(b) Feedback indicated that the exercise significantly enhanced coordination between operations and communications teams by providing them a safe space to better understand their critical operations, but also their priorities, in this type of scenario.

(c) Many participants reported gaining a clearer understanding of the rolling outages process and their respective communication responsibilities in the event of a nationwide outage.

4.6. **Importance of business continuity plans**: Many participants have plans to respond to:

(a) offices impacted by rolling outages

(b) staff and remote workers impacted by rolling outages

(c) increased work volumes for both operations and communications staff. This included the use of pre-recorded messages, the use of contracted or third-party call centres with scalability, internal staff redeployment, digital channel redirection to websites and FAQs, and the use of chatbots.

Some participants identified the need for further work to create formal processes to support remote staff impacted during rolling outages.

Operations: strengths and lessons learned

4.7. The System Operator's process for providing the 35-day half hourly GXP demand forecast to participants and receiving participant feedback was very manual, leading to some data omissions. In a real event, it would be challenging for participants to provide their GXP demand forecast accurately and on a daily rolling basis. Some lines companies were in favour of making this process weekly rather than daily.

4.8. While not part of the exercise, the System Operator notes it needs to continue to refine its process for incorporating demand savings information from lines companies into its demand forecast. This is to ensure that market schedules remain accurate while still being able to produce subsequent 35-day half hourly GXP demand forecasts without the savings included.

4.9. While most participants endeavoured to provide half hourly GXP level demand forecast and outage information in the correct format, some participants provided demand reductions instead of GXP demand. In these cases, these participants would not have been compliant with the Electricity Industry Participation Code in a real event. The information was workable for operational purposes but would prove difficult to use for market scheduling during an actual event.

4.10. The interaction between participants and the System Operator leading up to the start of rolling outages was good and enabled any misunderstandings to be clarified and missing data to be corrected. We would expect and encourage this same level of engagement leading up to or during any major power system event.

4.11. Some participants reported rate of change values for load in their workbooks that were outside the guidance given by System Operator, ie, too much too quickly. This could lead to system security issues in a real event.

4.12. Most lines companies and direct connects reported having processes in place to manage rolling outages, while others are working to improve their processes.

4.13. Operations teams demonstrated good use of command language throughout the exercise.

4.14. Lines companies and direct connects identified the opportunity to improve their participant rolling outage plans by:

(a) better defining responsibilities across internal teams

(b) improving feeder prioritisation and switching sequences

(c) improving tools for load forecasting and operational planning

(d) integrating communications into operational plans

(e) enhancing coordination with retailers, particularly around medically dependent consumer data

(f) aligning their plans with the updated System Operator rolling outage plan.

4.15. Some lines companies indicated that they would be unlikely to be able to achieve a 25% savings target if required to during a supply emergency. However, all lines company participant rolling outage plans indicate they can achieve this savings target. This raises concerns that some participant rolling outage plans may not consider and reflect operational limitations.

Communications: strengths and lessons learned

4.16. Turning off and restoring the electricity supply to thousands of customers is unlikely to go as smoothly as it did in the exercise. However, participants were generally well prepared for the communications exercise.

4.17. Participants identified and reported a wide range of both internal and external stakeholders. This emphasises the importance of stakeholder mapping for a major event.

4.18. Many participants reported gaining a clearer understanding of the rolling outages process and their respective communications responsibilities.

4.19. All participating organisations added content to the social media simulator. Some participants posted more regularly than others. Some participants were very quick with their response, which demonstrated heightened preparedness.

4.20. Some participating organisations reported that they felt well-prepared and comfortable with their communications templates, while others said they could do more or would like to update their templates and messaging.

4.21. Many posts reiterated the messaging shared by the System Operator. Many posts also instructed stakeholders to refer to Transpower’s website for accurate

information or when to expect updates. This is a good demonstration of establishing a single source of truth for consumers.

