

**STATE OF MAINE PUBLIC UTILITIES COMMISSION**

**DOCKET NO. 2023-00038**



**CENTRAL MAINE POWER COMPANY  
APPROVAL OF ANNUAL COMPLIANCE FILING**

**December 5, 2023**

**Testimony and Exhibits of**

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Kerri Therriault  
Matthew Sadler  
Fred LaMontagne  
Peter Cohen  
Jacob Hurwitz  
Linda Ball  
Amy Marston**

**On behalf of  
Central Maine Power Company  
83 Edison Drive  
Augusta, ME 04336**

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## **EXHIBITS**

Exhibit CMP-1	Witness Panel Curriculum Vitae
Exhibit CMP-2	AtmosForecast Weather Update (12/12/22)
Exhibit CMP-3	DTN Energy Event Index (12/12/2022)
Exhibit CMP-4	12/12/2022 K. Therriault Email
Exhibit CMP-5	12/13/2022 K. Therriault Email
Exhibit CMP-6	12/14/2022 K. Therriault Email
Exhibit CMP-7	12/15/2022 F. LaMontagne Email
Exhibit CMP-8	12/19/2022 System Impact Assessment (SIA) Email
Exhibit CMP-9	12/21/2022 K. Therriault Email
Exhibit CMP-10	12/20/2022 K. Therriault Letter to MEMA (J. Legee)
Exhibit CMP-11	12/20/2022 K. Therriault Letter to MEMA (P. Rogers)
Exhibit CMP-12	12/21/2022 K. Elwell Email
Exhibit CMP-13	Maine Available Contractors Matrix
Exhibit CMP-14	12/27/2023 K. Therriault Email
Exhibit CMP-15	2022 Storms Sustained Impacts Summary
Exhibit CMP-16	Incremental Customer Outage Hours Due to OPA Recommendation
Exhibit CMP-17	Public Comments Submitted in Docket No. 2023-00038 (as of 12/6/2023)
Exhibit CMP-18	Elderly and Low-income Customer Demographic Information
Exhibit CMP-19	CMP's Refined Version of the OPA's ERP Guidelines Adjustment
Exhibit CMP-20	2022 Storm Cost Data supporting Figure 8 (Updated)
Exhibit CMP-21	CMP Corrections to OPA's ERP Guidelines Adjustment
Exhibit CMP-22	ARP 2008 Stipulation (Docket No. 2007-215) (Jan. 9, 2008), Attachment 9
Exhibit CMP-23	Form Service Agreements A & B Approved in Docket No. 2001-00178
Exhibit CMP-24	Sampling of Customer Comments on CMP's Facebook Page after the December 2022 Storms

**ACRONYMS - The following acronyms are used in this testimony or CMP's Emergency Response Plan.**

AAR	After Action Review
AC	Area Commander
ACP	Area Command Planning
ARCOS	Automated Crew Call Out and Resource Management System
CMP	Central Maine Power
CRC	Customer Relations Center
CCR	Customer Care Representative
CV	Curriculum Vitae
DOT	Department of Transportation
EEI	Edison Electric Institute
EMA	Emergency Management Agency (County)
EOC	Emergency Operations Center
EP	Emergency Preparedness
ERP	Emergency Response Plan
ESRP	Emergency Service Restoration Plan
ESR	Emergency Service Restoration
ETR	Estimated Time of Restoration
FEMA	Federal Emergency Management Agency
GIS	Geographical Information System
GPS	Global Positioning System
IAP	Incident Action Plan
IC	Incident Commander
ICS	Incident Command System
IMT	Incident Management Team
IOU	Investor-Owned Utilities
IT	Information Technology
IVR	Interactive Voice Recognition
JIC	Joint Information Center
MSA	Master Service Agreement
MEMA	Maine Emergency Management Agency
MPUC	Maine Public Utilities Commission
NAMAG	North Atlantic Mutual Aid Group
NIMS	National Incident Management System
NRE	National Response Event
NRF	National Response Framework
NTK	Need-to-Know
OMS /SPECTRUM OMS	Outage Management System
OPA	Office of Public Advocate

OT	Operational Technology
PIO	Public Information Officer
PUC	Public Utilities Commission
SCADA	Supervisory Control and Data Acquisition
SMART CARE	Customer Service Information System
T & D	Transmission and Distribution
VM	Vegetation Management
VRU	Voice Response Unit
WMS	Work Management System
21 <sup>st</sup> Century	Automated outage response system

1 **I. INTRODUCTION**

2 **A. Witness Panel and Qualifications**

3 **Q. Please state the names of Central Maine Power Company’s witnesses offering**  
4 **testimony in response to the Initial Testimony of Jesse Houck for the Office of Public**  
5 **Advocate.**

6 A. The members of the witness panel sponsoring testimony on behalf of Central Maine Power  
7 Company (“CMP” or the “Company”) are Adam Desrosiers, Kerri Therriault, Matthew  
8 Sadler, Fred LaMontagne, Peter Cohen, Jacob Hurwitz, Linda Ball, and Amy Marston  
9 (collectively, the “Panel”).

10 **Q. Mr. Desrosiers, please state your title and business address.**

11 A. I am the Vice President of Electric Operations at CMP. My business address is 83 Edison  
12 Drive, Augusta, ME 04336.

13 **Q. Please summarize your work experience and educational background.**

14 A. My curriculum vitae (“CV”) is set forth in Exhibit CMP-1.

15 **Q. Ms. Therriault, please state your title and business address.**

16 A. I am CMP’s Senior Director of Electric Operations. I also serve as the Area Commander  
17 of the Company’s Incident Management Team (“IMT”). In this role, I am responsible for  
18 all incident activities, including the development of strategies and tactics and the ordering  
19 and release of resources. My business address is 83 Edison Drive, Augusta, ME 04336.

20 **Q. Please summarize your work experience and educational background.**

21 A. My CV is set forth in Exhibit CMP-1.

1 **Q. Mr. Sadler, please state your title and business address.**

2 A. I am CMP's Senior Director – System Operations. I also serve as the Deputy Area  
3 Commander of the Company's IMT. In this role, I am responsible along with the Area  
4 Commander for all incident activities, including the development of strategies and tactics  
5 and the ordering and release of resources. My business address is 83 Edison Drive,  
6 Augusta, ME 04336.

7 **Q. Please summarize your work experience and educational background.**

8 A. My CV is set forth in Exhibit CMP-1.

9 **Q. Mr. LaMontagne, please state your title and business address.**

10 A. I am CMP's Senior Manager – Operational Readiness. I also serve as the Resource Unit  
11 Leader and Planning Section Chief of the Company's IMT. In this role, I am responsible  
12 for securing external line crews for CMP's restoration effort. My business address is 83  
13 Edison Drive, Augusta, ME 04336.

14 **Q. Please summarize your work experience and educational background.**

15 A. My CV is set forth in Exhibit CMP-1.

16 **Q. Mr. Cohen, please state your title and business address.**

17 A. I am the Vice President of Regulatory for CMP. My business address is 83 Edison Drive,  
18 Augusta, ME 04336.

19 **Q. Please summarize your work experience and educational background.**

20 A. My CV is set forth in Exhibit CMP-1.

21 **Q. Mr. Hurwitz, please state your title and business address.**

22 A. I am the Director of Revenue Requirements at Avangrid Networks, Inc. My business  
23 address is 125 High St, Suite 6, Boston, MA 02110.



1 **Q. Please summarize your experience and educational background.**

2 A. My CV is set forth in Exhibit CMP-1.

3 **Q. Ms. Ball, please state your title and business address.**

4 A. I am the Vice President of Customer Service for CMP. My business address is 83 Edison  
5 Drive, Augusta, ME 04336.

6 **Q. Please summarize your work experience and educational background.**

7 A. My CV is set forth in Exhibit CMP-1.

8 **Q. Ms. Marston, please state your title and business address.**

9 A. I am the Director of Community Relations for CMP. My business address is 83 Edison  
10 Drive, Augusta, ME 04336.

11 **Q. Please summarize your work experience and educational background.**

12 A. My CV is set forth in Exhibit CMP-1.

13 **B. Summary of Testimony**

14 **Q. What is the purpose of the Panel's testimony?**

15 A. Through the initial testimony of Jesse Houck, the Office of Public Advocate ("OPA")  
16 claims that CMP's external contractor costs for storm restoration services during several  
17 storms in 2022 were excessive and therefore a sizable portion of those costs should be  
18 disallowed as imprudent. The OPA states that "storm restoration is a balance between  
19 restoring power quickly on the one hand and cost on the other"<sup>1</sup> and argues, in effect, that  
20 CMP got that balance wrong in 2022. This argument is responsible for the vast majority of  
21 the OPA's recommended total disallowance of \$53,576,496 in incremental 2022 storm

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<sup>1</sup> Initial Testimony of Jesse Houck, On Behalf of the Maine Office of the Public Advocate (hereinafter "OPA Testimony") at 9.

1 restoration costs. The remainder of the OPA’s recommendations stem from CMP’s use of  
2 affiliates and its documentation for certain storm restoration activities.

3 While CMP understands that the OPA seeks to ensure the Company’s storm  
4 restoration services are efficient and that customers pay rates that are reasonable, the  
5 Company fundamentally disagrees with the OPA’s assessment of the Company’s conduct  
6 in responding to the storm events during 2022. This testimony explains CMP’s numerous  
7 bases for that disagreement and demonstrates why no disallowance is appropriate.

8 **Q. Please summarize CMP’s response to the OPA’s testimony.**

9 A. CMP has many concerns with the OPA’s testimony in this proceeding.

10 First, the OPA’s testimony fails entirely to consider that the OPA’s  
11 recommendations would lengthen outages, increasing the burden on customers. The core  
12 of the OPA’s argument is that CMP mis-balanced the competing priorities of faster outage  
13 restoration and cost management. Evaluating whether CMP appropriately weighed these  
14 two conflicting goals intrinsically requires analyzing: (1) the costs CMP incurred when  
15 restoring power as quickly and safely as possible, and (2) the financial burden borne by  
16 CMP’s customers during extended outages. While the OPA did offer evidence (albeit  
17 flawed evidence, as explained below) regarding CMP’s costs, it did not offer any evidence  
18 regarding the impacts of its recommendations on CMP’s customers despite being afforded  
19 opportunities to do so in its direct testimony, in response to data requests from both CMP  
20 and Staff, and during the November 15, 2023, technical conference.

