Decision No. C24-0755

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF COLORADO

PROCEEDING NO. 24M-0173E

IN THE MATTER OF THE COMMISSIONS' INVESTIGATION INTO THE APRIL 2024 FRONT RANGE WINDSTORM AND XCEL ENERGY'S PUBLIC SERVICE POWER SHUT-OFFS.

COMMISSION DECISION ADOPTING INTERIM PROCESSES AND CLOSING PROCEEDING, IN PART

Issued Date: October 18, 2024
Adopted Date: October 9, 2024

TABLE OF CONTENTS

I. BY THE COMMISSION

A. Statement

1. By this Decision, the Commission adopts the interim processes Public Service Company of Colorado, doing business as Xcel Energy ("Public Service" or "Company) specified it was incorporating into its Public Service Power Shutoff" procedures on an interim basis until the Commission issues a final decision in the Company's 2025-2027 Wildfire Mitigation Plan and

Public Safety Power Shutoff Application ("WMP and PSPS") currently pending in Proceeding No. 24A-0296E. We also find this process portion of Proceeding No. 24M-0173E is now concluded. No other action will be taken in this Miscellaneous Proceeding since the Public Service WMP and PSPS application adjudicatory proceeding is currently underway. This proceeding will remain open only to receive updated information from Public Service through the monthly updates as discussed in more detail below.

B. Background

2. The Front Range experienced extremely high winds over the weekend of April 6 to 7, 2024, with wind gusts in excess of 100 miles per hour in some locations and sustained high winds throughout the weekend. This weather event resulted in pro-active wildfire mitigation actions deployed by Public Service on its electric transmission and distribution system.

3. In anticipation of the weather event, Public Service took a number of pro-active steps to reduce the risk of wildfire resulting from utility transmission and distribution lines. It changed the settings on certain distribution and transmission feeders so equipment would not automatically attempt to reclose, or re-energize, if the equipment tripped off-line. The Company also pro-actively de-energized certain distribution lines, a practice similar to the Public Safety Power Shutoff ("PSPS") process that is in place in other states such as California and Oregon. This was the first time that a Colorado utility pro-actively implemented a PSPS. These shutoffs impacted approximately 55,000 customers across six counties. In addition to those 55,000 customers impacted by the pro-active shutoffs, well over 100,000 additional customers lost power as a result of the wind event. The majority of these outages were in areas where the Company was conducting Wildfire Safety Operations ("WSO").

4. Immediately after the conclusion of the high wind event and power shut off, the Commission began to receive numerous complaints from the public. The Commission opened a portal on its website to receive comments and information from the public on how the outage affected them. In response to the large number of comments coming into the Commission on the web portal, on April 15, 2024, by Decision No. C24-0232, we scheduled a virtual public comment hearing to hear customers' firsthand experiences about how the outage affected them.

5. Pursuant to Rule 4 *Code of Colorado Regulations* ("CCR") 723-3-3253, of the Commission's Rules Regulating Electric Utilities, the Commission also sought additional information beyond the Major Event Reporting required pursuant to Rule 4 CCR 723-3-3252 from Public Service. Specifically, the Commission sought information regarding the Company's operational actions and decision-making during the PSPS, customer communications activities, and community engagement efforts. The Commission directed Public Service to provide the following information to be filed by April 26, 2024:

a.) A detailed timeline of the utility decisions and events related to the April 6 to 7, 2024 high wind event, including timeframes for restoration of service.

b.) The specific criteria used by the Company to determine what pro-active measures were taken on which transmission and distribution lines.

c.) A detailed map showing the miles and location of Public Service transmission and distribution lines, and the number of customers impacted at the height of the outages and at 5:00 pm on Sunday, April 7, 2024, for the following:

i.) Lines pro-actively de-energized

ii.) WSO activity

iii.) Total actual outages

d.) The process and procedures the Company utilized in order to restore service including:

i.) Prioritization of restoration activities

ii.) Physical inspection processes and timeline, including descriptions of the use of helicopters, drones, or other technology to conduct line inspections

iii.) Description of any differences in the restoration process for the various categories of outage (*e.g.*, preventative outages, WSOs, and other outages)

iv.) Information regarding the number of and nature of issues encountered (*e.g.*, number of downed trees on lines, number of bent poles and other issues).

e.) Information regarding whether and how much assistance Public Service sought or received from other utilities or non-utility crews including an explanation of the Company's decision-making regarding such actions.

f.) Public Service's customer emergency communications plan in effect during the April 6 to 7, 2024 event.

g.) A detailed timeline of all customer communication efforts during the course of the high wind event including the method of communication. Provide the specific information supplied for different kinds of customers - residential, commercial, medical community, customers dependent on durable medical equipment and other impacted customers.

h.) Provide all maps provided to the public over the course of the event, the timeframe of when they were provided, and the means of communication (*e.g.*, describe what website or other media were used to provide such maps).

i.) A description of the Company's coordination efforts with other neighboring electric service providers including a timeline of communications and information provided or requested.

j.) A description of the Company's coordination efforts with other kinds of service providers such as telecommunications companies, basic emergency service providers, wireless providers, Public Safety Answering Points, first responders, other county level emergency response and disaster management agencies - including the timeline of communications and information provided or requested.

k.) A description of the Company's coordination efforts with medical service providers. Include a description of the Company's efforts to identify and contact customers with electricity-dependent medical equipment.

6. The public comment hearing was held on April 17, 2024, at which the Commission heard from over 50 Public Service customers, including residential customers, customers

dependent on durable medical equipment and local business owners. Additionally, the Commission received over 700 written public comments through the web portal.

