August Storm Response – Post Incident Review

TasNetworks | Powering a Bright Future

Chief Executive's Foreword

The August 2024 storm was one of the most significant natural disasters Tasmania has faced in recent memory. Over the course of 23 days, this extreme weather event tested the resilience of our state, our infrastructure, and our people. With unprecedented winds and destruction across every corner of Tasmania, including remote and hard-to-reach communities, our team worked tirelessly to restore power to over 200,000 customer connections under some of the most challenging conditions they have ever encountered.

At TasNetworks, our commitment to serving the Tasmanian community was unmistakeable in the extraordinary efforts of our field crews, customer service staff, and support teams. Many of our employees, despite facing outages in their own homes, showed unwavering dedication to ensuring the safety and wellbeing of others. This response demonstrated not only their professionalism but also the deep sense of community spirit that defines Tasmania.

However, this storm has also been a catalyst for reflection and growth. While the scale of the event was extraordinary, we recognise that there are areas where we could have been better prepared. This Post Incident Review highlights the need to modernise our response capability, strengthen our processes, and accelerate improvements to our IT systems. These actions are essential to provide timely, accurate information and meet the evolving expectations of our customers and stakeholders in an era of increasingly volatile weather.

We are committed to implementing the recommendations outlined in this review. Under the oversight of the TasNetworks Audit, Risk & Compliance Committee, we will ensure these actions are delivered with urgency and accountability. By doing so, we aim to build a more resilient network and improve our ability to respond to future events, supporting the Tasmanian community in times of need.

I extend my sincere thanks to all those who contributed to the recovery efforts during this storm and to those who will play a role in building a stronger future for TasNetworks and Tasmania.

Seán Mc Goldrick
Chief Executive Officer
TasNetworks

Independent Assessment Findings

TasNetworks engaged Mike Swanston to undertake an independent assessment of the August Storm Response Post Incident Review (PIR). Mike is a professional engineer with over forty years' experience in the design, development and operation of distribution power networks in Australia. Mike has undertaken lead roles in the response to storm and flooding events in several large utilities impacting hundreds of thousands of energy consumers. This included the function of communicating to energy consumers through the media regarding the state of the power supply and restoration progress.

More recently, Mike has been engaged by energy regulators and utilities in Australia and overseas to advise on operational excellence, prudent and efficient capital investment and planning for the resilience and emergency response to the continually changing climate risks facing energy utilities. Mike's high-level findings are outlined below.

There is no doubt that the series of powerful cold fronts that brought heavy rain and strong wind gusts to northern Tasmania in late August and early September resulted in widespread power interruptions to thousands of consumers was not a 'usual storm.' Many comments, both within TasNetworks and by members of the community, is that this was "the biggest, longest, most difficult and most complex" event that Tasmania has seem for some time."

The level of network damage and resultant power interruptions exceeded TasNetworks' reasonable capability to promptly and effectively respond. Given the nature and ferocity of the storms, being a number in a row, no electricity undertaking in Australia would, in my opinion, not have had challenges in safely restoring the network and supply to consumers in just a few days.

That does not mean however that TasNetworks' response in terms of the efficient repair and restoration of supply, and timely and appropriate communications to its consumers, could be markedly better.

This assurance report confirms that the PIR carried out by Dynamic Consulting, Melbourne, appropriately investigated the core issues and opportunities arising from the storm event and makes reasonable recommendations to improve TasNetworks response capability.

Mike Swanston
The Customer Advocate

Executive Summary

On August 26th a severe weather front hit Tasmania and continued for five consecutive days. The event comprised eight Major Event Days (MED), and including the response and restorations period, lasted 23 days in total. The destruction caused resulted in the event being declared a natural disaster by both the Tasmanian and Australian Governments (Australian Government reference number 1144). Unlike any previous weather event, the entire State bore the brunt with severe winds particularly impacting remote regions in the south, west and the north-west.

Tasmania has a population of 575,000, from which TasNetworks services 295,000 residential, commercial and industrial customers. A record number of customers were impacted by power outages. At the peak of the storm, there were 228 outages resulting in approximately 47,000 customers without power. Over 200,000 customer connections were restored during the response period, with some customers experiencing multiple outages. Due to the severity of the storm, some customers in more remote communities experienced outages for up to 20 days due to limited accessibility driven by safety issues.

During the storm event, TasNetworks benefitted from a strong sense of community resilience and support. There was great appreciation for the work completed by field crews and front-line customer service employees under the adverse conditions they faced to make infrastructure safe and restore services. Many of these crew members and employees had power off at their own homes during the event, yet a strong Tasmanian sense of community motivated their efforts to work in the service of the community.

While this storm was seen as one of the worst in living memory, TasNetworks could have been better prepared to respond to some impacts of the storm. TasNetworks needs continued improvement in its process and systems to meet customer and stakeholder expectations for timely and accurate information.

"During a major outage event, the information needs for customers are extremely clear. They need to know that TasNetworks is aware of the outage, and when power is expected to be restored." [Verian, 17 Oct, 2024]

It is widely reported that "Australia's weather and climate has continued to change, with an increase in extreme heat events, longer fire seasons, more intense heavy rainfall, and sea level rise." (CSIRO[1]). TasNetworks will benefit from modernisation of its response capability, centred around its core processes, and continued consideration of network resilience measures.

For TasNetworks to improve the supply of timely and accurate information regarding outages and forecast restoration times to customers, further improvements in the definition of its core processes and continued upgrade of its Information Technology (IT) systems should occur.

This August Storm Post Incident Review (PIR) was commissioned in September 2024, at the direction of the TasNetworks' CEO and Board. The PIR is directed to understand the impacts to TasNetworks' operations and identify potential improvements to processes and systems aimed to improve customer response performance during prolonged emergency events and to better support Tasmanian communities.

Upon acceptance of this PIR, implementation of agreed actions will be overseen by the TasNetworks Audit, Risk & Compliance Committee (ARCC). The program will be considered complete when all accepted actions have been deemed closed by the ARCC.[2]

For further information, initial enquiries may be directed to Andrew Davis, Executive Digital, Strategy and Customer. All media enquiries should be directed to Sarah McDonald, Leader Corporate Affairs.

1 State of the Climate - CSIRO.
2 As set out by the Terms of Reference, August Storm Response PIR, 16 September, 2024.

Next Steps

The findings from this review have been presented to the Customer Advisory Group and Stakeholder Advisory Group. We will continue to collaborate with these groups as we move towards implementation.

A project team is currently being stood up to deliver the actions outlined in this report. Their initial focus will be to deliver a draft Action Plan in February 2025.

The Tasmanian Government review into the storm will be released in March 2025. Following the release of this report, TasNetworks plans to incorporate any additional recommendations prior to releasing a final Action Plan in April 2025.

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Figures and Tables

Target State to guide Response

This PIR has identified positive aspects of the TasNetworks response, as well as internal improvement opportunities. The positive aspects include the visibility of leaders in the field, Field response and safety culture, engagement of the third-party crews, positive community sentiment and the efforts of frontline employees who dealt with TasNetworks' customers under incredibly challenging conditions.

The improvement opportunities range between foundational improvement activities, and further improvements that may be implemented at a functional, Business Unit and Enterprise level. Considering there was broad anecdotal evidence that TasNetworks has compiled storm event PIRs previously, and that prior improvement recommendations have been actioned inconsistently, this review suggests a focussed and accountable approach to actioning the agreed recommendations. Furthermore, this review prioritises the recommendations that are forecast to bring the greatest impact and improvement to TasNetworks' organisational response capability.

At the centre of the journey to improved capability maturity, is the TasNetworks customer. The Verian Customer Experience Review[3] is fundamental in providing this focus, or the "north star" for the TasNetworks response. This approach is in alignment with the TasNetworks stated Network 2030 vision[4], and published corporate strategy[5] of "embracing change driven by our customers".

"During a major outage event, the information needs for customers are extremely clear. They need to know that TasNetworks is aware of the outage, and when power is expected to be restored." [Verian, 17 Oct, 2024]

The central finding from the Verian review regarding TasNetworks' actual performance was that while TasNetworks has access to the right communication channels, a lack of timely and consistent updates impacted effectiveness in keeping customers informed. It is noted by this review that substantial improvement initiatives are currently underway (such as the Advanced Distribution Management System [ADMS] project), which will benefit TasNetworks' response capability, and could have substantially aided its response capability during this event.