21 The OPA’s failure to present evidence regarding the burden (financial and  
22 otherwise) borne by customers during extended outages shows a disregard for the very  
23 individuals the OPA purports to represent. Customers expect CMP to restore electric

1 service after a storm as quickly and safely as possible. This likewise represents best utility  
2 practice and the expectations of regulators across New England and around the country. In  
3 this testimony, we explain how the OPA’s recommendations, if adopted by CMP, would  
4 have resulted in customers experiencing millions of additional storm-related outage hours  
5 in 2022. Even conservative valuation methodologies suggest that those additional outage  
6 hours would increase the financial burden borne by impacted customers by tens of millions  
7 of dollars.

8 Second, the arguments the OPA did make regarding CMP’s 2022 storm restoration  
9 costs are wrong. They represent a fundamental misunderstanding of CMP’s Emergency  
10 Response Plan<sup>2</sup> and the drivers of the Company’s storm restoration staffing decisions.<sup>3</sup> To  
11 support its allegation that CMP’s costs were “excessive and imprudently incurred,”<sup>4</sup> the  
12 OPA points to a single table on page 51 of CMP’s Emergency Response Plan, claiming  
13 that the maximum number of external crews CMP should have retained was the high end  
14 of the range for external resources for each “event level” stated therein. The OPA then  
15 concludes that CMP acted imprudently because it retained more external crews than the  
16 high end of the range when responding to certain storm events in 2022. While the OPA  
17 analyzed every storm event CMP experienced in 2022, most of its recommended  
18 disallowances relate to Winter Storms Diaz and Elliott that struck Maine on December 16,  
19 2022, and December 23, 2022, respectively.

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<sup>2</sup> A copy of CMP’s Emergency Response Plan (hereinafter the “Plan” or “ERP”) is provided as OPA Testimony Exhibit 1.

<sup>3</sup> This misunderstanding may be explained in part by the inexperience of Mr. Houck with respect to utility storm restoration practices and emergency response plans. *See* EXM-002-001, EXM-002-002 & 11/15/2023 Tech. Conf. Tr. at 5:8-6:15.

<sup>4</sup> OPA Testimony at 1.

1           The OPA’s argument shows a complete disregard for the purpose and intent of  
2           CMP’s Emergency Response Plan and the realities of weather forecasting and storm  
3           restoration. Contrary to the OPA’s oversimplified conclusions, CMP’s Emergency  
4           Response Plan does not establish a rigid and absolute cap on the number of external crews  
5           the Company may retain in responding to a storm event. Rather, the Plan provides  
6           guidelines for estimated resource levels needed to restore customers within the time  
7           associated with the particular event level. The Emergency Response Plan makes clear that  
8           Company management has flexibility to determine the appropriate resource level based on  
9           the circumstances of each storm. In fact, the very section of the Plan that presents the  
10          resource level ranges by event level states that these “numbers represent a range, and  
11          specific resource needs would be determined based on the actual damage sustained....  
12          Mutual assistance needs will be continually reassessed throughout the event and scaled up  
13          or down as necessary.”<sup>5</sup> The Plan goes on to note that:

14                   [d]ue to the varied nature of emergency events, actual response activities  
15                   and resource needs can vary significantly, and these will be determined on  
16                   a case by case basis. Therefore, the guidance contained in this section is  
17                   not intended to be an absolute requirement or a required level of resources,  
18                   nor should they be interpreted as such. This information is intended to be  
19                   used as a guideline to aid decision making.<sup>6</sup>

20          CMP’s actions in restoring power during the 2022 storm events, including Winter  
21          Storms Diaz and Elliott, were consistent with the guidance within the Emergency  
22          Response Plan that the Company’s response to storm events reflect actual damage  
23          sustained. Following the storm restoration policies and procedures embodied in the Plan,  
24          the Company was able to restore power to customers safely and efficiently during each of

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<sup>5</sup> ERP at 51.

<sup>6</sup> *Id.* at 52.

1 these 2022 storms. Based on the circumstances of each storm, including the actual damage  
2 to CMP's electric distribution system and the demand for external crews from other  
3 utilities, the Company determined the appropriate resource level for each storm event and  
4 then executed the storm response efficiently to restore electrical service to customers as  
5 quickly and safely as possible without compromising the safety and wellbeing of its  
6 employees and contractors. These efforts proved successful as the actual restoration times  
7 for most of the identified storms were within (and in many cases below) the estimates set  
8 forth in the Emergency Response Plan due to the Company's planning and execution. In  
9 this regard, the Company was able to minimize the number of customers without power on  
10 Christmas and during the holiday week before New Year's Day after Winter Storm Elliott  
11 struck Maine on December 23, 2022.

12 **Q. Does CMP agree with the OPA that its actions caused it to incur "excessive" costs?**

13 A. No, and, in fact, the OPA's argument reveals a misunderstanding of the realities and  
14 mechanics of the costs of storm restoration and crew deployment. The OPA contends that  
15 CMP's decision to retain more external crews than the high end of the estimated event  
16 level range (and, by extension, to restore service faster) caused it to incur "much greater  
17 storm costs than it otherwise would have had the Company used the staffing levels and  
18 restoration timelines in its [Emergency Response Plan.]"<sup>7</sup> This argument ignores the  
19 fundamental driver of storm restoration costs – the amount of damages sustained on the  
20 system. The number of crews needed to restore service and the number of hours of work  
21 those crews must perform are a product of the actual damages sustained. Regardless of  
22 whether CMP's crews are internal or external, pre-staged or retained post-impact, the

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<sup>7</sup> OPA Testimony at 9.

1 necessary repairs and the time needed to complete them remain the same. The Company  
2 still must perform the same overall amount of work to complete the necessary repairs,  
3 regardless of the number of external crews it retains. If CMP had retained the reduced  
4 number of external crews the OPA recommends, those crews would have needed to work  
5 significantly longer to perform the same overall amount of work that the Company actually  
6 performed to restore power. As described in more detail later in this testimony, the OPA's  
7 oversimplified financial analysis misses this direct relationship, and as a result fails to  
8 appreciate that CMP's restoration costs were not materially increased by the use of more  
9 external crews.

10 In fact, had CMP retained fewer crews, as the OPA is recommending, it is possible  
11 that CMP's overall storm costs would have been higher because those remaining crews  
12 would (1) have had to spend considerably more time travelling around CMP's service  
13 territory in post-storm conditions, and (2) likely have experienced declining productivity  
14 over time as they worked several 17-hour days in a row.

15 Interestingly, the OPA appears to have filed evidence in this proceeding  
16 corroborating these effects. Specifically, the "Staffing Exercise" tab of CMP-001-001,  
17 Attachment A calculates the cost of a hypothetical storm event under a variety of external  
18 crew staffing level scenarios. As shown therein, the OPA determined that CMP would  
19 incur approximately \$12.5 million in costs if it retained 300 external crews and restored  
20 power in 72 hours, but that increasing the number of external crews retained to 500 would  
21 reduce costs to \$9.5 million while also decreasing the restoration time to 36 hours.<sup>8</sup>

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<sup>8</sup> In response to questioning from Staff during the November 15, 2023, Technical Conference, Mr. Houck acknowledged that the total costs in "scenario 3" should have been approximately \$12.6 million instead of \$9.5 million. 11/15/2023 Tech. Conf. Tr. at 143:3-144:5. Mr. Houck, however, also acknowledged that there may be

1 **Q. Please identify the specific disallowances recommended by the OPA.**

2 A. Through Mr. Houck’s testimony, the OPA recommends three different disallowances  
3 related to the storm costs CMP incurred in 2022. First, the OPA recommends three  
4 disallowances totaling \$50,787,408 (*i.e.*, \$796,154 for Tier 1 storm costs, \$5,136,099 for  
5 Tier 2 storm costs, and \$44,855,155 for Tier 3 storm costs) because CMP allegedly did not  
6 follow the guidelines set forth in its Emergency Response Plan with respect to the number  
7 of external overhead line crews.<sup>9</sup> These disallowances are collectively referred to herein as  
8 the “OPA’s ERP Guidelines Adjustment.” Second, the OPA recommends disallowing  
9 \$2,336,348 in storm costs charged to CMP by its affiliates (referred to herein as the  
10 “OPA’s Affiliate Cost Adjustment”).<sup>10</sup> Finally, the OPA recommends disallowing  
11 \$452,740 in external contractor costs incurred during storms in which CMP did not report  
12 hiring any external crews (referred to herein as the “OPA’s Documentation  
13 Adjustment”).<sup>11</sup>

14 **Q. How is the remainder of your testimony organized?**

15 A. The remainder of the Panel’s testimony is organized as follows:

- 16 • Section II provides a history and overview of CMP’s Emergency Response Plan.
- 17 • Section III outlines CMP’s emergency preparation process and includes a  
18 discussion of regional trends in storm response.

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efficiencies with respect to travel time and productivity in using more, rather than fewer, crews in responding to storms. *Id.* at 78:3-88:8.

<sup>9</sup> OPA Testimony at 2.

<sup>10</sup> *Id.* at 2.

<sup>11</sup> *Id.*

- 1           • Section IV describes CMP’s response to the 2022 storm events, with a particular  
2           emphasis on Winter Storms Diaz and Elliott, which were responsible for most the  
3           Company’s 2022 storm costs.
- 4           • Section V explains that the OPA’s ERP Guidelines Adjustment reflects a  
5           fundamental misunderstanding of CMP’s Emergency Response Plan and fails to  
6           account for the increased work per crew that would be necessary under the OPA’s  
7           recommendations. It also ignores the increased burden that CMP’s customers  
8           would experience, and the chilling impact to Maine’s beneficial electrification  
9           efforts that would occur, due to the extended outages that would result from the  
10          OPA’s recommendations. The OPA’s arguments regarding 2020 storm costs and  
11          the OPA’s comparison to Versant’s storm restoration efforts are also addressed in  
12          this section.
- 13          • Section VI refutes the OPA’s Affiliate Cost Adjustment based on prior Maine  
14          Public Utilities Commission (“Commission” or “MPUC”) orders and historical  
15          practice and demonstrates why the disallowance of affiliate-related storm charges  
16          would dis-incentivize CMP’s use of affiliate crews, notwithstanding their lower  
17          cost, to the detriment of customers.
- 18          • Section VII describes how CMP has already provided documentation on the record  
19          in this case that addresses the concerns raised in the OPA’s Documentation  
20          Adjustment.
- 21          • Section VIII demonstrates that CMP’s responses to 2022 storm events are  
22          consistent with good utility practice and customer and community expectations  
23          regarding storm response.