7. By Decision No. C24-0256, issued April 24, 2024, the Commission set a Commissioners' Informational Meeting ("CIM") for May 6, 2024. We set this CIM to hear from Public Service a detailed description of its actions before, during and after its PSPS, and the responses to questions we set out in Decision No. C24-0232. We were also interested in hearing: how Public Service made decisions on where and when the PSPSs were initiated, including an explanation of any wildfire modeling; the frequency, timing, and methods of communications to customers; the process of restoration of service; and Public Service's response to the oral and written public comments that the Commission had received up to that point. We also scheduled time in which a panel of city and county mangers and emergency personnel would be convened to hear about their experiences with the PSPS of April 6 through 7, 2024 and their recommendations for going-forward.

8. At the May 6, 2024, CIM, Mr. Robert Kenney, President of Public Service and Mr. Michael Lamb, Senior Vice President of Distribution and Gas Operations discussed the key event takeaways from the high wind event and outages. Also discussed was an overview of the operational mitigations the Company utilized for high wind risk; the criteria for enabling WSO, Wildfire Safety Settings ("WSS"), and PSPSs. As part of its presentation, Public Service explained the use of its Technosylva software used to model the PSPS and risk analysis. The Company offered its explanations as to why some neighborhoods were impacted partially with some residents experiencing outages, while neighbors retained power, as well as neighborhoods impacted by PSPS and why those neighborhoods with underground lines were nonetheless subject to the PSPS.

9. Public Service discussed its communications issues with customers during the high wind event and the restoration of power upon the event's conclusion. Public Service asserted it was committed to improve communications, publish maps of areas affected by outages, and support line workers to restore power as soon as possible. The Company also set out a plan for improved PSPS communications that includes earlier and more frequent communications.

10. The second part of the CIM involved a dialog with directors of local Offices of Emergency Management ("OEM") including Mr. Mike Chard, Boulder Director of Office of Disaster Management, Mr. Nathan Whittington, Jefferson County Manager of Emergency Management, and Ms. Lori Hodges, Larimer County Director of Emergency Management, as well as Ms. Bettina Swigger, CEO of the Downtown Boulder Partnership. Each of these participants provided anecdotal information and firsthand accounts of the consequences of the outages, including a lack of communication or advance notice by the Company. They also discussed from their perspectives, how the Company should improve its communications and advance notice protocols with local governments to ensure transparency as early in an outage process as possible.

11. The central theme of the emergency management directors was the importance of early, frequent, accurate, and consistent communications between Public Service and local governments. For example, while Larimer County was satisfied with the advance notice it received that a PSPS would be initiated, that satisfaction was not shared by Boulder and Jefferson Counties. Mr. Whittington indicated he only received notification two hours before the press conference announcing the PSPS. According to Mr. Whittington, this was only because he was asked to participate in the press conference.

12. Mr. Chard found the Company's integration, operational and situational awareness information was exceptional Tuesday morning after the conclusion of the high wind event and the

PSPS, which allowed Boulder County to move forward with response and recovery plans. However, Mr. Chard noted that efficiency, cooperation and proactive communication from Public Service should have also been provided on Friday, April 5, 2024, prior to the commencement of the high wind event and initiation of the PSPS. Instead, Mr. Chard indicated he had not been made aware of the PSPS until mid-morning on Saturday, April 6, 2024. As a result, Boulder had limited time to address issues with housing needs, ensuring people reliant on durable medical equipment would have power, and to develop plans for traffic impacts.

13. Boulder, Larimer and Jefferson Counties agreed that accurate, up-to-date outage maps are critical in PSPS situations. Mr. Whittington requested that an API or GIS platform be utilized for detailed maps to keep counties better informed of how outages are moving throughout the area. Not only are these maps critical prior to and during outages, but when distribution and transmission lines are re-energized as well, so counties know what areas are functioning. Another component the counties agreed was critical included an integration of effort between Public Service operations teams and the counties. Boulder, Larimer and Jefferson Counties indicated that a predictable response environment resulting from such integration is paramount to ensuring efficiencies and reducing wasted effort and resources.

14. Ms. Swigger, CEO of the Downtown Boulder Partnership provided information on data received from an economic impact survey conducted among Boulder businesses to gauge the impact on businesses because of the outage there. It is estimated that $1.3 million to $1.4 million in revenue was lost during the outage, just among surveyed customers in Boulder. Approximately $240,000 in unpaid wages also resulted from the outage. Because these business losses impact the individuals who own those businesses and the people employed by them,

Ms. Swigger urged that businesses be included in PSPS information sharing as well, so they may prepare for outage impacts.

15. On June 11, 2024, we issued Decision No. C24-0400 in which we expressed our concerns with what we heard at the May 6 CIM from Public Service, local emergency operations managers, local business leaders and the public regarding the way Public Service handled the PSPS. It was clear further action was necessary to improve on the events of the April PSPS. We found it imperatively necessary to ensure a sound transition plan for the interim period until a final decision is issued in the WMP and PSPS application proceeding. We found we all must collectively do better in the event of a similar extreme weather occurrence.

16. In Decision No. C24-0400, we indicated the information received from public comments, both written and at the public comment hearing was invaluable and informed the Commission of the consequences of an outage situation accompanied by inadequate communication and cooperation from Public Service. We also found invaluable the information received by local government emergency management leaders as to how the Company could work better with local emergency management offices and first responders to ensure transparency and timely and continuous communications with the public. This was especially important for those members of the public reliant on home medical equipment, to be able to make alternative arrangements in anticipation of a weather-related outage event.

17. In discussing its commitment to improve the PSPS process, Public Service represented it did not intend to wait until its WMP and PSPS application proceeding is complete to begin implementing changes to how it handles PSPS events. Mr. Kenney committed to improvement, including earlier, more frequent, more accurate, and more consistent communications.