While TasNetworks did benefit from substantial positive community sentiment, the opportunity is to maintain pace with evolving customer and stakeholder expectations in delivering to their information needs as other adjacent service industries are.

3 Conducted by external Research Consultant, Verian.
4 TasNetworks, Tasmania's Energy Future. To 2030 and Beyond.
5 Our strategy - TasNetworks.

Core Findings & Recommendations

The following findings and associated recommendations are considered core to guiding TasNetworks' response to the August storm event and establish the foundation upon which to focus efforts and improve TasNetworks' response capability.

Finding 1:	**TasNetworks needs to improve the timeliness and accuracy of its customer communications during an event**
Supporting Analysis:	• Customer Experience (CX) and stakeholder research demonstrated that TasNetworks did not meet expectations regarding the provision of timely and accurate outage information. The expectation is that TasNetworks should know of the outage and be able to provide a restoration estimate. Further information is available here • Customer Service representatives were reliant on updates to core systems from the field regarding outage and restoration information. Field updates were dealt with in the context of their priority being field response, which led to delays in the flow of information available in systems that publish customer and stakeholder communications. Transmission customers under an Account Manager, benefitted from proactive and personalised communication, which enabled a more positive experience • Inaccurate, incomplete and untimely information published via Short Message Service (SMS), website and Interactive Voice Recording (IVR) systems frustrated customers, and resulted in increased numbers of calls to the Customer Service Centre (CSC), who had no better and further information. This compounded customer frustrations • TasNetworks recently completed an exercise of Customer Journey mapping, which will inform formulation of its response effort. This work identified that in 23/24 the number of unplanned outages increased to 7,297 (a 10% increase over the 22/23 year) with 540,000 direct customer impacts. This analysis and scale of outages being dealt with will support and inform improvements in end-to-end process definition
Contributing Factor(s):	• Limited organisational understanding of the end-to-end fault process, supporting systems and downstream information needs by employees working within the Incident Contingency System (ICS) process • Field crews and depots have lower levels of system access to the Job Management system than the central Fault Dispatch team • Field crews and depot teams focussed on fault response in preference to Information Technology (IT) systems updates, carrying flow on impacts for customer information and downstream processes • Limited prioritisation by field crews and depot teams of the importance of job updates to inform customer restoration time communications • Lack of recent training for depot teams and field crews impacted their ability to use the job management systems during the ICS • To optimise the accuracy of customer messaging given the current systems, TasNetworks has implemented a manual control to assess or override messaging

Finding 1:	TasNetworks needs to improve the timeliness and accuracy of its customer communications during an event
Recommended Action(s):	Action
	A1. Review and document the end-to-end Fault process, including the ICS variations. Identifying a single organisation wide Process Owner (Executive direct report level) accountability (and allocating support capability) is recommended as part of this action
	A2. Map the data flows that support the Fault process, to highlight "moments of truth" and further improvement opportunities. Scaling the processes and supporting IT systems to consider the August 2024 storm metrics (outages, customer contacts) as a non-functional design input
	A3. Noted as "in train". Pre-built templates for SMS and social media communications are being prepared and made ready. Final review by the Customer Advocacy Group to ensure suitability to be completed in December
	A4. In major storm events, pre-emptive customer communications (across multiple channels) could be enhanced, re-iterating that a storm is imminent, outlining preparation actions and key contact information

Finding 2:	TasNetworks updated strategy requires further refinements to the target state process architecture & enabling culture – to accelerate organisational improvement
Supporting Analysis:	• Process improvements have traditionally evolved in pockets and functions, without holistic understanding of workflow impacts • Procedures have traditionally been developed to support functions, and there is some historical inconsistency of documented processes. With updates to the organisational strategy, the opportunity is to review processes to align strategic objectives with operations • Core processes in Distribution Network Service Providers (DNSP) usually centre around construction, maintenance, fault, billing and customer contact processes • TasNetworks is undergoing a cultural evolution towards universal standardisation underpinned by greater reliance on core systems • The current One Way Workflow (OWWF) project has been initially focussed upon Operations, and continues to be built out
Contributing Factor(s):	TasNetworks process design has evolved organically, within functions. There is a historical reliance on those who have "done this before", as newer employees assimilate. New ideas are assessed in a localised functional context Organisation wide understanding of upstream/downstream implications and how workflows result in customer communications could be improved Lack of alignment of IT systems to business process and Customer data needs is a constraint to timely and efficient information flows – noting current "in flight" projects aimed at improving this factor TasNetworks would benefit from a consistent reference model to support new employees who bring their version of "what good looks like" to inform any improvements to core processes
Recommended Action(s):	**Action**
	A5. Confirm the target core process architecture (at Level 2/3), within which process improvements may be assessed and implemented. This exercise should consider (but broaden) the investment in the OWWF structures, and create the target for a standardised and recognised "TasNetworks way of doing things"
	A6. Define and communicate the foundations for a target state Culture supporting the standardised "TasNetworks way of doing things", so that improvement activities are focussed and aligned. Sustained focus on that target state culture to drive execution must be maintained

Finding 3:	The Regional ICS has served TasNetworks well, but needs to maintain focus for short term improvement
Supporting Analysis:	• The ICS procedure was initiated before the creation of TasNetworks in 2014. While there is broad acknowledgement of the term "ICS", newer staff members lack familiarity with its operation • The current version of the procedure has been in place since 2015, but recent reviews and localised 'improvements' have been considered, including testing of a recent draft Emergency Fault Dispatch (EFD) variant • A primary difference in the ICS (against standard fault process) is to devolve central responsibility for prioritisation and dispatch, to three Regional centres. Regional teams then use system versions with less functionality (i-Dispatcher vs. Net-Dispatcher) • Prioritisation was consistently applied to network faults impacting high volumes of customers, then hospitals, aged care, schools and Life Support Customers (LSC). Local factors then influenced execution against these priorities • The ICS alleviates the pressure of significant volumes on the central Dispatch team, and leverages local team knowledge of the network, services, critical customers, geography and weather impacts • IT systems usage impacted many downstream processes, including customer outage restoration estimates (available via website, SMS), cost allocation, capitalisation, Guaranteed Service Level (GSL) payment calculations, insurance and regulatory reporting • Online outages, reported by customers, are usually actioned by the central Dispatch team. During this ICS, additional team members had to be trained rapidly to take up this task • As TasNetworks continues towards improved systems providing closer to real time information (ADMS, Switch Order Management [SOM] etc) TasNetworks should retain the ICS in the medium term. However, TasNetworks should consider the emerging triggers that may ultimately enable it to dispense with the ICS "contingency"
Contributing Factor(s):	• Process documentation needs updating to reflect current practice. There is wide understanding of the term "ICS", but there remains a high reliance on employees with prior ICS experience • Roles and responsibilities can be clarified given multiple recent changes in organisational responsibilities • Communications responsibilities (internal and external) could be improved between the ICS procedure and the Incident Communications Activation Plan • Prioritisation is informed by local knowledge in an ICS • Focus on supply and updates to customer outage information is limited with Field Crews and Depots. One depot reported 24-hour delays in providing system updates due to a lack of system knowledge • ICS procedure training responsibilities have changed. Any ICS or supporting IT systems training has been conducted locally, and in pockets. No recent simulation event has been performed

Finding 3:	The Regional ICS has served TasNetworks well, but needs to maintain focus for short term improvement
Recommended Action(s):	Action
	A7. The ICS procedure (and working draft Emergency Fault Dispatch – EFD) process are to be reviewed in context of the end-to-end fault process (A1). The ICS procedure review should specifically address all process, communication, job management and IT system data maintenance responsibilities, and include both inbound and downstream communication and reporting
	A8. Improved integration between the revised ICS procedure and the Incident Communications Activation Plan to be implemented as part of A7
	A9. Review the role and function of the Customer Service Centre and Fault Dispatch centre under ICS conditions, with specific attention to communications, role sharing and potential for deployment of Dispatch skills (and system access) to support regional centres. This review may require the identification and training for further skilled backup resources
	A10. Assign responsibility for Fault process training. Conduct regular Fault process training, including ICS training variants, for critical functions including Control Room, Customer Service Centre, Dispatch, Field crews and Depot teams Articulation of information needs supporting Customer and Finance requirements to be included (dependencies on A1, A7, A8, A9). Training should be maintained by the process owner and routinely delivered
	A11. Consider developing greater awareness in Field Crews and Depots regarding the downstream impacts of IT systems use, including customer outage updates (especially in an ICS), and cost/materials allocation to work orders
	A12. (Noting that the ICS procedure should become substantially less relevant post the introduction of the full function of the ADMS). Consider what capabilities need to be in place for TasNetworks prior to a future consideration of dispensing with the ICS "contingency" procedure
	A13. Improve organisation-wide communication of the impacts of the ICS, such that non-essential activities, impacting those supporting response, are de-prioritised during an ICS, allowing focus on response, safety and fatigue management

Supplementary Findings & Recommendations

The following findings and associated recommendations are considered "supplementary" to the "core" findings but remain of great importance to TasNetworks' response capability. They are established as "supplementary" to note the importance of delivering in conjunction with the "core" findings to enhance TasNetworks' response capability.