4.22. During disruptions, the communications inputs posted in the social media simulator were often angry or frustrated messages, but participants consistently responded calmly, communicating with empathy and genuine care – even in high-stress situations. Many participants personalised their responses to individual comments.

Medically dependent consumers

4.23. Participants prefer direct, immediate and personal contact with medically dependent consumers.

4.24. Retailers seemed well prepared to engage with medically dependent consumers and highlighted the importance of:

(a) discussing the importance of an emergency plan

(b) providing information and resources

(c) advising customers to call 111 in an emergency

(d) regular communication and checks with medically dependent consumers

(e) encouraging alternate power solutions.

4.25. Most lines companies rely on retailers to notify medically dependent consumers of outages. However, it was encouraging to see that many still support communication efforts through emails, follow-up calls or public messaging to encourage consumers to contact their retailers and activate their emergency response plans.

Opportunities for the next exercise

4.26. **Workbooks:** Use a more concise format for the workbooks and allow the ability to save the workbook before submitting. Allow more time to complete the workbooks and/or have fewer questions.

4.27. **Social media simulator**: Explore alternative platforms beyond X and Facebook to reflect participants' digital communication practices, for example use of Instagram. Provide a walk-through of the simulator before the exercise to ensure all participants are set up for success.

4.28. **Curveballs:** Consider adding more curveballs to the scenario to further test how participants handle something going wrong.

4.29. **Webinars**: Ensure the content and messaging are well tailored to the audience and are not too lengthy. Consider separate workshops for operations and communications/customer representatives.

4.30. **Hot debrief sessions**: Consider having separate feedback sessions for operations and communications teams.

4.31. **Opportunities to collaborate across the sector**: Structure the exercise format to provide more opportunity for interaction between participants.

4.32. **Opportunities to collaborate outside the immediate sector**: Work more closely with other support agencies and involve them as participants. Ensure they understand the processes for major power system events, the impact and their responsibilities, if any.

5. All recommendations and actions

5.1. We have identified the following recommendations to further improve industry readiness to respond to a major power system event and to uplift resilience capability.

Recommendations for participants

5.2. Participants should update their business continuity plans, communications plans and operational procedures to incorporate lessons learned from the Industry Exercise 2025.

5.3. Communications teams should be well-prepared and have templates with key messages/materials to use during a real event. These templates, which could include emails to consumers, website statements, media statements and social media content would then be tailored with scenario specific information, enabling a quick and consistent response.

5.4. Communications teams should assess the language they use to ensure clarity and consistency including:

(a) accurate use of event-related terminology in line with System Operator communications

(b) clear requests for action by consumers

(c) caution when setting expectations. For example, qualitative (eg ‘soon’) rather than quantitative (eg ‘within 30 minutes’) restoration timelines

(d) use of plain customer-focused language so communications are clear, concise and easy to understand by a wide audience, such as use of ‘power cut’ instead of ‘power outage’

(e) use of empathy and reassurance to reflect the gravity of the situation.

For further communication tips and examples, see Appendix B.

5.5. Communications teams should pre-establish a structured operating rhythm (timeline) when responding to an event. This rhythm should align with anticipated timing and content for messaging from the System Operator. For example, clarifying actions and messaging to be released once a supply shortage has been declared. This rhythm should also consider the timing for updating the source of truth materials (eg, website FAQs) following updates from the System Operator.

5.6. Communications teams should have a process in place to regularly review their communications materials and look for additional opportunities to validate their readiness in line with best practice communications approaches.

5.7. Communications teams should develop a clear stakeholder communication checklist which identifies who and when they should communicate with each stakeholder. This should also include the ‘relationship owner’ for these stakeholders.

5.8. Lines companies and direct connects should review their participant rolling outage plans and update their plans with lessons learned from participating in the Industry Exercise 2025. The plans should be reviewed by all impacted internal stakeholders

to ensure the plan is operationally workable. This includes reviewing load ramp rates and savings targets.

5.9. Lines companies and direct connects should develop a rolling outage switching plan consistent with their participant rolling outage plan. Where participants are unsure, they should discuss with the System Operator. Once developed, they should consider sharing these plans with the System Operator to promote collaboration and visibility.