- Section IX summarizes the Panel’s conclusions.

**Q. Does the Company believe that its storm restoration activities in 2022 and the resulting incremental costs for those services were prudent?**

A. Absolutely. The Company’s performance was consistent with good utility practice, in line with the level of service provided by other comparable utilities in New England and across the country, and met the expectations of CMP’s customers, responsible state and local emergency management agencies, and other public officials that the Company should restore power as quickly and safely as possible. Doing so minimizes the financial, health and safety, and other impacts of extended outages on customers. It also promotes the adoption by Mainers of beneficial electrification measures, such as electrical vehicles, in accordance with Maine’s greenhouse gas reduction policies by building confidence in the reliability of electric service in Maine.

**II. CMP’S EMERGENCY RESPONSE PLAN**

**Q. The OPA’s proposed adjustments are based for the most part on specific guidelines within the Company’s Emergency Response Plan. Before responding to the adjustments, please explain how the Emergency Response Plan was developed and its purpose.**

A. CMP’s Emergency Response Plan at issue in this proceeding was specifically developed in response to a new law enacted in 2019 directing Maine’s investor-owned utilities (“IOUs”), including CMP, to establish and maintain emergency response plans. Built upon the Company’s then existing emergency response plan, its extensive experience and practices restoring power after storms and other emergencies, and relevant prior Commission guidance, CMP’s Emergency Response Plan:

1 is designed to provide a systematic approach to plan for, identify, assess  
2 and recover from the effects of an emergency in the safest and most  
3 efficient manner possible. The plan serves as a guide to assist management  
4 and response personnel in identifying the resources, materials and steps  
5 required for a safe and efficient restoration process. This plan provides the  
6 high-level strategy and consolidates coordination of procedures for  
7 emergency preparedness, communications, response and restoration  
8 process.<sup>12</sup>

9 **A. History of CMP’s Emergency Response Plan**

10 **Q. Please summarize the 2019 legislation that required CMP to develop its Emergency**  
11 **Response Plan.**

12 A. In 2019, the Legislature enacted an *Act to Increase the Safety of Maine Residents in*  
13 *Extended Power Outages*, P.L. 2019, ch. 120 (“Act”). The Act required the Commission  
14 to direct independent IOUs to establish an emergency response plan for recovery and  
15 restoration in response to an emergency. As specified in the Act, an “emergency” refers to  
16 widespread outages within the utility’s service territory because of weather or other causes  
17 outside the control of the utility.

18 On November 4, 2019, the Commission issued an order in Docket 2019-00266  
19 requiring each IOU to develop an emergency response plan in accordance with the Act,  
20 including a prioritization process which follows the statewide comprehensive emergency  
21 management plan under Title 37-B, chapter 13 in coordination with the Department of  
22 Defense, Veterans and Emergency Management, Maine Emergency Management Agency  
23 (“MEMA”), as established in Title 37-B, section 701, and county emergency management  
24 agencies. The emergency response plan must include a prioritization process for ensuring

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<sup>12</sup> ERP at 9.

1 the safety of electric facilities, road openings and service restoration. Facilities critical to  
2 the protection of life, health and safety are to be considered as part of the prioritization.

3 To encourage a coordinated approach to providing an effective and efficient  
4 emergency response, the Act requires the utility emergency response plan to include at  
5 least the following:

- 6 A. Priorities for emergency response and service restoration;
- 7 B. Provisions for staffing, both internal and external, identification of both  
8 Management and field resources roles and responsibilities, utility operations during  
9 an emergency, to ensure sufficient knowledge of the operating system and  
10 implementation of the emergency response plan, including a provision for  
11 acquiring additional external resources required to address the emergency;
- 12 C. Provisions for communicating with the Department of Defense, Veterans and  
13 Emergency, MEMA and local emergency management agencies concerning  
14 conditions, road openings and service restoration;
- 15 D. Systems for customer communications during an emergency and a provision to  
16 communicate estimated times of restoration;
- 17 E. Procedures for deployment of internal/external resources, including field  
18 employees, supplies and equipment needed for emergency response; and
- 19 F. Provisions to ensure the safety and well-being of internal and external resources  
20 engaged in the emergency response effort.

21 The Act also mandates that the IOUs submit their emergency response plan to the  
22 Commission no later than May 15 of each even-numbered year. The Commission is then

1 responsible for reviewing the plan for compliance with the Act and to direct the utility to  
2 amend and resubmit the plan, should it be found non-compliant with the Act.

3 CMP submitted its initial Emergency Response Plan under the Act on February 1,  
4 2020. That Plan reflected a complete rewrite the Company made in 2019 after an  
5 extensive evaluation of the October 2017 windstorm. CMP's Plan was then further  
6 reviewed, updated, and filed with the Commission as required by the Act on January 5,  
7 2022, in Docket No. 2022-00138.

8 **Q. In preparing its Emergency Response Plan, did CMP consider prior Commission and  
9 Company learning and experience?**

10 A. Yes. CMP has had plans for emergency restoration response for decades. CMP's response  
11 plans have evolved throughout the years based on guidance provided in several  
12 Commission investigations and self-assessment reviews by the Company. The key take-  
13 aways from four key Commission investigations into the Company's storm restoration  
14 performance that resulted in improvements to CMP's earlier Emergency Response Plans  
15 are as follows:

- 16 • **1985 Hurricane Gloria (Docket No. 1985-00198):** In an investigation of CMP's  
17 storm response to Hurricane Gloria, the Commission recommended that the  
18 Company:
  - 19 ○ Consolidate CMP's existing storm response guidelines into one  
20 comprehensive plan.<sup>13</sup>

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<sup>13</sup> Prior to the investigation in Docket No. 1985-00198, CMP had four different documents that were relied upon for storm restoration.

- 1                   ○ Set forth a standard format for each division to follow in establishing their  
2                   emergency procedures;
- 3                   ○ Set levels of severity of emergencies to elicit appropriate responses; and
- 4                   ○ Design procedures to “insure flexibility of response” “in recognition of the  
5                   fact that different types of emergencies may require different priorities in  
6                   service restoration.”<sup>14</sup>
- 7                   ● **1991 Hurricane Bob**<sup>15</sup>: As part of an investigation of CMP’s response to  
8                   Hurricane Bob, the Commission Staff found the Company’s restoration plans on  
9                   file with the Commission were obsolete and in need of updating. Staff’s  
10                  recommendations on the plan included:
- 11                  ○ Update roles and responsibilities of each functional unit within CMP, while  
12                  retaining flexibility;
- 13                  ○ Establish an on-going close working relationship with the National Guard,  
14                  Federal Emergency Management Agency (“FEMA”)/MEMA and  
15                  Department of Transportation (“DOT”) offices;
- 16                  ○ Keep storm units intact when moving crews within CMP’s service territory;  
17                  and
- 18                  ○ Clarify the emergency support team’s mission and structure (outside  
19                  resource procurement, clearing house, inventory management, information  
20                  systems, account, etc.).

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<sup>14</sup> *Nancy G. Rines, et al., vs. Central Maine Power Company, Complaint Under Section 29 against Central Maine Power Company in Handling the Aftermath of Hurricane Gloria (September 27, 1985), Docket No. 1985-00198, Commission Stipulated Report by Parties (Jun. 1986).*

<sup>15</sup> *Public Utilities Commission Re: Issues Related to Utility Planning For and Recovery From Hurricane Bob, August 1991, Report of Summary Investigation (Sep. 5, 1991).*

- 1           • **1998 Ice Storm (Docket No. 1998-00026):** As part of an investigation into CMP’s  
2 response to the Ice Storm of 1998, the Commission recommended that CMP:  
3           ○ Assess its response plan based on storm assessments from Hurricane Gloria  
4           and Hurricane Bob experiences; and  
5           ○ Develop and maintain a written Emergency Response Plan and make the  
6           plans available to the Commission upon request.

7           In addition, the Commission ordered the Company to conduct an internal  
8 assessment for all future Tier 2 and Tier 3 storms. Those assessments continue to  
9 lead to additional changes to the Company’s Emergency Response Plan as new  
10 lessons are learned from each storm event.<sup>16</sup>

- 11          • **Investigation Into Adequacy of Utility Service During Power Outages (Docket**  
12 **No. 2002-00151):** The Commission directed CMP to review its Emergency  
13 Response Plan to ensure that its procedures fully address emergency conditions  
14 requiring emergency outage restoration.<sup>17</sup>

15           The Commission’s guidance in these proceedings and CMP’s experience and  
16 learning from prior storm events helped shape the contents of the Company’s Emergency  
17 Response Plan at issue in this proceeding.

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<sup>16</sup> Public Utilities Commission, *Inquiry into the Response by Public Utilities in Maine to the January 1998 Ice Storm*, Docket No. 1998-00026, Order (Dec. 29, 1998).

<sup>17</sup> *Investigation into the Adequacy of Utility Services in Maine During Power Outages*, Docket No. 2002-00151, Order at 5-7 (Nov. 14, 2003).

1           **B.       CMP’s Emergency Response Plan**

2   **Q.       Please explain the underlying principle and scope of the Company’s current**  
3   **Emergency Response Plan.**

4   A.       As stated in its introduction, CMP’s Emergency Response Plan provides the basis for the  
5   Company’s emergency response and restoration strategy: namely “to safely and efficiently  
6   restore electric service” after an emergency or storm event.<sup>18</sup> The Plan “uses this principle  
7   to establish guidelines for pre-incident preparedness, pre-incident planning, incident  
8   assessments, incident response, communications, and return to normal operations.”<sup>19</sup>  
9   These guidelines do not represent a rigid pre-determination of how the Company should  
10   respond to emergency events. Rather, the Plan “is designed to provide a systematic  
11   approach to recover from the effects of an emergency in the safest and most efficient  
12   manner possible. It is intended to maintain flexibility so that specific details of service  
13   restoration can be tailored to address varying incidents.”<sup>20</sup> In this way, the Emergency  
14   Response Plan is CMP’s guide for planning, staffing, and responding to emergency events,  
15   but expressly provides the Company flexibility to adjust its actions to ensure that power  
16   can be restored to its customers in the quickest and safest way possible under the  
17   circumstances of each storm event.<sup>21</sup>

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<sup>18</sup> ERP at 12.

