

Climate Change, Environment and Infrastructure Committee
Call for evidence: Storm Bert & Storm Darragh
Written Evidence from SP Energy Networks

1. This response is from SP Energy Networks (SPEN), representing SP Manweb (SPM), part of the ScottishPower group. We own and operate the electricity distribution networks in Merseyside and North Wales which serve one and a half million customers.
2. We welcome the opportunity to respond to the Senedd's Climate Change, Environment and Infrastructure Committee's call for evidence into Storms Bert & Darragh.

Overview and Response

3. Storm Darragh began on 6th December with recorded windspeeds peaking at 93mph. Across the SPM area, 181,059 customers were impacted, the majority of whom were in Wales with the worst hit areas being Mid Wales, North Wales and Dee Valley.
4. Due to the intensity of the storm and the length of impact, SPEN districts operated to a strict health and safety risk assessment policy and focused on switching activities to restoring customers connections meaning that 89% were restored in the 24 hours and 95% in 48 hours.
5. In advance of the storm, SPEN proactively contacted 68,000 customers and sent 200,000 SMS and voice messages to customers in the most impacted areas. Once the storm hit, SPEN worked with Local Resilience Forums (LRF) to open rest centres across the impacted areas to provide customers with a warm space and access to showers, hot water, food and drinks. Over the course of Storm Darragh, SPEN took a total of c.77,000 calls (c.65,000 of which were for SPM), prioritising vulnerable customers who were on the Priority Services Register (PSR).
6. Many rural and hard to reach areas were impacted by Storm Darragh, and the flooding of highways, fallen trees and the fact that parts of the network were submerged in flooded fields impacted the speed of access to several areas and sites. SPEN teams worked day and night, where it was safe to do so, to restore electricity to homes on the network. Efforts focused on the homes that were without power the longest, and SPEN worked to ensure that in addition to restoring power we were also looking out for welfare of our customers by providing generators, accommodation, and access to emergency facilities. SPEN used more material in repairing the damage from Storm Darragh than in the last 5 large storms combined, including Storm Arwen.
7. On Friday 13th December, SPEN began processing compensation payments for customers. SPEN pay compensation proactively; therefore, customers do not need to claim or contact us to receive compensation they are eligible for. In total,

9,500 customers were eligible for compensation, and to date 8,000 have been paid with the remaining 1,500 being unmanned sites or requiring additional information from customers, which we are in the progress of collecting.

Preparedness and Response

8. The Customer Service team informed SPM of the Met Office weather warnings starting with a Yellow Warning on Wednesday, 4th December through to the issue of a Red Warning on Friday 6th December.
9. At On 5th December 09:00 Daily Operational Update call, the decision was made to go to strategic Level 3 at 12:00. This would enable additional resources (20 over head line teams) and ensure additional logistics were on standby and in place. As weather warnings became more severe, SPM resource requests increased. SPEN was able to deploy resources from SP Distribution in Scotland in addition to support from other DNOs including SSE and additional support from Ireland with 894 in total out assisting the restoration of the network.
10. With the 2024 pre-storm exercise complete and teams readied for the storm period, there was clear district visibility of intensifying weather condition from Wednesday 4th through to storm impact. District Emergency Action Centres (EAC) opened as pre-planned and took over full resourcing and updating stakeholders from 6am Saturday 7th December, through to storm completion at differing times based on impact. EAC's remained open and operational for 18 hours per day, with staff staying overnight to prepare for the following day.
11. SPEN was represented on LRF and Tactical Co-ordination Groups (TCG) prior to the storm. Dyfed and Powys TCG escalated to Strategic Coordination Group (SCG) on 7th December at approximately 10:00hrs due to declaration of Major Incident, this was triggered due to 132kv fault resulting in widespread loss of supply to key services. In total there were 35 hours spent in communication with LRFs in Wales both before and during the storm.
12. SPEN worked closely with council leaders, councillors, and community councillors to ensure effective communication and coordination. This included at least twice-daily communications to this collective group, totalling 12 emails. These ranged from pre-storm communications to inform communities to get ready, updates throughout the storm on restoration efforts, and a post-storm email detailing the compensation process. The content included sharing more about the challenges faced, customer support updates, and news of progress made.
13. Additionally, a single point of contact was offered, which was instrumental in identifying emergency situations reported by communities on the ground. This contact allowed us to address MP and Councillor enquiries quickly and efficiently, providing first-line responses and relaying the history and actions taken. The Welsh Government was briefed each morning. During and following the storm,

several MPs and AMs were briefed specifically on situations in their constituencies to share live information on faults or vulnerable customers.

Priority Service Register (PSR) & Vulnerability Support

14. The PSR ensures that we are fully aware of our customers specific needs and can offer extra support where its most needed.

- Customers can join the PSR if they are:
- Are over the age of 60
- Have a special communication need
- Depend on electricity for home or medical care
- Have a child under 5 years of age
- Have chronic illness
- Or just feel you need a little extra help
- Customers are also able to join if they need support for a short period of time e.g. if they are recovering from an operation, pregnant, or recently bereaved.

In Advance of the Storm

15. In the lead up to Storm Darragh, SPEN proactively looked at gaps in our PSR registrations using multi layered data models. Through our PSR strategy and outreach, we have reached 96% of eligible customers vs census data, across SPEN there are 1.3m households on our register.