18. Given the 700 plus written comments the Commission received through its website, the 50 people who spoke at the public comment hearing, and the information from local emergency management directors we received at the CIM, it was apparent that while Public Service should be acknowledged for initiating its first ever PSPS in Colorado, much was still required to improve that process. More high extreme weather events are inevitable along the Front Range. Therefore, we found it imperative to begin to move now to improve the cooperation between Public Service and local governments to ensure a PSPS process that is efficient, effective and transparent.

19. In Commission deliberations on May 15, 2024, Chairman Blank set out eight areas to be addressed to help inform parties of the Commission's priorities going forward. First, we wanted to see a list of business associations, chambers of commerce, emergency operations centers, and downtown partnerships developed, identifying those who have been or are likely to be adversely impacted by high winds.

20. We also saw a need and a priority to create detailed and accurate PSPS maps defining forecasted high wind and outage areas prior to and during high wind events. Those maps should overlay with county maps identifying critical facilities and homes with residents reliant on durable medical equipment, so local governments can accordingly direct increased resources to those areas in preparation for outages. We also urged Public Service to develop maps and lists in conjunction with local governments identifying local critical facilities and infrastructure customers including hospitals, water treatment facilities, as well as residential customers and assisted living facilities reliant on durable medical equipment.

21. We determined information on backup power, including batteries and generators at each facility, and available backup options for residential customers would also be important to develop and share. We indicated a need to see options made available through the regulated system

that could be facilitated through rebates or other mechanisms to ensure backup power is available when needed. We were also interested in learning about the technology available, including sensors and visual inspection technology that would more quickly restore power and require fewer patrol inspections of power lines following a PSPS or other outages.

22. We saw these as the core questions that should be answered by Public Service and other stakeholders as we transition to the next phase of incorporating best practices and state of the art technology in what we see as an increasing use of PSPSs. Consequently, we urged the Company to prioritize its response to these concerns and continue to keep the Commission apprised of its progress in improving its PSPS processes. We then set out the foundational criteria we expected Public Service to utilize in establishing a coordinated and effective PSPS scheme as soon as possible.

23. It was apparent the PSPS suffered from a lack of effective coordination with municipalities and emergency operation centers during the high wind and subsequent outage event. In order to improve coordination, we wanted to see a phased approach to extreme weather events that could lead to outages. For example, when an extreme weather event is imminent such that a PSPS is likely, we advised Public Service to share information with, and accept updates from, local jurisdictions in a more proactive manner. Such information sharing should include:

a.) Identifying areas of the system where communications are dependent on electric service being operational, including type, location and duration of backup, especially in more remote mountain areas.

b.) Identify critical infrastructure reliant upon electric service such as hospitals, assisted living facilities, and rehabilitation centers. Such information should include the specific type of facility, location, whether emergency electric backup equipment is available and if so, identifying the type of equipment.

c.) Incident protocols need to be developed and incorporated into trainings with emergency services agencies on a regular basis as well as coordination to establish the identity and location of customers with medical needs using electric-dependent durable medical equipment. Cross-referencing that

information with local jurisdictions if possible, taking into consideration privacy issues, is critical to ensure accuracy.

24. For each of those critical factors, we wanted Public Service to identify and address critical communications, infrastructure and facilities, as well as identify medically dependent customers as opportunities for Public Service to partner with those facilities and customers in order to provide necessary backup equipment for PSPS events. We also identified the need for the Company to investigate whether that backup equipment could be used to provide power back to the grid during other times, or whether demand response programs for backup equipment could be feasible to lessen the cost of implementing such backup programs for all ratepayers.

25. Discussion from the CIM demonstrated that prior to the occurrence of a PSPS event, written and widely disseminated communication plans should already be in place. Additionally, proactive warnings of a PSPS to local emergency operations centers should occur as a matter of course. As we heard, notifications to local emergency operations centers were inconsistent and unpredictable. Early communication of a PSPS should be a priority to allow local governments to plan their responses with sufficient advance warning. We wanted Public Service to inform us of protocols it plans to pu in place to provide redundancy of communication through multiple channels to meet people where they are.

26. It was evident from discussions at the CIM there is a need to establish a single point of contact at Public Service available primarily to emergency operations centers. Local emergency officials were adamant this was critical to avoid confusion as to whom to contact for information and for verification. We urged the Company to establish a regular cadence for updates to all local emergency operations centers prior to and during PSPS events. Based on comments made by local emergency officials at the CIM, there was also concern that some counties received regular updates while other counties received sporadic communications.

27. As reported by local emergency operations directors, some of the initial maps of the April outage were incorrect and information was not timely updated to customers. Further, initial Public Service press releases omitted Larimer County, even though it was aware the county was included in the outage. We concluded that rather than respond to appeals for updated or corrected information, the Company should have a system in place to continuously provide accurate and timely information at reasonably close intervals.

28. We also determined minimizing the time necessary for an outage during a PSPS should be of prime importance to Public Service. We requested the Company establish mechanisms for remote sensing and verification of energizing capability to speed up reenergization of lines at the conclusion of a PSPS. Additionally, we requested the Company report back to us on ways in which the topological architecture of the system can maximize reliability while isolating areas with the potential for higher risk from extreme weather events and fire.

29. We understood Public Service would codify lessons learned from the extreme weather event which would address some of the concerns we raised based on what we heard from the public and local emergency operations directors. We anticipated such a filing would help ensure we employ a state-of-the-art emergency outage plan that safeguards the health, safety and welfare of all Colorado citizens in the event of an extreme weather event, particularly during the interim period before a final Commission decision is issued in the Company's pending WMP and PSPS application filing.