<sup>19</sup> *Id.*

<sup>20</sup> *Id.*

<sup>21</sup> See 11/15/2023 Tech. Conf. Tr. at 38:5-39:2 (“MR. DES ROSIERS: And when you say most efficient, do you mean quickest and safest way to restore power? MR. HOUCK: Yes, yeah.”).

1 **Q. In practice, how does CMP use its Emergency Response Plan to restore electrical**  
2 **service in the safest and most efficient way possible?**

3 A. As quoted above, the Plan serves as a guide to assist CMP management, including the  
4 Company's IMT, in identifying the resources, materials and steps required for a safe and  
5 efficient restoration process. In using this guide, the Company considers the following  
6 other data points to develop its staffing and restoration decisions for each storm event:

- 7 • Predicted weather;
- 8 • Historical data, which includes, predicted weather, actual impact, total customers  
9 impacted, and peak outages;
- 10 • Impact to other utilities;
- 11 • Time of year and forecasted weather post-event;
- 12 • General knowledge of past weather events and impacts; and
- 13 • Current conditions in the service territory, such as saturated ground from previous  
14 events, snow laden trees from previous events, tree health, etc.

15 As stated on page 19 of the Emergency Response Plan:

16 The [Company's] Area Commander will determine staffing levels for each  
17 event during the planning phase based on forecasts, past historical events, and  
18 resources available. **Staffing level estimates by anticipated class levels of a**  
19 **storm are intended to be a guideline for use as a resource planning tool.**  
20 **Due to the varied nature of emergency events, actual resource needs can**  
21 **vary and will be determined on a case-by-case basis and adjusted as**  
22 **operational conditions change.**<sup>22</sup>

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<sup>22</sup> ERP at 19 (emphasis added). Notably, Mr. Houck highlighted this language in the Emergency Response Plan he reviewed but does not mention it in his testimony. ODR-003-001, Attachment A



1 **Q. Please provide more detail on how the Company uses its Emergency Response Plan**  
2 **and these data points to make staffing and restoration decisions during an emergency**  
3 **event.**

4 A. CMP’s Emergency Response Plan formally utilizes the FEMA Incident Command System  
5 (“ICS”) that is also utilized nationally and in Maine with all first responders. The  
6 Company takes a more formal approach to the planning process using an Event Level  
7 Classification system based on an analysis of past storms that impacted the CMP service  
8 territory as well as multiple weather forecasts. As stated in the Plan, an event level is a  
9 combination of category values, used in conjunction with additional incident information  
10 that determines the appropriate level of response. The matrix estimates are based on  
11 historical events and outcomes/results may vary depending on actual resource availability  
12 and the extent of sustained damage. Using the event level matrix, the Area Commander  
13 sets a pre-impact event level based on several objective and subjective information points,  
14 including several weather forecasts, historical storm data, and current system conditions.  
15 The combination of this information assists in establishing the initial event level, which the  
16 Company can later adjust during each operational period as required due to changing  
17 weather conditions and resource availability. Based on the Event Level and the anticipated  
18 peak of customer power outages, CMP establishes the initial needed crew complement  
19 estimate in addition to CMP’s internal line crews and a global estimated restoration time.

20 It is important to note that an Event Level is a “swim lane” that is not intended to  
21 perfectly capture each piece of the storm “puzzle.” In other words, the predicted weather  
22 event does not necessarily fall within a every target for a particular Event Level. Rather, in  
23 most cases, the parameters of each event (*e.g.*, wind speeds, inches of precipitation,

1 customer outages, wire down orders, etc.) span multiple event levels. The storm  
2 management team sets an Event Level based on its experience and judgment as a guide but  
3 plans and executes the restoration based on the facts and circumstances in the field. Using  
4 this approach, as called for in the Emergency Response Plan, the Company has  
5 successfully planned, pre-staged crews, and responded to numerous outage events. This  
6 process has resulted in safe and timely restorations that have benefitted customers.

7 **Q. Does the Emergency Response Plan also provide guidance on the Company’s**  
8 **communications during a storm event?**

9 A. Yes. A vital component of the Emergency Response Plan is the process implemented to  
10 improve communication and coordination with the Company’s Emergency Management  
11 Agency (County) (“EMA”) partners at the State and county levels. Emergency  
12 Preparedness at CMP has formed a Public Liaison team, which has been deployed  
13 numerous times since 2018, and each deployment offers the team an opportunity to learn.  
14 With the guidance of the Emergency Response Plan, additional accommodations to  
15 maintain effective communication paths and efficient restoration efforts when required  
16 have been implemented. This improved communications process has resulted in the safer  
17 and more efficient restoration of power for the benefit of customers and the communities in  
18 which they reside.

19 **Q. What does CMP do to learn from past storm events and ensure that its storm**  
20 **restoration practices are consistent with best practices and the current regulatory**  
21 **environment?**

22 A. CMP continuously reviews its storm response policies, procedures, and strategies, and  
23 conducts internal storm reviews on major events as dictated in the Emergency Response

1 Plan. Emergency Planning within CMP also is engaged with other utilities through the  
2 North Atlantic Mutual Assistance Group (“NAMAG”) and reviews past storm experiences  
3 to discover any additional industry best practices. Nationally the storm planning, response  
4 and restoration process has dramatically changed and taken on a far more aggressive  
5 posture in the past five years. This industry shift in planning as well as response is due to  
6 several factors.

- 7 • Climate change has increased the frequency and severity of storms in many parts of  
8 the country including Maine.
- 9 • Nationally most utilities have shifted to a planning and prestaging model prior to  
10 storms to comply with regulatory mandates for faster restoration times. This  
11 movement of large numbers of line crews prior to an event has exposed the limited  
12 number of line workers available on a regional basis. In the past crews would be  
13 mobilized and moved after the damage was determined. Now utilities are securing  
14 crews earlier prior to storm events. This process has created resource competition  
15 as well and often a shortage after a storm has impacted a utility.
- 16 • In most cases, crews are now made available through the traditional NAMAG  
17 mutual aid resource process only after storms have passed through utility service  
18 territories, putting more pressure on utilities to secure resources prior to events.
- 19 • Customer and political expectations have also become a major driving force behind  
20 a more aggressive restoration philosophy. This philosophy is prevalent not just in  
21 Maine, but on a national basis as society has become more dependent on  
22 technology and electricity. These expectations can only be met by aggressively  
23 planning and pre-staging of crews prior to a storm event.

24 The Plan also has a provision for after action reviews and filing of post storm assessments  
25 with the Commission. As part of that filing, the Company identifies any deviations from  
26 the Emergency Response Plan and the reasons why. Should the Commission find issue  
27 with that portion of the filing, it has the right to open an investigation into CMP’s planning  
28 and restoration efforts for a particular storm event.

1 **III. CMP'S EMERGENCY PREPARATION PROCESS**

2 **Q. Please describe the process CMP follows in planning for and responding to storm**  
3 **events.**

4 A. CMP's Emergency Response Plan lays out the process that the Company follows in  
5 planning for and responding to storm events. This section of the Company's testimony  
6 walks through the process from pre-storm planning to impact assessment, restoration, and  
7 then concluding with demobilization. It also explains how regional trends in storm  
8 response activities are impacting CMP's planning and staffing decision-making.

9 **A. Planning**

10 **Q. Please describe what CMP does to plan for a storm event?**

11 A. CMP receives daily, weekly and extended weather forecasts on a regular basis as part of its  
12 operations. Upon receiving notice of a potential concern for hazardous weather conditions,  
13 the Company increases its monitoring of these forecasts. This monitoring can begin as  
14 early as ten days prior to impact to as little as three days prior to an event. CMP contracts  
15 with four external weather forecasting companies: DTN, Atmos, Utiliweather, and  
16 Nor'easter Weather Consulting, LLC. In addition to these four contracted weather  
17 resources, Area Command and Area Command Planning monitor local forecasts and the  
18 National Weather Service to have the most comprehensive data to determine the Event  
19 Level for which the Company will need to plan.

20 Weather forecasters use a variety of different computer models to forecast the most  
21 likely path, intensity, timing, and impacts of storm events. Typically, these weather  
22 models provide a variety of potential outcomes, but as the actual impact draws near the  
23 model outputs usually become more consistent. As the weather models align, Area

1 Command Planning will review historical weather events with similar forecast predictions  
2 with respect to precipitation, temperature, sustained wind speeds, potential hazardous wind  
3 gusts, and wind direction. That information is then used to help determine the Event Level  
4 as prescribed by the Emergency Response Plan. In accordance with the Plan, the  
5 Company uses the Event Levels to categorize incidents by the severity. An incident level  
6 assists response personnel in understanding the potential severity of an event and enables  
7 them to respond in an appropriate manner. It also builds Avangrid’s enterprise awareness  
8 of potential impacts. Events are classified into six levels, and these are described in Figure  
9 6.1 of the Plan. The Plan not only relies upon predicted weather potentials but also  
10 considers the type of event: hurricane, nor’easter, etc.; time of year; leaves on or leaves  
11 off; soil saturation; and the service area primarily predicted to be hit. The Event Level  
12 matrix does not, however, consider wind direction. Wind direction under hazardous  
13 conditions can significantly change the anticipated damage thereby requiring the Area  
14 Commander to decide to bring in crews above the recommended guidelines in the  
15 Emergency Response Plan. These factors then drive the Area Commander to an  
16 anticipated Event Level. This Event Level “puts the Company in a lane,” and planning for  
17 the restoration event begins.

18 Figure 6.2 of the Emergency Response Plan, reproduced below, provides guidance  
19 on the plan activation process and lists the incident response activities by event level.

Figure 6.2 – Plan Activation Matching Guidance

EVENT LEVEL	INCIDENT RESPONSE
5 Minor	Crews may be held. CMP EOC staffing may or may not be used and will depend upon anticipated severity. Alert notification will indicate staffing levels.
5 Moderate	Crews may be held. CMP EOC staffing may or may not be used and will depend upon anticipated severity. Alert notification will indicate staffing levels.
5	Locally assigned contract crews or could include diverted crews, as needed. Some CMP Emergency Storm Assignments may be activated.
4	Area wide response using all available CMP line resources and on site contractors. Mutual assistance or off site contractors may be required CMP Emergency Storm Assignments will be activated.
3	Area wide response using all available CMP line resources and on site contractors. Mutual assistance or off site contractors will be required. CMP Emergency Storm Assignments will be activated.
2	Area wide response using all available CMP line resources and on site contractors. Significant mutual assistance and off site contractors will be required. CMP Emergency Response Assignments will be activated. 100 % of resource pool activated. Will likely need to commit to external resources well in advance of event in order to ensure that estimated resource needs can be met.
1A	Area wide response using all available CMP line resources and on site contractors. Substantial mutual assistance and off site contractors will be required. CMP Emergency Response Assignments will be activated. 100 % of resource pool activated. Will be necessary to commit to external resources well in advance of event in order to ensure that estimated resource needs can be met.
1	Area wide response using all available CMP line resources and on site contractors. Substantial mutual assistance and off site contractors will be required. CMP Emergency Response Assignments will be activated. 100 % of resource pool activated. Will be necessary to commit to external resources well in advance of event in order to ensure that estimated resource needs can be met.