Recommendations for the System Operator

5.10. The System Operator should update their communications plans and operational procedures to incorporate lessons learned from the Industry Exercise 2025.

5.11. The System Operator should determine how to incorporate lines companies demand savings into the forecast to enable accurate market schedules for scheduling and dispatch.

5.12. The System Operator should investigate the ability to automate the handling of 35-day half hourly GXP demand forecast information with lines companies.

5.13. The System Operator should create a template for 35-day half hourly GXP demand forecast information. Lines companies should be involved in the development of the template to ensure that it is in a usable format.

5.14. The System Operator should consider an amendment to the System Operator Rolling Outage Plan to enable participants to provide GXP demand forecast information weekly rather than daily, as currently required.

5.15. The System Operator should update the template *direction to reduce demand* to include recommendations on the timings of outages to optimise the effect of such outages.

5.16. The System Operator should review its Customer Advice Notice templates to ensure the language used is simple and required actions and timeframes are clear. Links to a fact sheet could be used to accompany longer messaging to ensure key messages are clear, and that technical details are easily identified and consistently understood by recipients.

5.17. The System Operator should provide further education on dry year event notices, processes and escalation points.

5.18. The System Operator should consider using other protocols (eg, text messages) to notify industry of operational notices. The Major Power System Event Contact List has a text alert function for specific uses. The System Operator should assist participants to sign up for this alert function where suitable.

Recommendations for the Electricity Authority

5.19. The Authority should update their communications plan to incorporate lessons learned from the Industry Exercise 2025. This includes:

(a) preparing answers for likely questions from participants and consumers

(b) preparing an overview of obligations for lines companies and retailers during an Official Conservation Campaign and rolling outages.

5.20. The Authority should review the EIEP5A file format to ensure it supports rolling outages.

Joint recommendations for the Electricity Authority and System Operator

5.21. Be ready to get dedicated webpages or a website live for an Official Conservation Campaign and rolling outages, so there is a single source of truth for the public with clear messaging and relevant information.

5.22. Work together to prepare centralised communications resources for industry participants for Official Conservation Campaigns and rolling outages. For example, key messages, communications toolkits, Q&As, sharable graphics, set social media hashtags.

5.23. Work more closely with support agencies such as NEMA and Utilities Disputes to ensure they know more about the major power system event processes, operations and communications.

5.24. Consider providing tailored support for smaller organisations to ensure they are prepared for major power system events.

5.25. Consider running another industry exercise on rolling outages in two to three years' time to test if improvements by the System Operator, Authority and participants have been embedded.

Appendix A Industry Exercise 2025 participant list

Lines companies	Generators	Direct connects
Alpine Energy	Contact Energy	Daiken Southland
Aurora Energy	Genesis Energy	New Zealand Steel
Buller Electricity Ltd	Manawa Energy	NZAS
Counties Energy	Mercury	Pan Pac Forest Products
EA Networks	Meridian Energy	Oji Fibre Solutions
Electra	Pioneer Energy	
Firstlight Network		
Horizon Networks	**Retailers**	**Observers**
Mainpower	2degrees NZ	Electricity Networks Aotearoa
Marlborough Lines	Contact Energy	Emergency Management Canterbury
Nelson Electricity	Deep Energy	ERANZ
Network Tasman	Ecotricity	Major Electricity Users Group
Network Waitaki	Electric Kiwi	Minister for Energy's Office
Northpower	Flick Electric	NEMA
Orion	For Our Good	Utilities Disputes
Powerco	Genesis Energy	
Powernet	K Power Limited	
Smart Net Limited	Lodestone Energy	
The Lines Company	Meridian Energy	
Top Energy	Mercury Energy	
Unison Networks	Nova Energy	
Vector	Octopus Energy	
Waipa Networks	Orange Services	
WEL Networks	Plains Power	
Wellington Electricity	Pulse Energy	
Westpower	Rural Energy Retail	
	Sustainability Trust – Toast Electric	

Appendix B Communication: tips and examples

Effective communication is crucial for managing public expectations, maintaining trust, minimising confusion and building trust and confidence in industry's ability to manage a major power system event.