30. It was clear further action would be necessary to improve on the events of the April 2024 PSPS. We wanted to ensure a sound transition plan was in place for the interim period until a final decision is issued in the WMP proceeding. We found this necessary to ensure we collectively do better in the event of a similar extreme weather occurrence.

31. On July 11, 2024, Public Service filed its replies addressing the Commission's concerns with how the Company conducted its PSPS in April and how it intended to move forward on an interim basis until permanent processes could be established in the WMP and PSPS adjudicatory proceeding currently moving forward at the Commission. Public Service represented it is in the process of making improvements for future PSPS events and other wildfire operations. Public Service stated that although some of its improvements will take time to implement, its processes will be better than they were in April 2024, and they will continue to improve over time. Public Service stated it is making improvements as follows.

A. Improve communications with its customers:

- By working to launch public-facing web content with up-to-date information about PSPS events and Enhanced Powerline Safety Settings.
- Preparing more user-friendly maps of outages, including for potential proactive power shutoffs.
- Communicating with customers and other stakeholders who may be affected by a PSPS event through multiple channels in advance of the expected event.
- Communicating with customers and other stakeholders at regular intervals to provide frequent updates and timelines throughout PSPS events and during the restoration process.
- Engaging with the community on wildfire operations through virtual town hall meetings.
- Ensuring multi-lingual communications.

B. Increasing support for critical care customers:

- By maintaining a thorough list of Critical Customers, such as emergency services, medical services, municipal utility service, and large power users, including updated records of backup power capabilities.
- Identifying and maintaining a list of residential customers with electricity dependent medical needs through outreach to all residential customers to ensure up-to-date information.
- Providing targeted communications and dedicated resources to Critical Customers and electricity dependent medical needs customers ahead of and during PSPS events.

- Establishing power restoration processes that consider impacts to Critical Customers.

C. Improving coordination with its communities:

- By expanding partnerships with state government, community-based organizations, and local offices of emergency management in areas of elevated wildfire risk.
- Establishing a communication plan with emergency response partners like police, fire departments, hospitals, and other essential service providers to ensure integration and coordination during an event.
- Partnering with government agencies and non-profits to support customers and address community needs effectively.
- Conducting proactive outreach to business associations, chambers of commerce, and downtown partnerships in areas of elevated wildfire risk.
- Coordinating with adjacent utilities whose systems could be affected by a PSPS event.

32. Public Service also responded to the specific questions and concerns we posed in Decision No. C24-0400. We requested the Company develop a list of business associations, chambers of commerce, emergency operations centers, and downtown partnerships that have been, or are likely to be adversely impacted by high winds.

33. Public Service stated it will be conducting in a proactive manner, outreach to business associations, chambers of commerce, and downtown partnerships in areas of elevated wildfire risk to educate them on the Company's wildfire activities and where additional resources are available. Public Service adds, this process will also assist the Company in gaining a greater understanding of the role such business groups may play in advancing its wildfire-related outreach, as well as preparing businesses for the impacts of its wildfire mitigation measures. Concerning emergency operations centers, the Company addresses issues related to such types of facilities further below.

34. We requested Public Service also create detailed and accurate PSPS maps defining forecasted high wind and outage areas prior to and during high wind events. We wanted these maps to overlay with county maps identifying critical facilities and homes with residents reliant on durable medical equipment so local governments can accordingly direct increased resources to those areas in preparation for outages.

35. In response, Public Service states it has taken steps to improve its outage map to provide additional information to customers on impacts of a PSPS event. The Company provides its outage map will approximate the geographical extent of customer impacts during a PSPS event, displayed on an interactive online map that displays the paths of affected electrical infrastructure and the residences and facilities likely to be impacted. Customers may navigate in the map to their locations to understand whether they are likely to be impacted or not. The Company indicates it will generate the map as quickly as possible once PSPS impact boundaries are established.

36. The Company proposes to generate the map as quickly as possible once PSPS impact boundaries are established. However, because the map updates must be completed manually, Public Service cautions it may require approximately two hours to update the map with PSPS boundaries. The Company commits to communicate to customers how they can access the online map, including through media outreach, social media, customer emails, and references in its online resources.

37. The Company states it is also working to develop an upgraded outage map for future release that will incorporate features related to PSPS that will allow customers to see visual representations of impacted PSPS areas during events. The upgraded outage map is intended to provide customers with more detailed information on the status of power disruptions in their area. Public Service further indicates there may additional improvements to the map in the future.

38. We stated a preference for Public Service to develop maps and lists in conjunction with local governments identifying local critical facilities and infrastructure customers including hospitals, water treatment facilities, as well as residential customers and assisted living facilities reliant on durable medical equipment. Information on backup power including batteries and generators at each facility and available backup options for residential customers would also be important to develop and share.

39. The Company states its outage map should permit OEMs to review areas of its system where critical facilities or homes with customers relying on durable medical equipment exist. Due to privacy concerns, the maps cannot identify Public Service critical customers, critical facilities, or customers on durable medical equipment. Nonetheless, The Company claims OEMs will have a resource to cross check the potential of specific facilities or residences to be part of a proactive power shutoff.

40. Public Service represented that it is addressing these issues in its 2025-2027 WMP. The Company states it has included its current working definition for "Critical Customers," which includes categories of customers such as Critical Facilities, Critical Infrastructure, and Large Electric Load Customers with automatic throw-over capability. In applying this working definition for Critical Customers, the Company intends to partner with OEMs to consider their own identification of local critical facilities and infrastructure as well as identify and consider whether these customers have known backup power options.