16. In addition, SPEN conduct a leaflet drop every year to promote the PSR – with the last drop carried out in September 2024. The purpose of the leaflet drop is to encourage customers to update their data, as it is important for compensation purposes. It also tells customers who we are and how to contact us and provides them with advice on what to do in a power cut and emergency scenario.

17. SPEN proactively SMS customers in the areas likely to be most impacted by a storm the day before and remind them to be prepared. We have a special PSR phone line open for customers, and are available to discuss support they require before, during and after an event.

During a Power Cut

18. When customers registered for PSR call us, they are prioritised in the queue through a matching process. As part of the process, we check vulnerability on every call to update records and check for new vulnerability and specific needs. SPEN made outbound calls to customers who were medically dependent to check on their welfare. During the storm we escalated a small number of cases to the Red Cross and Local Resilience Forum (LRF) partners.

19. Hot food was provided for customers via various routes such as ordering for the customers, providing vouchers, or directing them to a food van or café. LRF partners (such as social care) collected and delivered food for customers from food van. We also provided generators for customers who were in most need. Following the storm, we continued visits to check on the most vulnerable.

Storm Bert

20. Storm Bert started to impact the licence area around 8am on Saturday 22nd November, with the most intense gusts seen between 9am and 12 noon. The highest recorded wind gust was 83mph at Capel Curig at 9am. Winds also picked up again overnight on Saturday through to Sunday, particularly between 10pm and 1am, where the maximum wind gust was measured at 76mph.
21. Flood warnings were present throughout the licence area, and a Major Incident was called in Northwich, Mid Cheshire, due to Phase 1&2 flood defences being deployed. SPEN staff attended the area and confirmed that there were no risks to SPEN assets.
22. There were no safety issues escalated to the SPM Tactical Emergency Action Centre and no Guaranteed Standard of Performance (GS2, 12 Hour) breaches during Storm Bert. The longest duration off supply was 716 mins (11hrs 56 mins).
23. Storm Bert did not result in any major impact for SPM, and this meant that we did not exceed our normal “business as usual” position during the storm event.

Resilience and Storm Arwen Lessons Learned

24. SPEN have continually invested in network resilience through our Ofgem endorsed asset strategy. Our network held up well to Storm Arwen and this was recognised by Ofgem during their site visits at the time. Our networks cover approximately 12% of the GB customer base but we were responsible for 22% of GB investment in overhead line networks in the 5 years before Arwen. This strong track record of investment meant our network experienced fewer faults - with no damage at Transmission voltages and no interruptions from damage at Extra High Voltage.
25. During Storm Arwen, despite extensive damage to vegetation (~16m trees in Scotland) affecting the overhead network and shutting off roads, we restored 96% of customers within the first 48 hours and restored 100% of customers in half the time of other impacted DNOs.
26. SPEN had the shortest average customer call wait-time despite handling the highest volume of calls - and experienced no website interruptions.
27. After the Storm Arwen, SPEN was the first DNO to complete all mandatory compensation payments (2 weeks earlier than the next best DNO) and the first to

offer additional voluntary compensation payment for those off for more than 48 hours. SPEN was the only impacted DNO not to be subject to additional penalties following Arwen.

Improvements following Storm Arwen

28. **Network:** We have continued to invest in the resilience of our overhead line infrastructure, spending a further £220m since Arwen on modernising assets (including rebuilding 680km of lines), managing vegetation, undergrounding problematic spans and completing drone and helicopter asset surveys. We have deployed 1,850 new HV automation points to enable rapid reconfiguration and restoration of the system during power cuts and have plans to invest a further £310m in building resilience into our overhead lines by 2028.
29. **Systems:** We have successfully stress-tested our telephony and online systems and updated our weather alert systems. We are delivering the £5.6m Predict4Resilience project to use AI to predict where faults could occur up-to seven days in advance to mobilise engineers and equipment to shorten power cuts. We have expanded our staff storm roles to include new activities such as standby guard to free up operational resource, expanded the use of drones for fault finding, and digitised severe weather maps with satellite climate image analysis.
30. **Collaboration:** We have strengthened partnerships with LRFs through winter preparedness briefings and exercises, and the new industry-wide Memorandum of Understanding which defines roles, responsibilities for responders during storms. We led development of best practice for welfare principles for customer care and support and have updated the DNO mutual-aid agreement (NEWSAC) to extend the types of resources that can be shared.
31. **Communication:** We have increased our pre-winter readiness communications to customers to prepare themselves and know how to contact us. This includes updating their contact details and readiness to receive compensation payments. We have expanded staff training for call-handling and customer care. We have also improved processes for estimating restoration times to give customers more accurate information on timescales to restore power.

Areas for Improvement following Storm Darragh

32. Field communication was challenging as many areas with 4G masts off were supply, Airwave devices were limited, and Sat-Phones were working intermittently throughout. This meant that contact with the Control Room was delayed and slowed restoration throughout the event due to shear volumes.
33. Falling trees and branches caused 85% - 90% of damage during Storm Darragh, this being predominantly softwood trees and forestry plantations. The importance

good forestry management and cutting is vital, particularly in softwood plantations.

34. SPEN learned that bringing innovational data driven solutions to use in storm situation provided benefits; but there are notable opportunities to scale further.