Finding 4:	**TasNetworks has plans in place to improve on its preparedness for extreme weather events, such as further storms or bushfires**
Supporting Analysis:	• Developing a position on the future for extreme weather events will guide the development of a business case for further resilience measures • Network resilience plans are under development but are yet to be submitted through the Australian Energy Regulator (AER) determination process as this work is on-going • Risk assessments guide Vegetation Management (VM) and Asset Management Plans (AMP). Works are carried out according to AMPs and budgets as per cyclic program. The intent of the program is to identify clearance issues and cut vegetation to allow clearance plus recommended re-growth • Hazard tree identification and management works are under development. Removal of identified hazard trees has traditionally been addressed on a case-by-case basis • Customers and Councils (via the CX review) expressed a desire for further vegetation control in remote areas; there seems little resistance to further VM control outside residential areas so could be actioned if deemed prudent to do so • TasNetworks presence in the community was valued, providing or supporting community services and related services. TasNetworks led establishment of community "caravan" centre response when under the initial Enterprise Agreement (EA) and the protected industrial action. Once the storm hit, this became a Council responsibility
Contributing Factor(s):	• Outage reconciliations conducted show a clear majority (over 60% identified to date) of outages were caused by vegetation falling onto assets in the storm. Of the vegetation related outages, 76% were caused by vegetation outside the clearance zone, 20% were due to windborne debris and the remaining 4% were suspected vegetation within the clearance zone. • The risk assessment process and budgets create the foundations for executing the VM program • Overall strategies dealing with Network Resilience are maturing in relation to establishing self-healing networks and alternative vegetation management approaches • Further information is available here
Recommended Action(s):	**Action**
	A14. Complete reconciliations of the August storm outage reports, to determine the impact of vegetation "within" and "outside" clearance and revisit the risk assessments. When considered alongside the financial cost of the August storm event, a business case for further investment may emerge as prudent
	A15. Noted as "in train". Pursue a Network Resilience strategy in line with the risk assessment and potential for avoided costs in an ICS event response

Finding 5:	TasNetworks field response (including third party crews) performed well under adverse conditions
Supporting Analysis:	• Extreme demand, continued poor weather conditions, and multiple storm fronts all provided substantial challenges • High levels of focus on prioritisation of high impact outages (feeders) were consistent across all crews, teams and regions • Advance crews and drones were used to conduct pre-scoping activities, providing insights for crews prior to attending • Once the decision was taken to engage third parties, licencing occurred very efficiently. These third-party crews were engaged to provide supplementary capacity and were well received. Ultimately, the third-party crews closed out over 30% of jobs • Materials were available in almost all cases, and where stocks were depleted, replacement supply was expedited • Escalation and support processes for field crews and depot teams worked well, enabling an efficient field response • Lack of a "single source of truth" arising from the ICS devolving prioritisation and dispatch to three regions, and inconsistent use of IT systems, resulted in challenge and frustration between crew, depots and the central dispatch and CSC teams • Given the processes and data used to allocate work to third parties, one provider was allocated 350 jobs, yet 126 of those outages had already been restored when the crew arrived
Contributing Factor(s):	• Focus through the organisation was on customer response – strong culture of make safe and restoration • Organisation wide focus on providing whatever support was required to both field and third-party crews • Strong desire to overcome adversity focussed teams on a common goal of crew and community safety. The opportunity is to supplement that attention with a focus on customer information needs • Further information is available here

Finding 5:	TasNetworks field response (including third party crews) performed well under adverse conditions
Recommended Action(s):	**Action**
	A16. TasNetworks could consider the positive community sentiment associated with community response vehicles that it may deploy in emergency situations, and to support its community presence. These vehicles could supplement pre-emptive community awareness efforts
	A17. TasNetworks to consider what pre-emptive arrangements may be made with third party crew suppliers, such that assessment, licencing and onboarding activities may be considered to allow more rapid deployment of capacity when needed

Finding 6:	Field crews operated with a strong Health, Safety and Environment (HSE) culture, and further improvements to HSE processes and systems are being actioned
Supporting Analysis:	All field supervisors and dispatchers were critically aware of safety requirements, including the dangers of fatigue, and managed to the intent of the procedures, noting localised discretion was applied
	Noting some less-serious incidents, overall safety performance was commendable
	A two day stand down was implemented towards the end of the storm event response by the Chief Executive Officer, as a deliberate strategy to manage fatigue in the concluding stages of the event
	Environment management procedures were well understood, however the unprecedented volume of transformer "oil spill" incidents created localised stress for field teams
Contributing Factor(s):	Fatigue management tracking accountability is distributed, control systems are largely manual and reliant on timely, accurate and complete inputs, open to some local variation in application of the procedures
	Current fatigue management systems and process are reliant on manual data entry and multiple data transfer points which limits the ability to monitor and forecast potential fatigue risk in rapidly changing situations such as large storm or fire response events
	A draft fatigue management procedure and management plan is currently in progress
Recommended Action(s):	**Action**
	A18. Re-assess and confirm accountabilities for HSE activities, both central (policy) and Field (operations). Consider what is an appropriate spread of resourcing (central vs field) given these accountabilities. Consider what incremental support the HSE teams can deliver to the regional triage and dispatch functions in an ICS (e.g. fatigue management, environmental management)
	A19. Noted as "in train". Continue implementation of draft fatigue procedure and improvement plan. Recommend ensuring measures are included to ensure procedures are consistently applied
	A20. Noted as "in train". Scoping of HSE IT systems improvements should remain a priority. It is recommended that this project and its implementation is prioritised

Finding 7:	TasNetworks can be more proactive in handling the needs of life support, vulnerable and specific needs customers
Supporting Analysis:	Life Support Customers (LSC) are identified as required by legislation however, vulnerable customers need to self-identify through the TasNetworks CSC in instances such as an ICS event Aged care, hospitals and schools are known to local regional teams, and are prioritised in TasNetworks response LSC know they are a priority for restoration, but are unclear of other services and options that may be available to them in the case of an extended outage
Contributing Factor(s):	Lack of visibility in systems other than for LSC. When vulnerable customers self-identify to TasNetworks during an incident – this is then communicated to and actioned by the regional centres Lack of clarity on any additional services that these customers may be able to access (including through other agencies) other than prioritisation for response Portable batteries and generators were available and deployed in some situations. These support resources were very well received when deployed Further information is available here
Recommended Action(s):	**Action**
	A21. Explore whether the feature enabling identification of LSC in TasNetworks systems may be used to identify vulnerable customers, noting their needs, priority and response may differ
	A22. Explore how this "list" of LSC and vulnerable customers may be made available to external agencies (e.g. Department of Premier and Cabinet (DPAC) and care organisations) involved in care services (such as door knocks). This action may need further legal consideration
	A23. Clarify what alternative or additional services or strategies may be available to LSC and vulnerable customers in the case of an extended outage (which may include or centre around access to third party services). Then ensure CSC have this information to hand
	A24. Consider further use of generators and portable battery systems that may be deployed for safe and efficient use supporting LSC and vulnerable customers. These could be stored at depots around the state to ensure broad community coverage
	A25. Ensure the revised ICS procedures (Action A7) include consideration for the identification and prioritisation of, and communication with, LSC and vulnerable customers
	A26. Consider whether a dedicated telephone line, or dedicated IVR option, could be established for priority LSC and vulnerable customers, so that they are prioritised and escalated in the call queue