1           Importantly, the introductory language for this Figure states:

2                           Due to the varied nature of emergency events, actual response activities  
3                           and resource needs can vary significantly, and these will be determined on  
4                           a case by case basis. **Therefore, the guidance contained in this section**  
5                           **is not intended to be an absolute requirement or a required level of**  
6                           **resources, nor should they be interpreted as such. The information is**  
7                           **intended to be used as a guideline to aid decision making.**<sup>23</sup>

8                           In addition to the information above, Area Command Planning may start to receive  
9                           notifications from utilities or contractors to Maine’s south that are beginning to request,  
10                           acquire, and secure resources. Due to prevailing weather patterns, for most weather  
11                           systems, the impacts to the service territories of utilities to the south occur earlier in time  
12                           than the impacts to CMP’s service territory. As a result, external resources may be

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<sup>23</sup> ERP at 52 (emphasis added).

1 “reserved” by those utilities multiple days before the actual event in Maine. For example,  
2 National Grid in New York or Massachusetts may be planning for the event three to five  
3 days ahead of impact and may have already made a request for 300 external line crews.  
4 These utilities have right of first refusal contracts with certain contractors, and those  
5 contractors must contact them first before committing to another company. Many times,  
6 this process limits the resources that CMP can acquire because crews have already begun  
7 to be secured. With this in mind, when CMP determines that the severity of an event will  
8 be at a Level 5 or even more severe (Levels 4 to 1a), the Company may make a decision to  
9 acquire resources above the resource recommendations provided in the Emergency  
10 Response Plan in order to ensure outage restoration is as safe and efficient as possible. It  
11 is important to note that any event level above a Level 5 requires CMP to acquire resources  
12 above the Company’s on-property contractors. To wait until after impact to secure  
13 external crews would leave CMP in a very challenging position where other companies  
14 have already secured many of the resources well ahead of the event. This would mean  
15 long hours for employees and extended days of outages for customers.

16 The Area Commander will activate the ICT and conduct a pre-planning call to  
17 prepare for the storm event. That call encompasses:

- 18 • Safety
- 19 • Weather
- 20 • Situational Awareness: Event Level, Report Time
- 21 • Resource Acquisition (External & Vegetation Management)
- 22 • Report out from Incident Commanders (“IC”) for coverage heading into the  
23 event, needs, and confirmation that they are communicating with EMAs.
- 24 • Inventory
- 25 • Fleet
- 26 • Facilities
- 27 • Customer Service
- 28 • Energy Control Center/Distribution Operating Center
- 29 • Communications

- 1 • Estimated Time of Restoration (“ETR”)/Outage Management System
- 2 (“OMS”) Branch Director
- 3 • Logistics
- 4 • Damage Assessment
- 5 • Public Liaison Officer

6           Once the Event Level is defined, regular communications are a critical part of the  
7 planning phase of the event. A pre-plan email is sent to the CMP storm team advising of  
8 the weather predicted, the anticipated Event Level, and activation of the Area Commander.  
9 A detailed outline is provided to the storm team of the current plan for initial response and  
10 to request that all storm team members review the pre-storm check lists. A pre-storm  
11 conference call is also scheduled for situational awareness and as a check in to ensure that  
12 all storm support is ready for impact. In addition, a regular cadence of storm calls will be  
13 scheduled ahead of the event. These calls occur at least three times a day.

14           Area Command and Area Command Planning will continue to monitor the weather  
15 forecasts to ensure there are no changes in intensity. Should the weather forecasts call for  
16 more hazardous conditions, the Event Level will be elevated, and additional resources will  
17 be secured.

18 **B. Impact and Restoration**

19 **Q. Please describe the process the Company follows to assess the actual impacts of a**  
20 **storm and then to restore power for impacted customers.**

21 A. The assessment and restoration phases of storm response begin as soon as the Company  
22 deems it safe after the impact of the storm has passed. Storm resources are given an  
23 established report time dependent on when the impact of the storm is predicted to start.  
24 Those report times may mean holding crews at the end of the day or establishing a 5:00  
25 a.m. report time. As outages begin to occur, the Area Commander will work with the



1 Distribution Operations Center to put CMP in storm mode. Storm mode stops the  
2 assignment of automatic estimated times of restoration and activates all levels of the storm  
3 team. A system emergency is declared as well to allow crews to work on a 17/7 work  
4 rotation. This means that the crews will work 17 hours and rest for seven. This work  
5 rotation will continue until restoration is complete. Adequate resources and efficient use of  
6 those resources is imperative to ensure that workers do not work to the point of exhaustion  
7 that could result in injuries or worse.

8 Local EMAs work closely with the local IC in each service area to identify blocked  
9 roads, wires down and other emergent needs. Make safe and road openings work will be  
10 ongoing from impact and throughout the event as needs arise. This process is well  
11 established and outlined within the Emergency Response Plan.

12 Damage assessment is run in parallel to addressing the make safe and road  
13 openings requests. Damage assessors are the first ones to get eyes on the damage  
14 sustained by the impact of the storm. The first round of damage assessment is to quickly  
15 determine the number of broken poles, trees down and transformers on the ground.  
16 Identifying all broken poles as far ahead of restoration is critical to the restoration effort.  
17 A broken pole on average will take four hours to replace; however, if ledge is involved, it  
18 can take significantly longer. Getting poles set prior to wire transfers is critical to a timely  
19 restoration process.

20 A more in-depth damage assessment is done by patrollers who travel with the line  
21 crews during restoration. These patrollers will move ahead of the crews to the next  
22 assigned job so that they can assess the damage, report back and ensure that the crews will  
23 have everything they need to restore that circuit or line.

1 Consistent with CMP’s restoration philosophy, the “goal of the restoration process  
2 is to safely restore electric service to the largest number of customers as efficiently as  
3 possible.”<sup>24</sup> This philosophy supports the following general sequence of service  
4 restoration:

- 5 • Respond to Immediate Life-Threatening Situations, Public Health and  
6 Safety
- 7 • Make Safe and Road Clearing activities
- 8 • Repair transmission substations and transmission power lines
- 9 • Repair distribution substation facilities
- 10 • Restore power to hospitals (when possible)
- 11 • Restore power to three-phase circuits
- 12 • Restore power to single-phase circuits
- 13 • Repair service cables
- 14 • Restore power to seasonal customers<sup>25</sup>

15 The above work can be done in parallel depending on the damage incurred during the  
16 storm event.

17 Throughout the event, the field is communicating with the office staff to ensure  
18 accurate information with respect to damage, estimated restoration times, cause, and actual  
19 restoration times. Restoration is always done with safety and the customer front of mind.

### 20 **C. Demobilization**

21 **Q. Please describe the process CMP follows to demobilize crews as the restoration is  
22 completed.**

23 A. As the restoration efforts continue, Area Command and Area Command Planning  
24 continuously work to collapse resources into the hardest hit areas as other areas clean up.  
25 An evaluation of resources needed to continue efficient restoration is reviewed and if any  
26 external resources can begin to be released, that decision is made as soon as it is feasible.

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<sup>24</sup> ERP at 21.

<sup>25</sup> *Id.*

1 CMP continually moves internal resources into those areas to release external crews as  
2 soon as feasibly possible. The guideline for releasing external resources is as follows:

- 3 1. Non-Master Service Agreement (“MSA”) contractors with the highest rates;
- 4 2. Non-MSA contractors with the farthest to travel;
- 5 3. Mutual aid resources (including sister companies) by destination;
- 6 4. MSA contractors; and
- 7 5. Internal crews.

8 In accordance with the Emergency Response Plan, CMP also notifies NAMAG  
9 when utility-based resources are being released so that they can be assigned to assist at  
10 other utilities, if the need arises. If independent contractor resources are released to  
11 another utility, the cost of travel to that location will be assumed by the receiving utility.

12 **D. Regional Trends in Storm/Emergency Response**

13 **Q. Please explain how policies enacted in other states have introduced constraints or**  
14 **other complexities to CMP’s planning and ability to retain external resources during**  
15 **major events.**

16 A. CMP is a member of the NAMAG that includes 32 utilities from Pennsylvania, New  
17 Jersey, New York, all New England states, as well as New Brunswick, Quebec, Nova  
18 Scotia, and Ontario.

19 Over the past five years, NAMAG has seen a dramatic shift from a reactive  
20 response model of operation to a planning and proactive pre-event organization. In the  
21 past, utilities through NAMAG would send resources to impacted utilities after the damage  
22 was assessed and identified. This model has shifted due to customer expectations as well  
23 as additional regulatory requirements. Currently several major utilities are prestaging a

1           sizable number of crews prior to every storm and depleting the regional resource pool  
2           available to other utilities. This has forced many utilities including CMP to look to other  
3           options including Canadian crews on a regular basis to meet anticipated restoration times.  
4           It has also pushed CMP to retain additional crews and pre-stage on a regular basis or risk  
5           not having any regional contractor crews available if needed.<sup>26</sup> Versant has faced this  
6           same challenge. As it reported in the review of Winter Storm Elliott held at the  
7           Commission, when Versant reached out to NAMAG requesting additional resources twice  
8           ahead of this event, it was told there were no resources available.