41. Public Service has also defined "Qualifying Medical Customers," which includes customers that are dependent on electric-powered medical devices. To support those customers, beginning on June 25, 2024, the Company launched an outreach campaign to contact its customers through email and phone calls to ensure they are aware of the Company's medical assistance

programs. Public Service expects this outreach campaign to lead to growth of its customers enrolled in its medical assistance programs, which in turn will assist the Company in identifying customers on its system that are Qualifying Medical Customers.

42. We requested Public Service investigate to determine options made available through the regulated system that could be facilitated through rebates or other mechanisms to ensure backup power is available when needed.

43. In response, the Company points out its 2025-2027 WMP is introducing a new rebate offering called the PSPS Resilience Rebate for certain residential customers to assist their procurement of back-up power resources. Eligible customers would be its Income-Qualified customers, customers enrolled in the Company's Medical Exemption Rate, and customers enrolled in the Company's Medical Certification Program. According to Public Service, the rebate will encompass Battery Energy Storage Systems and Vehicle-to-Home charging equipment to assist in the mitigation of outages experienced during PSPS and wildfire events. Public Service maintains the back-up storage device can assist customers in moderating the impacts of the power outage and powering critical home electrical devices necessary to protect customer safety and wellbeing. Vehicle-to-Home equipment could similarly be used by customers to facilitate back-up energy supply, where the back-up energy supply source would be the battery in an electric vehicle. The Vehicle-to-Home equipment would allow a customer to harness the power supply from their electric vehicle to power their home and associated critical home devices according to Public Service.

44. As encouraged by the emergency management directors, we also wanted to see Public Service propose a more integrated system between it and counties, including protocols for

coordinated power outage meetings, and a dedicated single point of contact at the utility that counties know will be available to provide the most current information available.

45. The Company states it has been meeting with OEMs and receiving their input on ways to improve its communication and planning. Those meetings, according to Public Service, have been successful in promoting refinements to the Company's existing single points of contact and improving consistency between its various Company Area Managers. Public Service additionally notes that in its 2025-2027 WMP it is proposing to add a Community Resilience Manager. This role, the Company states, will serve as the new single point of contact for county emergency operations, first responders, and other emergency preparedness and response officers, to ensure coordination with stakeholders during PSPS events, as well as during other wildfire emergency response events. By maintaining this position, the Company believes it will have greater embedded resources to ensure the consistency of emergency response preparations with the communities we serve.

46. We were likewise interested in learning about the technology available, including sensors and visual inspection technology that would more quickly restore power and require fewer patrol inspections of power lines following a PSPS or other outages.

47. Through deployment and use of Enhanced Powerline Safety Settings ("EPSS"), Public Service maintains it will be able to segment and reduce the areas of its system that are part of PSPS events. With reduced areas that experience a proactive de-energization, the Company claims it will reduce the amount of the system that it needs to inspect as part of the power restoration process, which promotes a faster return to service. Public Service also points to technological advances occurring in fault detection. It provided the example of sensors that are currently available, that can provide for real-time identification of specific system issues such as

faults that occur while the feeder is de-energized, so a utility could dispatch crews to a specific location where a known problem exists. These types of sensors, according to Public Service, could allow for virtual inspections to occur to speed up the inspection process.

48. The Company also notes other resources that could aid in certain circumstances in speeding restoration which may involve more sophisticated drone technologies that conduct inspections of individual sections of its facilities, as well as greater helicopter resources to support faster visual inspections. However, Public Service gave no indication those technologies are currently set to be deployed by it.

49. We also remarked that when an extreme weather event is imminent so a PSPS is likely, Public Service should share information with, and accept updates from, local jurisdictions in a more proactive manner. This should include identifying areas of the system where communications are dependent on electric service being operational, including type, location and duration of backup, especially in more remote mountain areas.

50. The Company states it will be working with OEMs to identify Critical Customers on its system, which may also encompass Critical Customers that have communication needs dependent on electric service. The identification of these types of customers will require coordination and partnership with OEMs, who are likely in the best position to locate them.

51. We further identified a need to develop incident protocols and incorporate them into trainings with emergency services agencies on a regular basis as well as coordination to establish the identity and location of customers with medical needs using electric-dependent durable medical equipment. We also saw a need to cross-reference that information with local jurisdictions if possible, taking into consideration privacy issues, is critical to ensure accuracy.

52. In response, Public Service maintains it is currently in the process of contacting its customers to raise awareness of the Company's medical assistance programs, which will promote its identification of Qualifying Medical Customers on its system. The Company notes it may not provide to emergency services agencies the identification of its Qualifying Medical Customers, without receiving consent to do so from those customers. Nevertheless, through discussions and partnerships with local jurisdictions, the Company is open to additional tactics to raise awareness with customers of its medical assistance programs. Through the registration of its customers in these programs, the Company will maintain documented and reliable listings of its Qualifying Medical Customers.

53. For each of those critical factors, we wanted Public Service to identify and address critical communications, infrastructure and facilities, as well as identify medically dependent customers to consider potential roles for the Company to partner with those facilities and customers in order to provide necessary backup equipment for PSPS events. We also requested the Company investigate whether that backup equipment could be used to provide power back to the grid during other times, or whether demand response programs for backup equipment could be feasible to lessen the cost of implementing such backup programs for all ratepayers.

54. The Company agrees with the importance of identifying and addressing through communications its Critical Customers and Qualifying Medical Customers, to educate them on wildfire mitigation activities, including the potential for related outages. In partnering with such customers, Public Service states it intends to consider their backup power supply resources. Public Service represents it will be offering a rebate for certain residential customers, including Qualifying Medical Customers, to assist their procurement of backup power supply. For its Critical Customers, the Company states it does not have a wildfire specific proposal to enhance their

backup power supply alternatives. However, it notes some of those customers already have backup power supply resources (*e.g.*, hospitals), and the Company indicates it is interested in learning more about the additional needs of these customers for backup supply and whether Public Service should consider additional offerings to facilitate those resources.