Finding 8:	The TasNetworks IT Systems environment is undergoing substantial improvement, noting existing platforms performed well under the volumes and load experienced
Supporting Analysis:	Given the unprecedented demands of the August storm response, customer contacts via the website and Interactive Voice Recording (IVR) system were well serviced in terms of technical performance (noting the supporting information improvements) The current Outage Management System (OMS) and Dispatch Systems are considered 'end of life' and subject to a current replacement and upgrade activity, through the Advanced Distribution Management System (ADMS). This goes "live" in March 2025 The ADMS in isolation will not solve TasNetworks fault response capability (which was a common statement made to this review). The ADMS will enable a disciplined fault process and will have greatly enhanced functionality if it ensures delivery of the Switch Order Management (SOM) capability to automate the switching sheets and include Advanced Metering Infrastructure (AMI) data capability to verify residential services Job Management capabilities through to the Work Order process, available to the crews via Mobile TC, were reported as performing well when used. Usage discipline and training could be improved
Contributing Factor(s):	Demand profiles were considered unique in this storm event. This tested all aspects of TasNetworks process and system capability More recent IT systems training (fault, job) in the regional depots would improve processing of jobs and work orders, which ultimately impact the accuracy of customer communications, financial systems and related calculations Anecdotally, the legacy IT platforms (noting inflight upgrades) was characterised by limited functionality and integration It should be noted that sound understanding of end-to-end processes mitigate the risk of delays with the introduction of new IT systems
Recommended Action(s):	**Action**
	A27. Ensure the ADMS project scope contemplates the process improvement actions (A1) and manages the impact and sequencing of the introduction of process and systems improvements
	A28. Given the critical nature of the ADMS to the future fault (and ICS) capability, the Heads of Functions from Operations, Customer and Finance should be represented on the steering committee

Finding 9:	TasNetworks will benefit from implementing the recommendations from this review
Supporting Analysis:	In 2022, Timmins Ray conducted an executive crisis simulation study. The report recommended an annual crisis simulation event, to test process, systems and response capability (crisis management plans), as part of 11 recommendations It was complicated to assess the degree to which identified improvement actions from prior reviews have been actioned – this should be reviewed as part of any improvement plan
Contributing Factor(s):	Focus and maintaining diligence on delivery and transparency of PIR actions will enhance TasNetworks response capability Decisions taken regarding which actions are agreed and which are rejected should be made transparent
Recommended Action(s):	**Action**
	A29. A TasNetworks Executive is allocated responsibility for co-ordinating the organisation-wide response to the storm event PIR, implementation governance, and reporting of progress through to the CEO and ARCC

The Network

The TasNetworks transmission network is responsible for transporting high-voltage electricity from generators, primarily hydroelectric and wind farms, to substations. The transmission network operates at voltages of up to 220 kV, covering over 3,500 kilometres of power lines. A number of Major Industrial (MI) customers access power directly from the transmission network. The distribution network delivers lower-voltage power to homes, businesses, and industries throughout Tasmania. The distribution network comprises over 15,000 kilometres of low-voltage power lines, operating at 11 kV to 33 kV and transforms electricity through local substations to 240V for residential use.

Considering the geography and climate, key challenges in Tasmania include maintaining reliability across the island's terrain, dealing with maintaining infrastructure, and integrating increasing amounts of decentralised renewable generation. Further and continued deployment of smart metering infrastructure sits at approximately 83% penetration in residential households with full deployment to be completed in 2026. These deployments are being undertaken by third parties, commissioned by the Retailers. TasNetworks is currently in negotiation to access this smart meter data to support enhanced network visibility in real time to support customers during outages, amongst many other use cases.

During the August storm event, significant damage to the network was experienced, with a peak of 228 outages resulting in 47,000 customers being without service. As an indicator of the scale of damage, TasNetworks materials used in the response effort included in Table 1 below:

Table 1: Materials consumed in repair

12km conductor
12km cable
1900 sleeves to repair conductor
48 transformers
126 poles
3400 fuses
440 crossarms

Network Resilience

From the detailed analysis of individual outages conducted to date, it is confirmed that over 60% of these outages have been caused by vegetation damage. Of the vegetation related outages:

- 76% were caused by vegetation outside the clearance zone
- 20% were due to windborne debris and
- Only 4% was suspected to be caused by vegetation within the clearance zone

Vegetation management continues to perform a major role in the mitigation of damage caused by both storm and fire events and must continue to be managed diligently.

The budget for TasNetworks' vegetation management program has increased by approximately 30% between 2022-2025. Actual spend on works has aligned with budgeted works outside both the FY 2022 & 2023 years – where significant overspend was undertaken to ensure risk was reasonably mitigated. The table below highlights TasNetworks' planned and actual performance in financial terms. Critically, it remains highly complex to gauge the exact impact that spend has had in terms of mitigating the vegetation risk.

Table 2: Vegetation Management Budget Vs Actual

Vegetation Management	Full Year Actual (AUD)	Full Year Budget (AUD)
FY2025 (YTD)	10,363,035.65 (YTD)	20,313,382.50
FY2024	19,542,927.70	19,599,653.20
FY2023	17,295,472.50	15,026,566.20
FY2022	17,301,791.50	15,411,958.80
FY2021	17,483,012.70	17,994,356.80

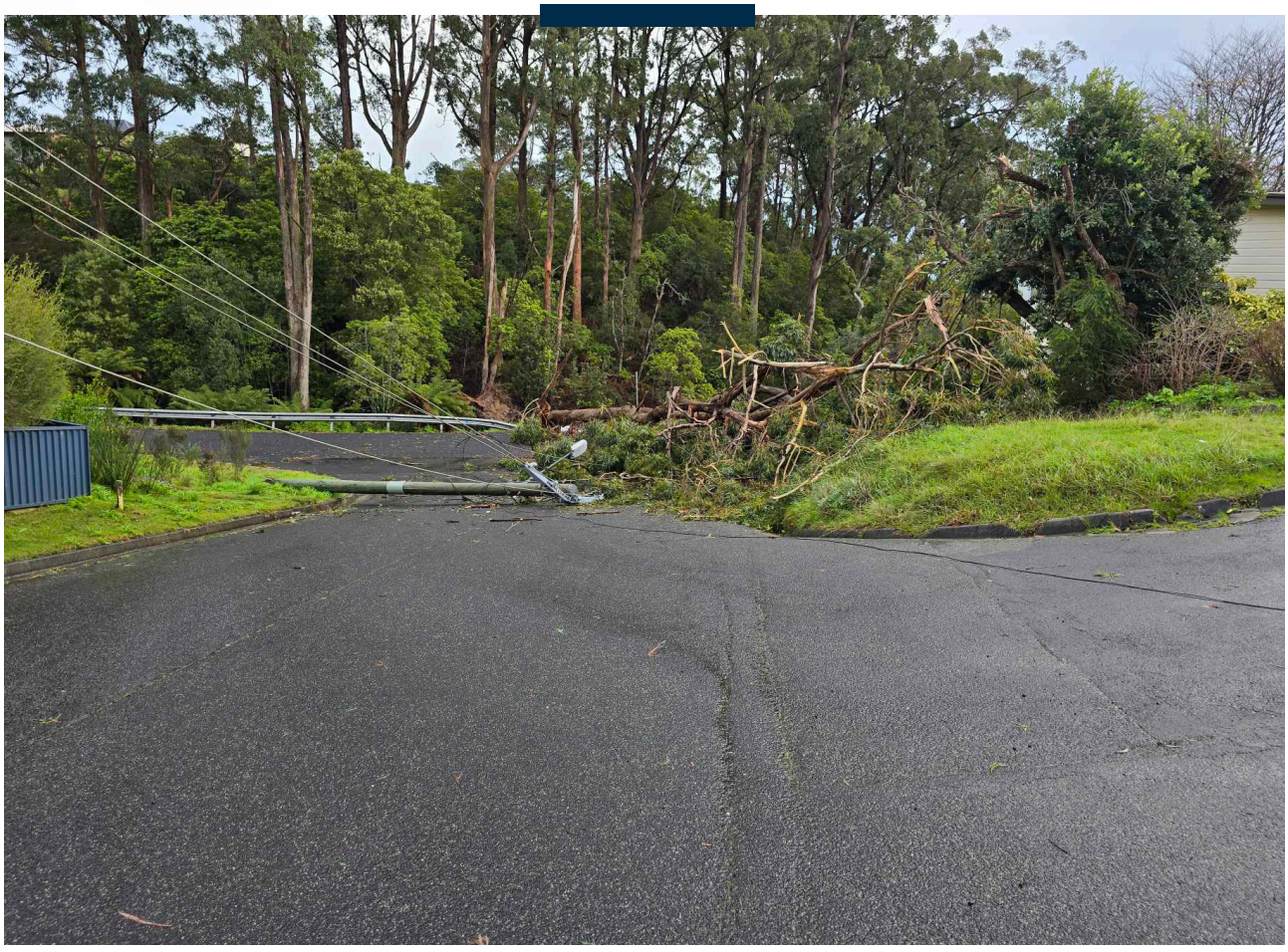
*YTD as at 31/12/2024

Given the force of the storm event and likelihood of further extreme weather events, with the criticality of electricity infrastructure, it is prudent to consider further network resilience capability. The AER discusses the concept of the Value of Network Resilience (VNR) and characterises VNR[6] as a network's ability to withstand and recover from an extreme hazard that is likely to lead to a prolonged outage and supports network investments to withstand and recover from events.