9           Due to its location in northern New England, and typically impacted by weather  
10          events later in time, CMP observes independent storm resources push south every storm to  
11          New York, New Jersey, and Pennsylvania a few days prior to Maine being potentially  
12          impacted. The remaining independent crews, those not pre-staged or secured by right of  
13          first refusal are being retained by the utilities to the south and west. These crews are from  
14          New York, Ohio, Pennsylvania, Connecticut, Massachusetts, New Hampshire, Maine and  
15          the Province of Quebec. New York’s governor also enacted a rule that prohibits utility  
16          crews from leaving New York until all restoration work has been completed within the  
17          state. This requires in-state utilities to retain their resources including independent  
18          contractors within New York prior to assisting other states. Crews could be available in  
19          eastern New York to assist New England utilities; however, Buffalo may still have outages

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<sup>26</sup> The Commission, Staff, the OPA, CMP, and other settling parties in the Company’s recent rate case recognized the value and importance of CMP pre-staging crews before storms in the Stipulation settling the case. In that Stipulation, which was approved by the Commission, the settling parties, with Staff’s support, agreed that for storms forecast to be “major” under the “High Confidence EEI level 3 classification” system, all pre-staging costs will be charged to the Tier 2 storm reserve regardless of the eventual outcome of the storm. *Central Maine Power Co. Request for Approval of Distribution Rate Increase and Rate Design Changes Pursuant to 35-A M.R.S. § 307, Docket No. 2022-00152, Stipulation, ¶ 44(c)* (May 31, 2023).

1 that would prohibit their release. This substantially delays the mutual aid process and the  
2 efficient shifting of crews regionally.

3 Nationally, regulatory bodies have crafted staffing requirements that promote the  
4 acquisition of resources, both full-time and for emergency response through a variety of  
5 methods. NAMAG began to see this shift in particular, because of the New York State  
6 Department of Public Service Staff's investigation into utility response to Tropical Storm  
7 Isaias. New York utilities received direct written communications from John B. Rhodes,  
8 then Chair and Chief Executive Officer of the Department, instructing the utilities to:

- 9 • Immediately begin the process of adding crewing capacity via retainer contracts  
10 from private contractors or utilities located outside of New York, with a goal to  
11 be able to secure sufficient crewing to double your existing internal capacity,  
12 and report bi-weekly to the Department on your crewing capacity for the  
13 remainder of the 2020 calendar year; and
- 14 • Develop other plans to secure utility crews in addition to private contractor and  
15 mutual aid provided by the NAMAG before and during storms, and report bi-  
16 weekly to the Department on your progress for the remainder of the 2020  
17 calendar year.

18 Regulators in both New York and Connecticut have also established regulations  
19 exposing utilities to financial penalties if storm restoration takes longer than 96 hours.  
20 These regulations drive utilities to secure resources earlier in the process and as many  
21 crews as they believe are needed ahead of an event to meet the 96-hour threshold. The  
22 domino effect of these regulations puts a burden on other utilities across the northeast,  
23 including especially CMP as one of the last utilities to be hit by most storms, as more and  
24 more utilities retain greater numbers of external crews to achieve faster restorations.

25 Through discussions with other utilities regarding resource readiness, the Company  
26 has learned over the last few years that the New York and New England utilities are using  
27 varying strategies to comply with these requirements, including the following:

- 1                   • Contracts with right of first refusal agreements that include minimum days of  
2                   activation per contract year or set annual costs for guaranteed resources;
  
- 3                   • Contracts for right of first refusal are in place with no annual fee until activated,  
4                   with the contractor’s ability to enact the first refusal for any storm activation  
5                   (such as traveling south for storm response and contacting the host utility for  
6                   first refusal more than a week prior to storm impact);
  
- 7                   • Agreements to fly in workers from out of the area to utilize equipment that is  
8                   stored at a site within or nearby the utility’s service area; and
  
- 9                   • Informal agreements that exist between known storm contractors and host  
10                  utilities that are leveraged due to the parties’ ongoing relationship (and often  
11                  the convenience of the contract worker’s location near or inside the utility  
12                  service territory).

13                  All utilities also are currently challenged by resource shortages due to the lack of skilled  
14                  labor, like many other industries.

15                  The political and regulatory landscape and customer expectations have changed,  
16                  and the pre-staging process is an effective tool that utilities and regulators are using to  
17                  meet these demands. CMP has already seen the impact of these regulatory and contractual  
18                  obligations and the need to proactively acquire resources earlier and earlier to ensure  
19                  availability and an efficient response capability. These developments impacted the  
20                  Company’s decision-making during the storm events that struck Maine in 2022 and are at  
21                  issue in this proceeding.

22   **Q.    Have these changing regulatory and political dynamics impacted the contractual**  
23   **requirements and pricing available from external crews?**

24   A.    Yes. These dynamics have made it more difficult and expensive for CMP to retain the  
25   external crews it needs for storm restoration, particularly for more severe storms that  
26   impact utilities across the northeast.

1           CMP has MSAs with its “blue-sky contractors” that regularly work on the  
2           Company’s system. These agreements generally include fixed pricing for storm  
3           restoration services. They also require these contractors to get permission from the  
4           Company before they can accept offers from other utilities whether in Maine or from  
5           utilities to the south of the State. Having contracts with other non-blue-sky contractors for  
6           storm restoration services at fixed rates, however, raises significant financial implications  
7           to CMP and customers. Entering a contract with these contractors could provide the  
8           Company guaranteed resources and rates but would come at a significant cost. These  
9           contractors expect to get something in return which means a firm commitment to use them  
10          during storm events. This has become very competitive. Utilities across the northeast are  
11          signing right of first refusal contracts with storm contractors which guarantee a minimum  
12          of three days of pay whether the predicted weather event results in the need for these  
13          contractors. Rather than entering these costly contracts with storm contractors, CMP  
14          works hard to maintain positive relationships with these contractors, such that they are  
15          interested in assisting the Company on storm restorations when available.<sup>27</sup> When storms  
16          approach, CMP requests pricing sheets from these contractors and determines which, if  
17          any, to retain. If the prices quoted for these contractors are out of line with the market,

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<sup>27</sup> For example, Holland Power Services (“HPS”) is one of the contractors that CMP regularly seeks to retain for storm duty. HPS specializes in storm restoration services and is an industry leader. It assisted CMP respond to Winter Storms Diaz and Elliott. As reflected in the public comment it submitted in this proceeding on October 3, 2023, “HPS considers CMP to be among if not, the best of all the electric utilities that we assist with restoration services. Their planning pre-staging, on-boarding are efficient, and they put our crews to work quickly and keep us working until restoration is complete. This is no easy task, and they do a better job of it than we see from other utilities that we partner with.” *See* Exhibit CMP-17 at 25; *see also id.* at 29 (Northline Utilities Public Comment (Oct. 2, 2023)) (“Having worked with many utilities during large and small restoration efforts, my team and I have always found CMP to be one of the most efficient utilities. . . . It has been our experience that CMP consistently executes storm restoration very well and better than most. While we all care about managing costs, it is important to realize that CMP’s efficiency and organization saves money overall. Their ability to minimize downtime and restore power quickly means less inconvenience and financial strain for their customers and Maine communities.”).

1 there is a discussion between Area Command Planning, Area Command, and Company  
2 Executives before any crews are retained. The other source for external resources is  
3 through NAMAG. Those contractors, however, generally come from outside the northeast,  
4 increasing travel times, and have much higher rates. CMP secures those crews only when  
5 necessary, deciding to incur the additional cost rather than go without and extend the  
6 outage duration by days.

7 **IV. CMP'S 2022 STORM RESPONSE**

8 **A. 2022 Storm Events**

9 **Q. Please summarize the storm events CMP responded to during 2022.**

10 A. In 2022, CMP responded to six storm events that impacted over 5% of the Company's  
11 customer base. These events are listed below with information regarding what the  
12 Company planned for and how its restoration times compared to what was listed in the  
13 Emergency Response Plan:

14 **January 17, 2022 – Nor'easter with rain and wind gusts**  
15 (Customers impacted 33,904; Peak 11,436)  
16 Planned for Level 5 Event  
17 Initial Resources acquired: 175 Ext Line Crews/135 Tree Crews  
18 Resources in Event: 119 Ext Line crews/124 Tree Crews  
19 Event Level in Event: Level 5  
20 Restoration from first Need to Know ("NTK") to MPUC: 14 hours 27 min  
21 (Emergency Response Plan predicts 24 to 48 hours)

22 **April 19, 2022 – Snow and high winds**  
23 (Customers impacted 47,257; Peak 29,593)  
24 Planned for Level 5 Event  
25 Initial Resources acquired: 112 Ext Line Crews/105 Tree Crews  
26 Resources in Event: 112 Ext Line crews/105 Tree Crews  
27 Event Level in Event: Level 5  
28 Restoration from first NTK to MPUC: 14 hours 36 min (Emergency Response  
29 Plan predicts 24 to 48 hours)



1                   **October 14, 2022 – Rain and heavy wind gusts**  
2                   (Customers impacted 102,360; Peak 69,578)  
3                   Planned for Level 5 Moderate to Level 5 Event  
4                   Initial Resources acquired: 81 Ext Line Crews/105 Vegetation Crews  
5                   Resources in Event: 240 Ext Line Crews/99 Vegetation Crews  
6                   Event Level in Event: Level 4  
7                   Restoration from first NTK to MPUC: 18 hours (Emergency Response Plan  
8                   predicts 2 to 5 Days)

9                   **December 1, 2022 – Winds, snow showers, rain**  
10                   (Customers impacted 76,939; 43,499 Peak)  
11                   Planned for Level 5 Event  
12                   Initial Resources acquired: 180 Ext Line Crews/106 Vegetation Crews  
13                   Resources in Event: 180 Ext Line Crews/106 Vegetation Crews  
14                   Event Level in Event: Level 4  
15                   Restoration from first NTK to MPUC: 27 hours 16 minutes (Emergency Response  
16                   Plan predicts 2 to 5 Days)

17                   **December 16, 2022 – Snow and gusty winds**  
18                   (Customers impacted 121,890; Peak 73,016)  
19                   Planned for Level 5  
20                   Initial Resources acquired: 130 Ext Line Crews/119 Veg Crews  
21                   Resources in Event: 540 Ext Line Crews/335 Veg Crews  
22                   Event Level in Event: Level 4  
23                   Restoration from NTK to MPUC: 3 Days 20 Hours 46 Minutes (Emergency  
24                   Response Plan predicts 2 to 5 Days)

25                   **December 23, 2022 – Rain, gusty winds, flash freeze**  
26                   (Customers impacted 300,765; Peak 213,440)  
27                   Planned for Level 5 to a Level 4  
28                   Initial Resources Acquired: 449 External Line Crews/223 Veg Crews  
29                   Resources in Event: 637 Ext Line Crews/230 Veg Crews  
30                   Event Level in Event: Level 3  
31                   Restoration from NTK to MPUC: 3 Days 14 Hours 31 Minutes (Emergency  
32                   Response Plan predicts 5 to 7 Days)

33                   In addition, the Emergency Response Team planned for and responded to 17 other  
34                   smaller events including severe thunderstorms and less impactful winter events that did not  
35                   reach the 5% threshold. All storm events CMP responded to during 2022 are listed on  
36                   Exhibit 2 to the OPA Testimony.