Transpower will develop centralised communications to ensure industry participants receive the same, accurate information, with consistent messaging. It will also have dedicated webpages or a website that will serve as the single source of truth for participants to direct the public to for information.

Here are some communications tips and examples to help industry participants prepare:

1. Prepare a communications plan in advance

- Pre-draft messages for different scenarios (eg, short-term vs. prolonged outages)
- Identify key internal and external communications channels (eg, email, SMS, social media, website banners/alerts) and key stakeholders
- Identify a crisis team and assign clear roles and responsibilities
- Create templates for internal and external communications channels that can be quickly tailored with messaging from Transpower and scenario-specific information
- Have a clear plan for medically dependent consumers that meets the Consumer Care Obligations
- Have a plan for moderating mis/disinformation

2. Communicate early and often

- Be proactive rather than reactive, where possible – for example, acknowledge the situation as soon as possible, even if all details aren't available
- Provide regular updates as the situation evolves, even if there's no new information – consistency builds trust
- Provide certainty where certainty is possible – for example, that everyone will have power from a certain time in the evening and through to early the following morning
- Use any common event-related terminology, align messaging to that provided by Transpower to create consistency across industry
- Have frequently asked questions to anticipate concerns and help minimise queries

Examples

Important update for all New Zealanders! Transpower has advised rolling power cuts will start from 1 August and may be up to 5 hours. If you rely on power for medical reasons, have a back up in place or call 111. Check if/when your power will be off at: www…

The industry is working hard together to minimise the impact on households. There will continue to be rolling power cuts across Aotearoa to reduce demand and allow our hydro lakes to refill.

Power update: Transpower has advised the power shortfall has been reduced and the network is starting to return to normal. There are no more planned power cuts today across our network.

3. Use clear, concise and customer-focused language

- Use plain customer-focused language so communications are clear, concise and easy to understand by a wide audience, for example use ‘power cut’ instead of ‘power outage’
- Be clear what it means for customers and where they can find details and updates
- Have clear calls to action for customers.

Examples

Thanks very much for your support over the last two weeks since we began rolling power cuts…

We know how hard this situation is and we truly appreciate everyone’s efforts…

What does this mean for you? Continue to plan for power cuts; The timing and length of power cuts varies by location; Check if/when the power will be off in your area at www…; Be prepared for the situation to continue

4. Be transparent and honest

- Explain what is happening, where and why to build understanding
- Avoid overpromising – be realistic about timelines.

Examples

Power cuts are a tough but necessary step to manage our power supply and prevent more serious unplanned cuts.

Rolling outages are a controlled and temporary measure to manage the electricity supply shortage and prevent prolonged blackouts.

We are required by Transpower to reduce power demand to meet national energy savings required to manage energy shortfalls (due to minimal rainfall and low hydro lake levels). This means we will have to turn parts of our network off for fixed periods of time in order to meet the savings targets required Transpower.

5. Be empathetic and supportive

- Acknowledge the inconvenience and stress customers may be experiencing
- Offer helpful tips on how to prepare for and manage in a power cut, such as keeping the fridge/freezer closed, checking on neighbours
- Use empathy and reassurance to reflect the gravity of the situation
- Thank customers for their patience and support.

Examples

It’s been a tough couple of weeks, and we want to say a big thank you for how you’ve handled the ongoing power cuts. We know it’s been disruptive and there’s still a way to go.

Keen to help out? Every little bit of power saved helps. Check out some easy ways to use less power here: www…

Be prepared for the scheduled power cut tomorrow – charge essential devices, unplug sensitive electronics, plan for medical needs, prepare food and water.

Thanks to your incredible efforts, we’ve made a real difference! Thank you for doing your part for Aotearoa.