TasNetworks plans and potential future investments in network resilience were under consideration at the time of writing this report. Building resilience in the electricity network is crucial to ensure reliable energy supply in the face of increasingly frequent extreme weather events and other disruptions. Key strategies to enhance resilience may often include grid modernisation, de-centralised energy systems, underground cable installation (noting this is costly), localised microgrids, standalone power systems, and continued diligence in vegetation management.

In working through this review's findings and recommendations, there remains the open question of assessing the balance of network and customer accountability in preparation for the impact of storms on service availability.

6 AER Value of Network Resilience – Final Decision. Sep 2024.



The Weather Event

Weather forecasts and warnings first came through from The Bureau of Meteorology (BOM) at 12.57pm on Friday August 23rd, 2024.[7] The advice forecast damaging winds and rain and anticipated the impacts to be felt on Monday 26th and Tuesday 27th August. The forecast further noted the damaging winds and rains would continue into the first week of September.

The BOM duly followed on Monday 26th August 2024 with a Severe Weather Warning for damaging and locally destructive winds, developing from Tuesday morning and continuing into Wednesday. The BOM Key Messages update[8] forecasted the winds would be "persisting for the following week or two bringing frequent fronts over the state".

TasNetworks also observed alerts from both TasAlert and the BOM leading up to and including on 26th and 27th August - advising the community to prepare, also including the number via which to report outages to TasNetworks.

Multiple fronts passed through statewide, over a five-day period, particularly impacting remote regions in the South, West and North-West. As indicated in Figure 1 below, the weather cell resulted in widespread damage across the entire north of the state, as well as damage to communities in the South.

Figure 1: Outage Map

To illustrate the comparison of the size and scale of this event, it is appropriate to review Major Event Days (MED) and the System Average Interruption Duration Index (SAIDI) as determined by the AER[9]. A day is classified as a MED when the SAIDI (reliability measure related to the duration of outages, divided by the customer base) is more than 2.5 standard deviations greater than the average of the last five years of SAIDI data.

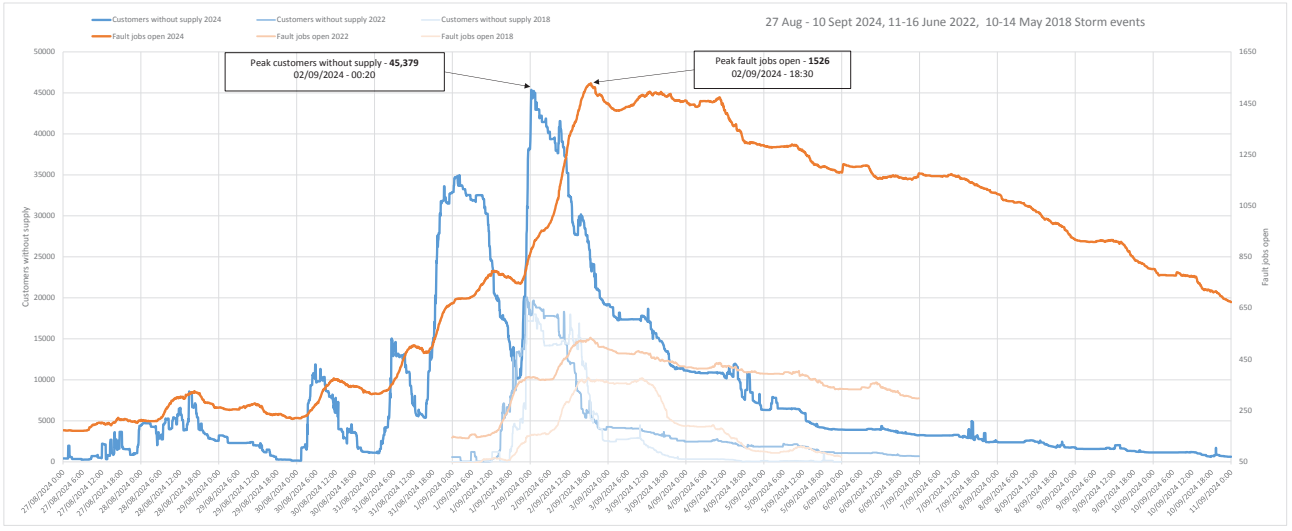
The total for August 2024 SAIDI is reported at 19.32 (excluding MEDs). The total for September 2024 SAIDI was 19.06 (excluding MEDs). The August 2024 storm event of 8 MEDs (27th - 28th Aug, then 30th Aug – 4th Sep incl) carried a combined SAIDI of 581.79. The TasNetworks MED threshold has hovered around seven SAIDI for the last 5 years.

There was then a further MED due to another weather front on the 23rd of September 2024. There were just three such event days during 2023-24, occurring on 31st July 2023, 25th October 2023 and 31st May 2024, giving context to the severity and duration of this event.

As indicated in Figure 2 below, the volume of outages and open jobs experienced in the August 2024 storm event was substantially greater than had been experienced by TasNetworks in recent memory. Every aspect of its response capability was tested.

7 The Bureau of Meteorology Key Messages, Friday 23rd August 2024, 12.57pm.
8 The Bureau of Meteorology Key Messages, Monday 26th August, 2024, 12.40pm.
9 AER Distribution Reliability Measures Guideline, November 2018.

Figure 2: August 2024 event comparison



There is no TasNetworks stated policy position regarding the future of extreme weather events. While this August storm was the worst in many people's memory and seen as a "once in twenty-year event", it could be beneficial for TasNetworks to develop a position on the frequency and severity of future weather events to guide its network resilience plans, preparedness and response capability.

Response

In response to advice from the BOM, and in accordance with the Distribution operating procedure for severe weather fault response, preparation for an Incident Contingency System (ICS) response was mobilised. A pre-ICS was called on Sunday 25th August, and a declaration of emergency was issued at 4pm on the same day. Corporate Communications advised media outlets of the potential for the situation. Given TasNetworks was subject to protected industrial action regarding its Enterprise Agreement (EA), this declaration required a cessation of the action to allow focus on the emergency response and restoration, for as long as the emergency response situation was in place.

Based on the updated forecasts, the TasNetworks Leader Real Time Operations cascaded communications notifying that an ICS had been called, at 3.19pm on Tuesday 27th August, 2024. At this stage, almost 2,000 customers were off supply. A broad customer advice was issued that same day. It was noted that other agencies also alerted the community to the imminent onset of storm event activity.

Industrial action was halted on 26th August, as the initial storm front, passed through 26th and 27th August. Crews resumed restoration activity, albeit with some delays in transmission restoration services which was due to the protected industrial action.

Initially, distribution response crew numbers were impacted by availability and leave, leaving jobs open until the weekend. On Saturday 31st August, the 5pm peak had 12,000 customers off supply, which then grew to 47,000 customers off supply by 7am Monday 2nd September. That weekend of 1st September was also Father's Day, with forecast availability further impacting response crew numbers.

The increasing demand from the outages, and the forecast crew levels, resulted in the decision made on 30th August, to call in additional resources in the form of third-party crews, primarily to support restoration activity in the North and North West regions. These third-party crews were mobilised, assessed and licenced in an efficient and diligent manner. They were deployed into the field on 5th September, and their assistance was greatly welcomed by TasNetworks crews and the community. They were directed at less complicated tasks, enabling TasNetworks crews to focus on the more complex restoration activities.

Towards the end of the event period, a two-day crew stand down was called by the CEO. It was characterised as a safety pause, and instituted on the 12th and 13th September, as a mechanism to manage fatigue and ensure crews maintained absolute focus on safety towards the concluding stages of the event.

All customer services were restored, and the ICS was formally stood down on 16th September, 2024.