55. In terms of using customer backup power supply resources to support the electrical grid, Public Service proposes to encourage customers to consider enrolling in the Demand Management programs, such as Peak Day Partners and Peak Partner Rewards, allowing customers to receive incentives and credits for their reduction of load during peak times. The Company is considering opportunities to combine into its wildfire mitigation communication and engagement, information related to Demand Management programs to assist customers in reducing the cost of implementing backup power supply resources.

56. Prior to the occurrence of a PSPS event, we stated we would like to see written and widely disseminated communication plans to already be in place before a PSPS event occurs.

57. Public Service states it has developed an education and outreach strategy to deploy prior to the occurrence of PSPS and wildfire emergency events. The Company plans on publicizing through media outreach, website updates and social media posts, a Geographic Information System map of approximated and forecasted PSPS areas. Additionally, the Company states it will amplify messaging from, and partner with, third-party public safety and emergency response organizations.

58. We wanted to see proactive warnings of a PSPS to local emergency operations centers which should occur as a matter of course. As indicated in the CIM, notifications to local emergency operations centers were inconsistent and unpredictable. Therefore, we find early communication of a PSPS should be a priority to allow local governments to plan their responses with sufficient advance warning.

59. Public Service states it intends to provide advanced notice of up to 48 to 72 hours of PSPS events to OEMs, local and state officials, the Commission, Critical Customers, and Qualifying Medical Customers. The advance notifications will assist in readying the Company's emergency partners in coordinating and preparing for outages associated with a PSPS event.

60. We would also like to see protocols established that will provide redundancy of communication through multiple channels to meet people where they are.

61. The Company agrees that redundancy of communications through multiple channels is necessary, and those communications should seek to meet people where they are. Public Service states it will communicate through outbound telephone calls, emails, and text messages to the customers that are expected to be affected by a PSPS. The Company also intends to publicize PSPS events via media outreach, website updates, social media posts, and outage maps of approximated forecasted PSPS areas. Public Service believes its redundancy of communication mediums will foster widespread communication of PSPS events.

62. It was evident a single point of contact at Public Service available primarily to emergency operations centers was imperative. Local emergency officials were adamant this was critical to avoid confusion as to who to contact for information and for verification. Consequently, we wanted the Company should establish a regular cadence for updates to all local emergency operations centers prior to and during PSPS events.

63. The Company agrees with using single points of contact with local emergency officials, and the Company plans to deploy a new fulltime position to act as such a standalone contact for emergency operations, first responders, and other emergency preparedness and response officers.

64. We noted it was of utmost importance for Public Service to provide accurate information and update information as soon as possible.

65. Public Service responded that it monitors multiple data streams, including meteorological and wildland fuel conditions, ongoing fires, fire suppression resource availability and constraints, electrical system conditions and outages, asset conditions, and field observations, among other items. Public Service pledges to proactively communicate reliable, accurate, and timely information to its employees, customers, emergency responders, the general public, and other stakeholders before, during, and after a PSPS event. Public Service represents this matter is also addressed in the Company's PSPS plan.

66. We asked the Company to look at ways in which the topological architecture of the system can maximize reliability while isolating areas with the potential for higher risk from extreme weather events and fire.

67. Public Service replied it has revised its identification of the highest wildfire risk areas on its system through an updated Wildfire Risk Map, which was based on federally recognized landscape data sources. According to the Company the map includes a weighted evaluation of wildfire and population risk to match local variables in Public Service's service area and with its assets. The Company notes its entire service territory is established into one of three risk tiers, with Tier 1 having the lowest wildfire risk and Tier 3 having the highest wildfire risk. The Wildfire Risk Map according to Public Service, will allow assist it in prioritizing where to complete work on its system.

68. In addition to our questions and concerns to which the Company responded, several other parties also filed responses our questions and concerns. The City of Boulder ("Boulder"), CTIA and the American Lung Association ("ALA") all filed responses.

69. Boulder states Public Service's response to the Commission lacks details on the timeline to implement the various actions discussed. Boulder complains the discussion is high level and lacks clear milestones, metrics and deliverable dates, making it difficult to understand how and when the proposed actions will be implemented relative to the schedule for the Wildfire Mitigation Plan and the anticipated approval and implementation of that plan. Boulder asserts there is an obvious gap between today and the Commission decision on the Wildfire Mitigation Plan application, and that gap spans a significant portion of the upcoming wind season in and around Boulder.

70. While Boulder appreciates the Company's recognition of the need for improved communications and outreach, Boulder finds it is unclear if additional mitigations are being considered While it finds it is absolutely necessary to improve notification to operators of critical facilities, Boulder notes there does not appear to be a recognition that other mitigations must be maximized prior to shutoff of a critical facility. Boulder is concerned there is a real risk that backup power units may not perform properly and, certainly, fuel supply can be a substantive issue when backup units must operate for days. According to Boulder's comments, this can be compounded by the magnitude of the events causing many entities to compete for any non-dedicated backup resources and fuel.

71. Boulder also notes not all facilities are suitable for reliance on on-site generators for backup. It notes an industry gold standard for these types of facilities is to use redundant primary power sources from two different geographically located substations. It points out Public Service did not include this in its proposed temporary PSPS plan. Boulder takes the position that there are critical facilities that must be considered uninterruptible. For facilities whose interruption of power presents an immediate threat to public safety and health, different

mitigations, accelerated hardening, service segmentation to allow reduced line loading, and fire watch must be adopted. Boulder concludes that interrupting these types of customers at all, especially without warning, does not meet the standard of Public Service's obligation to serve. Boulder continues to have concerns Public Service has not fully considered that everyone that faces health, life, safety or severe economic impact from a PSPS is not Public Service's direct customer.