1 **Q. In responding to these storms in 2022, did CMP follow its Emergency Response Plan?**

2 A. Yes. The Company's Incident Command team relied upon and followed the Emergency  
3 Response Plan as the guidelines and approach for responding to these storms in the safest  
4 and most efficient manner possible. In doing so, Company management exercised its  
5 discretion under the Plan to retain the external resources it believed appropriate under the  
6 circumstances, all with the goal of restoring electrical service to customers as quickly and  
7 safely as possible.

8 **B. Major December 2022 Storms**

9 **Q. The vast majority of the OPA's recommended cost disallowances are related to**  
10 **CMP's storm restoration activities during the two major storms that struck Maine in**  
11 **December 2022. Please identify those storms.**

12 A. On December 16, 2022, Winter Storm Diaz struck Maine causing a total of 121,890  
13 customers to lose power. Seven days later, on December 23, 2022, Winter Storm Elliott  
14 struck Maine causing a total of 300,765 customers to lose power.

15 **1. Winter Storm Diaz**

16 **Q. Please describe Winter Storm Diaz, its impacts, and the Company's decision-making**  
17 **to plan for and respond to this storm.**

18 A. CMP's tracking of Winter Storm Diaz began on December 12, 2022. On that date,  
19 weather forecasts began to indicate the possibility of a significant weather event  
20 anticipated to bring with it rain, snow, and hazard wind gusts. Based on these early  
21 indications, the Area Commander sent a communication to key business area leaders  
22 advising that Area Command would be closely monitoring weather reports.

1 CMP's actions to plan for and respond to this storm are discussed in more detail  
2 below. This summary is presented to track the Operating Guidelines contained in Section  
3 2 of the Company's Emergency Response Plan beginning on page 42.

4 **Pre-Event (ERP Section 2, Part 5)**

5 **a. Pre-Event Preparations - ERP, Section 2, Part 5(a), page 42**

6 CMP began pre-event planning preparations for the December 16, Winter  
7 Storm Diaz:

- 8 • 12/12/2022: Review of Weather Reports indicating possible  
9 significant weather events for rain, snow, and hazard wind gusts;  
10 email to key stakeholders advising that Area Command was  
11 monitoring weather forecasts. (See Exhibits CMP-2, CMP-3, and  
12 CMP-4).
- 13 • 12/13/2022: Engaged Managers of Electric Operations Incident  
14 Commander; Vegetation Management ("VM"), Emergency  
15 Preparedness ("EP") and Executives to begin initial planning (See  
16 Exhibit CMP-5).
  - 17 1. Added coverage in all areas Friday, Saturday and Sunday
  - 18 2. EMA Outreach
  - 19 3. Hold crews at end of day on Friday.
  - 20 4. Asked Area Command Planning ("ACP") to get count of  
21 MSA contractors and ask that they report at 2:30 p.m. on  
22 Friday.
  - 23 5. Preliminary Event Level set (5 Minor to 5 Moderate) with  
24 caveat that Area Commander ("AC") would continue to  
25 evaluate.
  - 26 6. Request to ACP to advise if they start to hear from utilities  
27 south of CMP territory and what they are planning to acquire  
28 resources.
  - 29 7. Asked Customer Service to provide coverage plan.
- 30 • 12/14/2022: Area Command Planning was advised to start reaching  
31 out to MSA contractors with a preliminary request to secure 50  
32 crews (100 full time employees ("FTEs") as well as to local  
33 contractors to get right of first refusal for 30 additional crews. This  
34 resource level put CMP a position to respond to a Level 5 Moderate  
35 as well as ramp up to a Level 5 should the weather reports call for  
36 more hazardous weather as the week progressed.

- 1 • 12/14/2022: Pre-planning storm call with CMP’s Incident  
2 Command Team discussing situational awareness and discussion on  
3 pre-event readiness.
- 4 • 12/14/2022: Pre-planning storm call to large CMP storm team (all  
5 areas including Executives) discussing preliminary weather  
6 predictions, Event Level and outline of preparations made as of 3:17  
7 p.m. (See Exhibit CMP-6).

8 **b. Weather Forecasts – ERP Section 2, Part 5(b) page 43**

9 CMP began monitoring weather events on December 12, 2023 and this  
10 monitoring continued through December 16, 2023 which was the day of  
11 impact.

12 **c. Communications Preparedness – ERP Section 2, Part 5(c) page 44:**

13 CMP began communicating with its external stakeholders such as EMAs  
14 and MEMA on December 12, 2022 well ahead of the event. CMP’s Public  
15 Communications also began press releases on December 15, 2022 and  
16 issued press releases on a regular cadence through the end of the event.

17 **d. Internal Briefings / Conference Calls - ERP Section 2, Part 5(d) page**  
18 **44:**

19 Pre-event conference calls began on December 16, 2022 at 8:00 p.m. and  
20 event conference calls were held at 8:00, 2:00 and 8:00 each day throughout  
21 the event ending with the last call on December 20, 2022 at 2:00 p.m.  
22 These calls were run by the Area Commander and required updates from all  
23 Area Command and Incident Command levels.

24 **e. Pre-Staging Resources – ERP Section 2, Part 5(e) page 45:**

25 Initial pre-staging of line resources issued on December 15, 2022. (See  
26 Exhibit CMP-7).

27 Area Commander issued a system emergency on 12/16/2022 6:40 p.m. and  
28 CMP went into storm mode on December 16, 2022 at 7:05 p.m.

29 **f. Mutual Assistance/External Resources – ERP Section 2, Part 5(e) page**  
30 **45:**

31 Area Command Planning started receiving calls on December 14, 2022 that  
32 National Grid was looking to get 300-line crews and on the December 15,  
33 2022 neighboring utilities had started to commit to contractors. On

1 December 17, 2022 CMP was advised that neighboring utilities were  
2 reaching out to the Company's MSA contractors to assist with their  
3 restoration efforts.

4 On December 15, 2022, CMP began working with the MEMA to begin to  
5 secure Canadian crews from New Brunswick. There were six different  
6 requests for Canadian crews that were issued to MEMA between December  
7 15 and December 17.

8 The initial lane for this storm was a Level 5 Moderate and on December 15,  
9 2022, at 6:00 p.m. the Company had secured 97 crews.

10 As the forecast solidified, CMP sought to retain an additional 200 external  
11 overhead line crews to provide restoration services for this storm. Thus, at  
12 the end of day on December 17, 2022, CMP had secured 297 external line  
13 crews from the United States and Canada. This number was greater than  
14 the 125-175 range estimated in the Emergency Response Plan.

15 The decision to bring on additional resources above what was estimated in  
16 the Emergency Response Plan was based on the weather forecasts, past  
17 historical storms, conversations with meteorologists on their confidence  
18 levels as well as information received from utilities to the south of Maine  
19 concerning the number of resources they were seeking to retain.

20 With widespread actual damage sustained, the looming threat of another  
21 significant storm, coupled with the access challenges crews were  
22 experiencing, Area Command requested an additional 200 external line  
23 crews and support resources, bringing the total external line crew count to  
24 540 crews plus support staff.

## 25 **Activation and Incident Level Classification (ERP Section 2, Part 6)**

### 26 **a. Event Level Classification, Weather Predictors & Staffing - ERP,** 27 **Section 2, Part 6(a)-(c), pages 47-51**

28 As demonstrated in the following Figures reproduced from the Emergency  
29 Response Plan, the impact of Winter Storm Diaz crossed over many  
30 different event levels. The highlighted values represent the many points of  
31 information Area Command used to establish and adjust the event level and  
32 the number of resources needed to respond to the event. As discussed  
33 above, event level classifications are not a one size fits all. Events, like  
34 Winter Storm Diaz, often produce impacts that fit into several different  
35 levels and the compilation of that information drives the Company's  
36 decision-making with respect to the number of external resources that must  
37 be secured for restoration efforts. If the Company were to rely solely on the  
38 weather predictions, it often would fail to acquire adequate resources to

1  
2  
3

restore power in a safe and efficient manner. During a winter event, this would mean leaving customers in the cold and dark for several days longer than they should be.

WEATHER PREDICTORS	EVENT LEVEL							
	5 MINOR	5 MODERATE	5	4	3	2	1A	1
<b>Rain and Wind without Foliage</b>								
Sustained winds (mph)	-	35-40	40-50	50-60	-	-	-	-
Wind gusts (mph)	-	>40	>50	>60	-	-	-	-
Rain (inches)	-	>2	>3	>4	-	-	-	-
<b>Rain and Wind with Foliage</b>								
Sustained winds (mph)	-	25-35	35-45	40-50	40-50	50-60	-	-
Wind gusts (mph)	-	>40	>50	>50	>60	>70	-	-
Rain (inches)	-	>1	>1	>1	>1	>1	-	-
<b>Derecho</b>								
Sustained winds (mph)	-	-	-	-	-	50-75	75-95	-
Wind gusts (mph)	-	-	-	-	-	>80	>100	-
Rain (inches)	-	-	-	-	-	>1	>1	-
<b>Thunderstorm</b>								
Sustained winds (mph)	-	25-35	35-45	40-50	40-50	-	-	-
Wind gusts (mph)	-	>40	>50	>50	>60	-	-	-
Rain (inches)	-	>1	>1	>1	>1	-	-	-
<b>Heat</b>								
Day s > 90 Degrees	3	4	5	-	-	-	-	-
<b>Tornado</b>								
Fujitsu Scale	-	-	1	2	≥3	-	-	-
<b>Nor'easter</b>								
Sustained winds (mph)	30-40	40-50	40-50	40-50	-	-	-	-
Wind gusts (mph)	>50	>50	>60	>60	-	-	-	-
Rain (inches)	>1	>1	>1	>1	-	-	-	-
Snow (inches)	>1	>1	>1	>2	-	-	-	-