The Incident Contingency System (ICS)

For over a decade, TasNetworks has relied on the ICS as its primary response system for dealing with critical issues such as the August storm event. The ICS Procedure[10] purpose is extracted and included for reference below.

The TasNetworks Incident Contingency System Procedure provides a framework for the emergency management of any significant incident, or collection of incidents, whether imminent or actual, pertaining to a significant interruption to supply, damage, or risk to TasNetworks' distribution assets and infrastructure. The TasNetworks ICS Procedure is triggered by events such as severe weather, bushfire, or disaster recovery due to critical system or asset failure. The TasNetworks ICS Procedure ensures a uniform approach in which depots operate independently to maintain the network, dispatch field crews, and work towards efficient restoration of supply.

Practically, the ICS devolves responsibility for prioritisation and dispatch from the centralised Fault Dispatch centre, to Regional depots. Rationale for this ICS procedure includes:

- Regional teams have a more intimate knowledge of the network, customers and services attached, local geographic features and matters likely to influence or hinder response capability; and
- The centralised Fault Dispatch centre has a limited roster of nine (9) skilled and experienced resources, on a rotation where two (2) operators are onsite at any time. The sheer volume of incidents, when combined with a working knowledge of the local area, positions the local teams being more adept at a more dynamic process for prioritisation and dispatch given the current limited telemetry in distribution systems visibility for Fault Dispatchers.

The ICS Procedure sets out key responsibilities, including the Incident Controller, Emergency Response Co-ordinators in each of the three major regional depots (Rocherlea, Cambridge and Devonport), the ICS Operations Co-ordinator, Customer Service Centre Team Leader, and the Incident Management Team (IMT). The ICS procedure further sets out numerous operating procedures.

Critically, the ICS Procedure outlines a training regime that is intended to include:

- Organisational processes;
- Inter-agency processes;
- Annual document reviews;
- Desktop training for staff who have not participated in an ICS in the prior twelve months;
- Quarterly training in the three regional centres; and
- Six monthly training at major resource centres such that additional resources may be added to a supplementary ICS resource pool.

The procedure further sets out matters relating to communications, escalation, governance and learning.

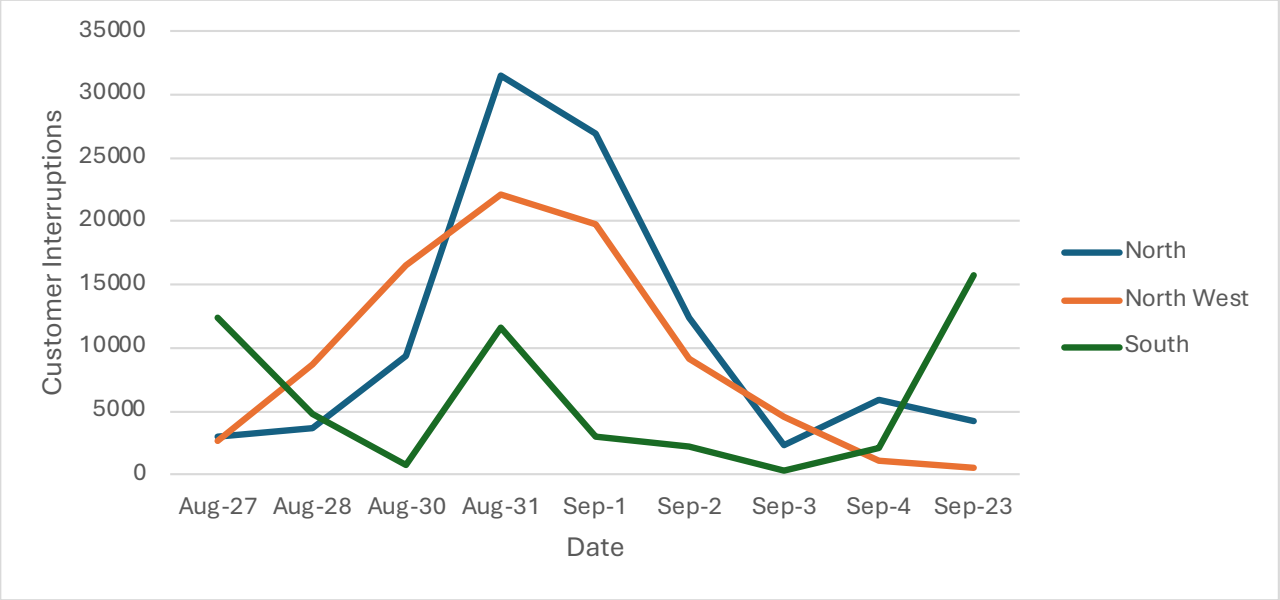
10 TasNetworks Incident Contingency Procedure (ICS), October, 2015

Customer Impacts

TasNetworks delivers infrastructure to 295,000 residential, commercial and industrial customers. Given the size and scale of the weather event, substantial impact to customers was to be expected, and TasNetworks customer response communication capabilities were tested.

As outlined in Figure 3 below, there were multiple waves of the storm event over the period, and the volumes of customer interruptions also showed the variations with each storm wave. The figure demonstrates the period of 27 August to 4 September, but also includes the one-off day of 23 September, when another front came through.

Figure 3: Customer Interruptions by Date



Customer inbound contacts during this period focussed on the website and call centre. While it is noted during the storm event there were 41,000 inbound calls to the call centre, there was a total of approximately 58,000 calls in a 30-day period (26th August to 25th September). Of those 58,000 calls:

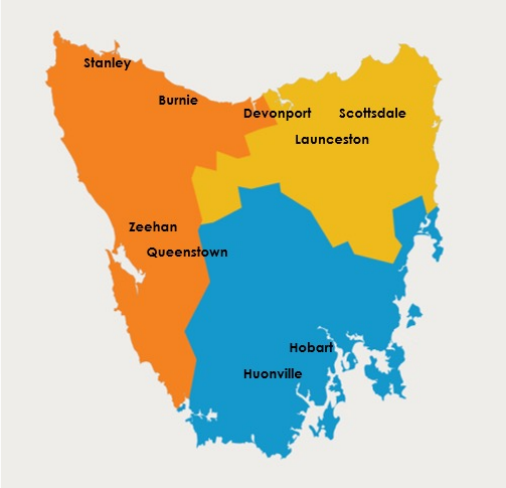
- 12,000 used IVR options for information;
- 16,000 opted to queue for an agent;
- 6,100 abandoned while queuing;
- 10,100 were answered by an agent; and
- The call answer rates went from high 90% to low 30% at the peak due to call volumes.

During the event period, Customer Satisfaction (CSAT) fell from an above target of 7.7 down to 5.7, which reflected the level of customer frustration. These statistics are consistent with the customer feedback obtained from an independent review into the Customer Experience.

To assess the customer impact of both the storm and TasNetworks response, TasNetworks commissioned external consultancy Verian, to conduct an independent customer and stakeholder review. The review involved qualitative research across Tasmania, and across all customer segments. This was achieved through one-to-one interviews and focus groups. This review aimed to understand customer and stakeholder experiences, and their perceptions of TasNetworks' communications performance during the storm event and throughout the recovery process. All customer segments were impacted through the August storm event.

Figure 4: Customer Focus Groups by Region

The geographical reach of the program was extensive. Face to face sessions were held across the locations highlighted in Figure 4 below. These were the areas most impacted by the storm activity.



Source: Verian

The Verian review explored:

- Customer and stakeholder information needs during outage events;
- Perceptions of TasNetworks' communications performance (effectiveness, usefulness, timeliness) during the storm;
- Information channel performance throughout the duration of the storm and recovery period, including the website, SMS, social media, the call centre and in the case of Stakeholders and large businesses, TasNetworks stakeholder and account management teams; and
- Learnings for how TasNetworks can improve communications with customers and stakeholders in future major outage events.

While TasNetworks' different customer segments have varied needs and criticality of their services, the Customer Experience review identified common themes in terms of customer's primary views and information needs. Verian's summary outlined findings related to:

1. The significance of the storm - for most people it was the worst in living memory;
2. The impacts, depending on a range of circumstances, were felt differently;
3. Without exception, Customers were grateful to field crews, and acknowledged their work under challenging circumstances to restore power; and
4. Customer information needs were paramount.

Verian summarised the expectations of Customers during events as prioritising safe and timely restoration of power, and communications that keep Tasmanians up to date on estimated restoration times. There was also an acknowledgement that TasNetworks offered priority support services to vulnerable or critical customers.