72. CTIA, a national wireless provider, states it is imperative that wireless providers are affirmatively identified for receipt of advanced notice of pending PSPS event. CTIA notes wireless providers need such notices to be delivered at pre-determined intervals, except when changed circumstances dictate more rapidly disseminated notice, and to contain needed actionable information. They also need processes in place to ensure that wireless providers and electric utilities alike identify in advance the appropriate contacts for such notice. CTIA points out that although advance notice containing crucial information that is delivered to the correct contact is vital, it is equally important that the exchange of such information is conducted in a way that avoids disclosure of information that could compromise public safety if released. CTIA also urges that restoration priorities be established in consultation with wireless providers so that critical wireless facilities that are without power can be re-energized expeditiously.

73. CTIA also proposes that Public Service should identify wireless networks as critical infrastructure. CTIA suggests that the Company include wireless networks in a definition of Critical Infrastructure. According to CTIA wireless networks have long been recognized as critical infrastructure. Their critical nature is also evidenced by their designation in the National Response Framework as indispensable to the delivery of an Emergency Support Function. CTIA suggest that either defining Critical Infrastructure to include wireless networks, and the backhaul networks that

carry wireless traffic from cell sites, or adopting the federal definitions, will improve its PSPS Plan by leaving no doubt regarding who must receive particularly detailed notices in order to best maintain public safety during a PSPS event.

74. ALA recommends the Commission require annual PSPS tabletop exercises, enrollment benchmarks and reporting requirements for growing vulnerable customer programs, and standards for accessibility and services available at community resource centers, including oxygen tanks and charging for medical devices.

75. ALA urges Public Service to apply more robust strategies to identify medical and other access needs. ALA notes the Company's current communication plans include goals to improve communication with critical customers like medical facilities. ALA urges that plans to identify qualifying medical customers should go beyond encouraging customers to self-identify, which places the burden on the vulnerable individuals.

76. ALA states more work should be done to coordinate with healthcare providers and durable medical equipment distributors to identify and communicate with their patients and customers. In the case of individuals who rely on portable oxygen concentrators and supplemental oxygen, even an advance notice of 48 to 72 hours prior to a PSPS event may not be enough time for a supplemental oxygen distributor to respond to a customer's request for extra oxygen tanks.

C. Findings and Conclusions

77. The events precipitating the April 6 to 7, 2024 extreme weather event and subsequent voluntary outage, certainly warranted Public Service calling a PSPS. Sustained high winds during that time required power shutdowns to prevent a potentially dangerous and costly wildfire. Public Service acted prudently in shutting off power to certain areas of the state. Nonetheless, there were issues associated with the PSPS, as we heard from local OEMs, business

leaders and the public. We appreciate the progress the Company has made to date in improving its PSPS processes, as well as its commitment to continue to work with emergency management personnel to improve coordination and communications. We intend to ensure that progress continues throughout the interim period until we issue a final decision in Public Service's 2025-2027 WMP and PSPS application proceeding. Based on the commitments Public Service has made to upgrade its PSPS until a final decision in Proceeding No. 24A-0296E, we find it appropriate to adopt Public Service's plan for process improvement as set forth in responses to Decision No. C24-0400, filed the Commission on July 11, 2024, and further discussed by the Company at the May 6, 2024, CIM.

78. As regards coordination with OEMs and first responders, we were pleased to hear of the July 16, 2024, work session Public Service held with members of the 14-county North Central All-Hazards Emergency Management Region ("NCR"). Public Service represented it had committed to hold additional work sessions with NCR, including workshops focused on GIS interoperability and critical infrastructure prioritization.

79. As part of Public Service's pledge to continue working with OEM's and first responders, we would like to see the Company follow-through on additional work sessions as well as development of the "OEM Playbook" requested by NCR in their filing with the Commission. In order to track this progress, we require Public Service to provide bi-monthly progress updates to the Commission on these actions and submit to the Commission the final OEM Playbook once completed and approved by NCR.

80. We find it imperative that the PSPS plans Public Service is coordinating with NCR be applied to its entire service territory vulnerable to extreme weather events and wildfires. We therefore request, to the extent it has not already done so, for the Company to immediately schedule

additional work sessions with all emergency management regions within the Company's service territory and continue to develop plans and agreements. We require Public Service provide updates on its progress developing similar PSPS plans in other regions. Updates on the progress the Company is making moving forward with OEMs and first responders will help the Commission understand how coordination is improving during this interim period.

81. Based on the commitments Public Service has made to the Commission, and to those parties responding to the Company's plans and assurances to upgrade its PSPS until a final decision in Proceeding No. 24A-0296E, we adopt Public Service's commitments and the plans it has set forth in its filings in this proceeding, and in discussions at the CIM, as its interim plan for improving its PSPS processes. We particularly address several salient points of the plan the Company presented as set forth below.

82. Public Service has committed to improve overall communications, including "clearer and earlier time horizons" for customer communications and improved online maps to show affected areas. The Company has also committed to earlier notification of planned outage events. In order to track these improved communication measures, we request Public Service continue to focus on providing customers access to timely, comprehensible, and relevant information regarding the timing of events, the locations where outages will be experienced, available support services, and expected outage restoration and recovery timelines. In furtherance of its commitments for improved communications, Public Service should provide on the Company's online "Electric Outage Hub" a description of each wildfire safety setting employed by it so that customers can better understand the different types of outages that may occur during a weather event.