Customer sentiment regarding a wider agency response (such as recovery centres) was that they are best coordinated by local government, and that the media should be led by an Emergency Coordinator (such as the Premier, State Emergency Services [SES] or Tasmania Police).

Verian explored the Customer experience with TasNetworks' information channels. The CX of the website was characterised by:

- Website was seen as the single source of trusted information – but the lack of regular updates was an issue;
- The outage map function is user friendly, but accuracy of the underlying information was tested;
- Customers liked the register to follow an outage feature; and
- Overall, the website consistently failed to provide accurate estimate of restoration times for outages.

Additionally, the Customer SMS experience was characterised by:

- SMS were appreciated, but were not consistent or timely in information provided;
- Many Customers didn't receive, or could not recall receiving notifications. Some viewed that the SMS feature should be "opt out" rather than "opt in";
- In case of long restoration delays, regular updates would be appreciated to remind Customers that we're still "on it"; and
- The Community centric communications (e.g. please check on your neighbours) were appreciated.

"I received a notification telling me the power was out, which I already knew, but no estimate of when it might come back on. So, I went to the website to see if there was an estimate there. Thing is, according to the website my power was still on ... which it wasn't ... so not only was it wrong but there was no estimate of reconnection because according to them the power never went out. I just gave up." Residential customer - Launceston

The Customer experience when dialling into the Call Centre was summarised as:

- When there was no SMS received, and little detail on the website, Customers called the CSC in the hope of additional information;
- Experience showed there was no greater access to information than on the website;
- Customer Service Centre staff were friendly and very patient, but there was some frustration given both the long wait times and little detail on pre-IVR; and
- There was no escalation point offered or available.

"Contrast this (lack of notifications) to other providers I have. Say TasWater. They are constantly notifying me of things, they just love their notifications. Water will be out here between this hour and that. Planned works in this area. Nothing like TasNetworks." Residential customer - Launceston

Transmission customers tended to have dedicated channels through an individual in an account management function. Their feedback was summarised as:

- Very positive regarding access via a liaison point, and their responsiveness;
- Ambiguity over restoration targets meant it was difficult to plan, and major customers were left unsure of whether to enact their own Business Continuity Plans (BCP);
- Even some rough estimate on restoration in terms of hours, days or weeks would have assisted; and
- These customers noted the same frustrations regarding the absence of timely and accurate information on the website.

This review also noted, in relation to Transmission and Major Industrial (MI) customers:

- The availability of Account Managers (AM) was appreciated by these customers, but in the absence of foundational information in key systems, meant these AMs created extra cycles trying to establish specific information for their customers. These AMs would benefit from a clear process and information channel by which to identify and obtain clear communication in such events;
- The Account Managers responsible for major Transmission customers were also contacted by some major Distribution customers. A review of Account Management options is in progress with further analysis of TasNetworks customer segmentation model. A key account management team for Distribution customers is currently being stood up. To further support both Transmission and key Distribution customers further, TasNetworks could also include a dedicated telephone line or IVR option for large and medium non-managed accounts; and
- These functions performed their role well under testing circumstances.

Other stakeholders were engaged by Verian and offered feedback on the collaboration and communications experiences with TasNetworks. Their feedback was summarised as:

- Regional emergency management contacts worked well once they were established (i.e. agencies such as SES, local council, fire, police);
- The same theme of the lack of visibility or estimates regarding restoration timeframes;
- There seemed limited views into prioritisation of critical, life support and vulnerable customers in some communities; and
- All agencies appreciated the information that was supplied but suggested there needed to be improvements regarding providing external agencies more actionable information.

"It seemed like TasNetworks may not have practiced its emergency protocols, and were thinking through as they went. They didn't get anything wrong, they were just slow. If it's thought through in advance, you react faster. It felt like they hadn't thought through the implications of evac centres and their responsibilities." Stakeholder

The use of other communication channels, such as social media, was also explored by Verian. Social media channels are seen as a valued source of information, if it is seen as coming from a formal and reliable source.

Social media is an important information source for customers, however this is typically via local community group pages rather than from following TasNetworks or other organisations. Just one person who participated in the consultation process actively 'followed' TasNetworks on Facebook. Most were unaware of TasNetworks presence on social media and didn't recall seeing information from TasNetworks through this channel, nor was it particularly needed, provided the website is updated.

What has widespread anecdotal agreement is that the August storm event was not a normal event, and it tested every aspect of response capability. However, the community spirit of the TasNetworks team and the Tasmanian community banded together to show the resilience of the Tasmanian people in the face of adversity.

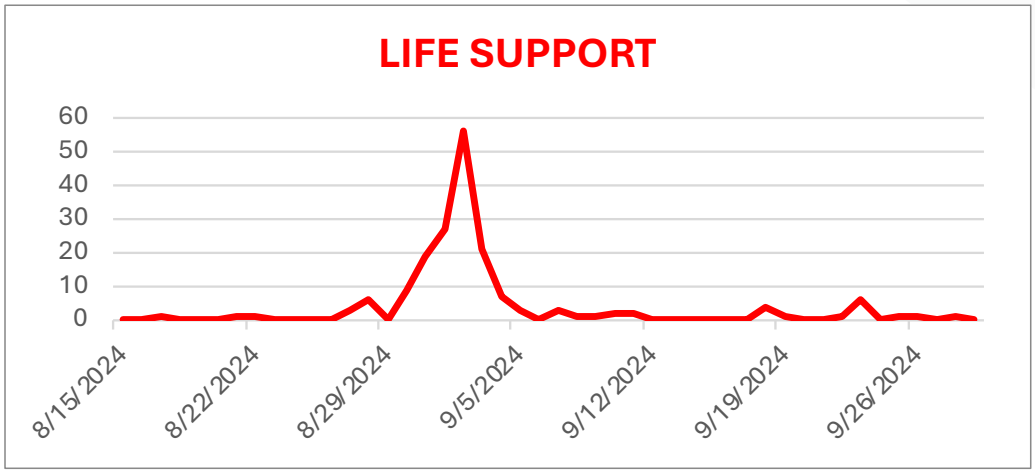
The Customer need for timely and accurate information regarding any outage is the central improvement opportunity for TasNetworks, and findings are made in this regard.

Life Support Customers (LSC)

Customers who rely upon electricity for life support purposes are specifically identified in systems, so that TasNetworks can appropriately identify and prioritise service restoration.

Through the storm event, LSC were identified by TasNetworks, and that information was then used to inform prioritisation of these customers in restoration efforts. Cases lodged in the figure below were as a result of LSCs raising cases with TasNetworks.

Figure 5: Life Support Daily Cases Lodged



There are also a range of customers who are often described as "vulnerable", who may be aged, have disabilities, or have temporary needs such as recovering from illness, accident or surgery. These customers may also have heightened needs and expectations, however TasNetworks CSC representatives were unaware of any additional services that may have been available for LSC in the event of extended outages.

"I sat on hold for 40 minutes watching my phone's battery drain down and down with no way to charge it. Gave up after 40-45 minutes. I figured having battery for other things was more important that sitting on hold with TasNetworks." Life support customer

This review makes findings and recommendations in relation to both life support and vulnerable customers.

Financial Impact

The financial cost for TasNetworks from the August storm event is material, and will impact TasNetworks financial profitability for the 24/25 financial year. Factors that influence the financial analysis include:

- Direct expenses allocated to network repairs including:
  - Materials;
  - Labour, including overtime and third party crews;
  - Traffic management; and
  - Vegetation management.
- Contingencies for service continuity, such as portable batteries and generators;
- Insurance claims;
- Payments to customers under the Guaranteed Service Level (GSL) scheme;
- The deferral of revenue from construction that was de-prioritised to accommodate the storm response; and
- The likely imposition of penalties for delays in major construction projects.

An outline of costs incurred by TasNetworks, attributable to the August storm and response, is represented below.

Table 3: Direct cost of the storm event

Cost item	Expense up to 31 December 2025
Emergency response	$8,821,309
Standdown	$545,641
GSL payments	$10,217,920
Generator purchases	$106,939
Generator hire	$576,515
Totals	$20,268,324

In determination of the costs above, an assessment of revenue impacts due to interruptions in service supply was undertaken. It was determined the revenue loss was within a usual variance, so was assessed as immaterial as an impact to TasNetworks.

It should also be noted that further 'embedded' costs have been incurred under Business as Usual (BAU) processing to progress analysis such as job capitalisation and outage cause reconciliations. To date, the values in the table above exclude any direct times and external costs that may be directed towards the conduct of this PIR.

TasNetworks further notes the availability of Community grants that were made available by the Tasmanian Government[11].

TasNetworks has the ability under the National Electricity Rules to seek a revenue adjustment via a cost pass through application to the Australian Energy Regulator (AER) for unforeseen events such as this storm event. This mechanism enables the recovery of incremental costs associated with the storm event to be recovered from customers assuming the AER deems the expenditure prudent and efficient. Revenue is recovered from customers in subsequent years of the regulatory control period.

11 https://www.premier.tas.gov.au/latest-news/2024

Further and Supporting Observations

The following list of observations have arisen from the storm response PIR and may be considered for further action by the TasNetworks PIR implementation team.

1. Given the scope and scale of storm impacts, the conduct of the review itself required consultation with a substantial number of TasNetworks employees, in order to assess the degree of preparedness and assess the response capability across the organisation. All employees associated with the PIR were open, transparent and willing to help and offer suggestions.
2. Customers expressed a strong desire for more frequent and informative pre-storm communications, potentially through media, social media or more pre-emptive campaigns such as letter drops and fridge magnets with key facts and contact details. This also correlates with some anecdotal feedback that TasNetworks would benefit from some customer education of the differences between TasNetworks and Aurora, and who to contact in the case of events such as storms.
3. The issue of automating Customer messages, and the "opt in" system for sending SMS was raised frequently during the review, and within the customer research by Verian. This is an important issue to deal with, given the current state of TasNetworks' systems maturity, data accuracy but also customer expectations. A definitive roadmap to illustrate the pathway for TasNetworks to turn on the "opt out" capability as a default should be considered.
4. It is worth noting the conditions experienced by CSC representatives during the storm event. The convergence of factors they had to deal with included the impacts of the severity of the storm, increased numbers of customer calls – many of whom were frustrated due to prior SMS or website experiences and extended periods on hold, and a lack of accurate information. Yet the CSC representatives remained customer focussed and implemented multiple innovative ways to identify data sources to better inform TasNetworks' service response.
5. Immediately prior to the August storm event, the TasNetworks Customer Experience team had just concluded Customer Journey Mapping, which commenced a much deeper understanding of the impacts on Customers from the existing process environment. Multiple strategic learnings are available from this work to complement the recommendations regarding core process improvements.
6. The impact of the EA and the protected industrial action, and the fact TasNetworks was already in an Incident Management Team (IMT) response, was raised. The transition between the IMT and ICS then introduced a layer of uncertainty, due to the layering of the events. However, it is unlikely this same sequence of events needs further scenario planning given the unlikely future confluence of two similar events.
7. The TasNetworks telecommunications team performed well and experienced no major setbacks. No improvements to their specific processes or preparation activities were identified, outside the wider organisational process improvements.
8. The Tasmanian Government Radio Network (TasGRN) was seen as a substantial improvement on prior reliance on inconsistent and unreliable telecommunications networks, especially when considering crew safety when working in remote areas and under adverse conditions. Anecdotally, depot teams stated more training for them and crews, and better protocols for use, would be beneficial to optimise the system value.
9. The August storm event cut across arrangements that were in place during protected industrial action. Given there were some customers experiencing extended outages during his time, TasNetworks co-ordinated with Councils for relief centres. However, when the storm event 'kicked in', the industrial action ceased and Councils were encouraged to pick up responsibility for relief centres. TasNetworks could consider an improvement in its community presence through such events.

10. It was offered multiple times, that TasNetworks' document management could be improved, in terms of structure, discipline, consistency of use, training and governance.
11. Culture has been referenced through this report. A target state culture helps an organisation define the desired behaviours, mindsets, and practices that employees should embody to drive success. Achieving this culture fosters teamwork, innovation, and accountability, as employees are guided by shared principles and goals. When a target state culture is well-defined and implemented, it creates a sense of purpose, boosts morale, and ultimately leads to higher productivity.

Annexures

Glossary

ADMS	Advanced Distribution Management System
AER	Australian Energy Regulator
AMI	Advanced Metering Infrastructure
AMP	Asset Management Plan
ARCC	Audit, Risk & Compliance Committee, a TasNetworks board committee
BCP	Business Continuity Plan
BOM	Bureau of Meteorology
CSAT	Customer Satisfaction
CSC	Customer Service Centre, a TasNetworks function
CX	Customer Experience
DNSP	Distribution Network Service Provider
EA	Enterprise Agreement
EFD	Emergency Fault Dispatch, a draft subcomponent of the ICS
GSL	Guaranteed Service Level
ICS	Incident Contingency System (refer also EFD)
IMT	Incident Management Team
IVR	Interactive Voice Recording
LSC	Life Support Customer
MED	Major Event Days (see also SAIDI)
MI	Major Industrial, a TasNetworks customer segment
Mobile TC	A TasNetworks field mobility IT system
OMS	Outage Management System
OWWF	One Way Workflow, a TasNetworks process improvement project
PIR	Post Incident Review
SAIDI	System Average Interruption Duration Index (see also MED)
SMS	Short Message Service
SOMS	Switch Order Management System
TasGRN	Tasmanian Government Radio Network
ToR	Terms of Reference
VM	Vegetation Management
VNR	Value of Network Resilience

Terms of Reference (ToR) - Post Incident Review Objectives

The following objectives are articulated in TasNetworks August Storm PIR ToR:

- Understand the health and safety impacts to people, communities and the environment
- Understand customer needs and their perception of TasNetworks performance during outage events
- Review types of outages and analyse the process of prioritisation for customer restorations
- Identify the adequacy of TasNetworks staffing levels to respond to severe weather events and declared natural disasters
- Identify the effectiveness of communications with impacted customers during the entirety of the event
- Identify internal process improvements to remove duplication or redundant effort both across and within:
    1. Digital, Strategy & Customer
    2. Finance, Regulation & Supply Chain
    3. Operations
    4. People & Transformation
- Review regulatory (or other barriers) to TasNetworks investment in staff development/training to respond appropriately to extreme weather events

Conduct of Review

The August storm response PIR was conducted under an approved ToR, which stated a primary objective of:

The primary objective of the project is to understand the impacts to TasNetworks operations and identify potential improvements to processes and systems. This is to increase customer response performance during prolonged emergency events and to support Tasmanian communities. This is paramount as the frequency of extreme weather events increase and becomes normalised. The focus of this project is understanding impacts to our customers and potential improvements to our assets, systems and processes.

The PIR methodology was a qualitative review and involved conducting interviews with a range of participants, including executives, management, operational, and field staff. Led by the primary reviewer, these interviews focused on each participant's role in preparing for and responding to the August storm event. Initial discussions explored preparedness by examining first-hand experiences with planning, communication, training, and clarity around organisational and procedural responsibilities. The main body of the interviews then centred on actual events, capturing insights into participants' understanding of their responsibilities and the key processes and systems they relied on. The review also assessed comprehension of end-to-end processes and their impact on downstream processes and data requirements.

The interviews utilised open-ended questions to elicit in-depth responses, encouraging participants to provide insights into what went well and what could be improved. Key data points and preliminary findings were recorded, categorised, and aggregated to identify emerging themes.

Participants were also asked to provide relevant artefacts, such as policies, procedures, templates, reports and logs used or relied in their roles. Concurrently, data on faults, customer interactions, and findings from an independent report on customer attitudes were all analysed to enrich and corroborate interview insights. Supporting data was cross-referenced with anecdotal and qualitative feedback to ensure accuracy.

The final analysis produced interim findings and recommendations, which were validated with key subject matter experts. Conducted independently, this PIR reflects an authentic assessment of events by the review team.

References

Document Name	Version	Date
National Disaster Risk Reduction Framework, Department of Home Affairs, Australian Government. National Disaster Risk Reduction (homeaffairs.gov.au)		2018
Victorian Emergency Management Planning Toolkit for People Most at Risk. Victorian Emergency Management Planning Toolkit for People Most at Risk | Emergency Management Victoria (emv.vic.gov.au)		
Tasmania severe weather event: commencing 26 August 2024. Tasmania severe weather event: commencing 26 August 2024 (disasterassist.gov.au)		
AER - Value of Network Resilience 2024	Final Decision	Sep 2024
Antarctic Climate and Ecosystems (ACE) – Climate Futures for Tasmania. Extreme Events. Hobart, Tasmania		2010
Climate Change Activity Statement 2024, Climate Change Office. Department of State Growth, Government of Tasmania		2024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