83. We also require Public Service provide continuous updates of how it is improving customer communications as it set forth in its July 11, 2024, response, including: launching its public-facing web content with up-to-date PSPS information; preparation of more user-friendly maps; dissemination of educational materials through social media, text messaging and emails; and, amplifying messaging with third party public safety and emergency response organizations.

84. We also require updates as to how the Company is improving its redundancy of communication through multiple channels to foster more widespread communication of PSPS events. Updates are also required on the Company's strategy to communicate with local businesses and business leaders and how it will provide accurate information to them to assist in mitigating economic losses during a PSPS.

85. Public Service committed to reach all of its Qualifying Medical Customers by phone and email by October 10, 2024, to update their contact information so that these customers can be reached prior to an outage event. We require updates in the Company's first bi-monthly update as to its progress in updating this contact information

86. We would also like to see, prior to November 30, 2024, Public Service conduct one "test message" to Qualifying Medical Customers using the same communication method (text or email) that would be used in an actual PSPS event and report to the Commission on the results of that test run. We require the Company to provide updates on what methods it is using to expand the Company's list of medically dependent customers and what approaches it is taking to ensure it is identifying as many critical care customers as possible. We also require the Company provide updates as to how it is ensuring medically dependent customers have timely access to PSPS notice to ensure they can obtain necessary medical equipment such as backup oxygen.

87. Public Service indicated it is working with the Office of Emergency Management to develop lists of "Critical Customers" so these customers (*e.g.*, emergency services, medical services, municipal utility service, and large power users) can receive enhanced notification. In order to ensure these lists are as comprehensive as possible, we require Public Service file with the Commission, a list of all currently identified Critical Care Customers which would be used by the Company should a PSPS event occur today. Public Service should also provide to the Commission documentation of all communications (emails and meeting agendas) with the state Office of Emergency Management addressing development of this list.[1] Public Service is also required to provide a list of those customers it considers "Critical Care Customers" including hospitals, emergency services, municipal utility services and large power users and how it intends to work with them to provide backup power and prioritize restoration of power to those critical customers, including cell phone providers.

88. Public Service indicates it is preparing user-friendly maps of outages, including for potential proactive power shutoffs. Public Service is to provide updates as it improves its maps during this interim period, including providing specifics of how its maps display the paths of a proposed and occurring PSPS, showing affected infrastructure and the residences and facilities likely to be impacted. We would like to see Public Service indicate on outage maps the reason for an outage (when and if that information is known) so that customers can determine if an outage is storm related or due to other reasons.

89. We also want to see working examples of improved mapping to show how their interactive capabilities improve customer and local OEM knowledge of where outages will be and are actually located, as well as real time changes to the location of outages in each local

[1] Public Service may file these as confidential.

jurisdiction. We want to see updates as to how the Company is improving the manual map update process to more quickly get information to customers and state agencies, local OEMs, and first responders and how OEMs will be able to easily identify Critical Care Customers.

90. Public Service indicates it is working with local OEMs to develop protocols to identify and address critical communications, infrastructure and facilities, as well as develop proactive warnings of a PSPS to local OEMs and first responders. In addition to its collaboration with OEMs through NCR as discussed above, we also require updates of the Company's collaboration with OEMs to consider their identification of local critical facilities and infrastructure, as well as identify and ensure these customers have available backup power options.

91. We will require Public Service provide information as to coordination with OEMs in developing a more integrated system, including protocols for coordinated power outage meetings, and a dedicated single point of contact at the Company available to local governments and OEMs at all times during an outage, to provide the most up-to-date information available. We correspondingly want to see updates on the development of all incident protocols with OEMs and updates on the Company's development of proactive warnings of a PSPS to local OEMs.

92. We require Public Service to provide the updates we have outlined above in order to keep us apprised of the Company's progress during this interim period. We understand the overlap that exists between this Miscellaneous Proceeding and Public Service's 2025-2027 WMP and PSPS application proceeding and are therefore taking these measured steps to keep informed as to the Company's progress while ensuring that all substantive issues remain in the adjudicatory proceeding.

93. Because this is an interim plan of action regarding any potential PSPS that may occur, we require Public Service file bi-monthly updates to the Commission in this proceeding

indicating its progress in incorporating an improved PSPS during this interim period until a final decision is made in the 2025-2027 WMP and PSPS application proceeding.

94. Finally, we find that this process portion of the 24M-0173E proceeding is now concluded. No other action will be taken in this Miscellaneous Proceeding. This proceeding, however, will remain open for the sole purpose of receiving updated information from Public Service through the bi-monthly updates we have requested.

II. ORDER

A. The Commission Orders That:

1. The Commission shall adopt the processes for improvement of Public Service Company of Colorado's ("Public Service" or the "Company") Public Safety Power Shutoff ("PSPS") plan as set forth in the Company's written and oral comments consistent with the discussion above, as an interim PSPS plan until a final Commission Decision is issued by the Commission in Proceeding No. 24A-0296E.

2. Public Service shall file bi-monthly updates as it continues to improve its PSPS plan consistent with the discussion above.

3. The process portion of this Proceeding is now concluded.

4. This Proceeding shall remain open for the sole purpose of receiving updates from Public Service consistent with the discussion above.

5. This Decision is effective immediately upon its Issued Date.

B. ADOPTED IN COMMISSIONERS' WEEKLY MEETING OCTOBER 9, 2024.

(S E A L)

THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO

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MEGAN M. GILMAN

ATTEST: A TRUE COPY

TOM PLANT

Commissioners

Rebecca E. White,
Director