WEATHER PREDICTORS	EVENT LEVEL							
	5 MINOR	5 MODERATE	5	4	3	2	1A	1
<b>Tropical Storm</b>								
Sustained winds (mph)	-	-	-	39-49	50-65	65 -73	-	-
Wind gusts (mph)	-	-	-	45-55	55-65	65-85	-	-
Rain (inches)	-	-	-	1 to 2	2 to 4	2 to 4	-	-
Storm Surge	-	-	-	-	-	2 ft -to 4 ft	-	-
<b>Hurricane Cat 1</b>								
Sustained winds (mph)	-	-	-	-	-	-	74-95	-
Wind gusts (mph)	-	-	-	-	-	-	>100	-
Rain (inches)	-	-	-	-	-	-	2 to 14	-
Storm Surge	-	-	-	-	-	-	4 ft to 6 ft	-
<b>Hurricane Cat 2</b>								
Sustained winds (mph)	-	-	-	-	-	-	-	96-110
Wind gusts (mph)	-	-	-	-	-	-	-	>110
Rain (inches)	-	-	-	-	-	-	-	2 to 14
Storm Surge	-	-	-	-	-	-	-	> 6 ft to 9 ft
<b>Snow with Foliage</b>								
Sustained winds (mph)	-	40-50	40-50	40-50	50-60	-	-	-
Wind gusts (mph)	-	>50	>50	>60	>70	-	-	-
Wet Snow (inches)	-	>2	>3	>4	>6	≥9	>12	>14
<b>Snowstorm / Blizzard</b>								
Sustained winds (mph)	25-35	35-45	40-50	40-50	50-60	-	-	-
Wind gusts (mph)	≥40	>50	>50	>60	>70	-	-	-
Powder Snow	≥12	>18	>24	-	-	-	-	-
Wet Snow (inches)	>3	>4	>5	≥6	-	-	-	-
<b>Ice</b>								
Ice Storm (inches of ice)	<1/4	>1/4<1/2	>1/2-3/4	>3/4-1	1-1.5	1.5-2	>2-2.5	-
Sustained winds (mph)	-	20-30	20-30	20-30	20-30	20-30	20-30	-
Wind gusts (mph)	-	>40	>40	>40	>40	>40	>40	-

W: 792.0pt X: 661.6pt  
H: 612.0pt Y: 275.0pt

50/10

PARAMETER	EVENT LEVEL CLASSIFICATION							
	5 MINOR	5 MODERATE	5	4	3	2	1A	1
CUSTOMER OUTAGES	≤10,000	>10,000 - <20,000	>20,000 - <64,000	≥64,000 - <192,500	>192,500 - <321,000	>321,000 - <449,250	>449,250 - <577,600	>577,600
PERCENTAGE OF CUSTOMERS AFFECTED*	Up to 1.6%	≥ 1.6% - < 3.15%	≥ 3.15% - < 10%	≥ 10% - < 30%	≥ 30% - < 50%	≥ 50% - < 70%	≥ 70% - < 90%	≥ 90% - 100%
FEEDER / CIRCUIT LOCKOUTS	-	Up to 5	>5	>10	>25	≥50	>100	>200
OMS OUTAGE ORDERS	-	≥25 - <50	≥50 - <75	≥75 - <400	≥400 - <1,000	≥1,000 - <2,000	≥2,000 - <3,000	≥3,000
TROUBLE ORDERS (PARTIAL SERVICE / NON-OUTAGE ORDERS)	-	≥50	≥75 - <100	≥100 - <500	≥500 - <1,000	≥500 - <1,000	≥1,000 - <2,500	≥2,500
WIRE DOWN ORDERS	-	≥25	≥50 - <75	≥75 - <100	≥100 - <250	≥250 - <700	≥700 - <1,500	≥1,500
GLOBAL ESTIMATED RESTORATION TIME (FROM PEAK)	<12 hrs.	≥12 hrs. - <24 hrs.	≥24 hrs. - <48 hrs.	>2 days - <5 days	≥5 - <7 days	≥7 - <9 days	≥9 - <14 days	≥14 days
SUBSTATION PROBLEMS	-	1	1	2	3	≥4 - <10	≥10 - <14	≥14

MUTUAL ASSISTANCE / CONTRACTOR FIELD RESOURCES	EVENT LEVEL							
	5 MINOR	5 MODERATE	5	4	3	2	1A	1
Overhead Line Construction Crews (Defined as 2 person crews)	-	25-50	50-125	125-175	175-325	325-500	500-1000	1000-2000

**b. Plan Activation - ERP, Section 2, Part 6(d), page 52:**

On the evening of December 16, 2022, CMP’s service territory began to be impacted by Winter Storm Diaz bringing with it light rain and wind followed by snow. Overnight outages began to climb due to heavy wet snow on powerlines and loading of trees and by 8:00 a.m. on December 17, CMP had 72,000 customers that had been impacted by the storm.

Area Command elevated the storm’s classification to a Level 4 event. Overnight crews responded to requests from the local EMAs and emergency personnel to make safe and open roads.

All storm personnel reported at 5:00 a.m. on December 17, 2022 and objectives were set for the day. Contractor and tree crew movements were made into the hardest hit areas and continued throughout the day as the storm shifted from the coast to inland areas.

Make safe, road openings and damage assessment were the first priorities on the first day of the storm and restoration efforts ran in parallel were possible.

A regular cadence of storm calls with the Incident Command team were held three times a day to address resource needs, urgent matters, etc. Constant communication assisted the Company in shifting resources where needed to have the most efficient restoration effort and ensure that all resources were in and working to restore power to customers.

Restoration efforts followed the general sequence of service restoration set forth in Section 1, Part 3 of the Company’s Emergency Response Plan.<sup>28</sup>

On December 20, 2022, CMP went out of storm mode at 6:36 p.m. All customers were restored by 8:30 p.m. with 121,890 customers impacted and a peak of 73,016.

Restoration efforts for Winter Diaz took the Company three days, 20 hours and 46 minutes, which is within the Estimated Time of Restoration in the Company’s Emergency Response Plan for an Event Level 4. However, to meet that Estimated Time of Restoration, the external crew levels acquired

<sup>28</sup> ERP at 21.

1 aligned more with a Level 2 event due to the actual damages sustained, as  
2 shown in the following breakdown:

- 3 • 55 Feeder/Pole Top Breaker Issues – Event Level 2
- 4 • 219 EMA requests addressed – Event Level 3
- 5 • 4,599 Incidents – Event Level 1
- 6 • 2,376 Trouble Orders – Event Level 1A

7 This is a good illustration as to why the Emergency Response Plan is clear  
8 that the Company must determine resource needs on a case-by-case basis  
9 based on the actual damage sustained and that the staffing levels provided  
10 in the Plan are intended to be a guideline in decision-making but not an  
11 absolute requirement.

12 After the completion of restoration activities for Winter Storm Diaz, CMP  
13 did not demobilize all its resources due to the threat of another anticipated  
14 storm, Winter Storm Elliott. Initially, CMP sought to holdover all of the  
15 line crews from Winter Storm Diaz. Ultimately, CMP held over 429 Line  
16 Crews from Winter Storm Diaz to assist the Company in restoration efforts  
17 for Winter Storm Elliott.

## 18 2. Winter Storm Elliott

19 **Q. Please describe Winter Storm Elliott, its impacts and the Company’s decision-making**  
20 **to plan for and respond to this storm.**

21 A. On December 18, 2022, weather forecasts began to predict the possibility of a significant  
22 and complex weather event anticipated to bring with it initial periods of heavy wet snow,  
23 turning to rain with the possibility of hazard wind gusts. On December 19, 2022, DTN  
24 issued a Storm Impact Analysis (“SIA”) which predicted East Southeast (ESE) to South  
25 Southwest (SSW) winds ranging in gusts from as low as 35 mph to as high as 55 mph  
26 across CMP’s service territory. The SIA uses weather predictions along with historical  
27 CMP storm data to predict the probability of storm impacts as well as the anticipated  
28 number of incidents and outages that the Company can anticipate. The SIA predicted that  
29 the Company’s service area had the probability of incurring 421 incidents during this event



1 which would equate to over 100,000 customers impacted by outages. A copy of the SIA is  
2 provided as Exhibit CMP-8.

3 As these weather reports and SIAs began to unfold, CMP was required to release  
4 utility-based crews to return to their home utilities due to the Winter Storm Elliott.  
5 Additionally, independent contractors were receiving requests from individual linemen to  
6 be released due to holiday plans and higher pay offers with signing bonuses from other storm  
7 contractors to the south and west. To shore up existing resources, utilities not impacted by  
8 Winter Storm Diaz requested NAMAG issue a call for resources. NAMAG began to hold  
9 conference calls for resources. There were five NAMAG calls held between December 20,  
10 2022, and December 24, 2022:

11 12/20/2022 12:47 NAMAG Call #1 – Elliott  
12 NAMAG Requested 150 FTE Line and 150 FTE VEG  
13 No utilities were able to offer any resources on that call as  
14 they were holding what they had for their own storm  
15 response.

16 12/22/2022 09:00 NAMAG Call #2 – Elliott  
17 No utilities were able to offer any resources on that call as  
18 they were holding what they had for their own storm  
19 response.

20 12/23/2022 09:00 NAMAG Call #3 – Elliott  
21 No utilities were able to offer any resources on that call as  
22 they were holding what they had for their own storm  
23 response.

24 12/23/2022 13:47 NAMAG Call #4 – Elliott  
25 Made aware that everybody is holding (in anticipation of  
26 Winter Storm Elliott)

27 12/24/2022 17:00 NAMAG Call #5 – Elliott  
28 There were no offers made by utilities to offer up resources  
29 as they were holding any resources they had for their own  
30 storm response.

1           On December 21, 2022 at approximately 6:00 p.m., Area Command and Area  
2           Command Planning met to discuss the challenge that would be faced if resources from  
3           Winter Storm Diaz were demobilized and arranged discussions with CMP Executives in  
4           accordance with the Emergency Response Plan.<sup>29</sup> The Area Commander and Area  
5           Command Planning recommended, based on the predicted weather forecast and damage to  
6           the Company's system and the overloaded trees resulting from Winter Storm Diaz, that  
7           CMP holdover as many of the crews that were currently deployed as possible. At  
8           approximately 9:00 p.m., CMP's President and Vice President of Operations agreed to the  
9           plan, and CMP held over 540 line crews for the upcoming Winter Storm Elliott. These  
10          crews were used to perform distribution system inspections between events to find and  
11          correct any hazards that might cause outages.

12           CMP's actions to plan for and respond to this storm are discussed in more detail  
13          below. This summary is presented to track the Operating Guidelines contained in Section  
14          2 of the Company's Emergency Response Plan beginning on page 42.

15           **Pre-Event (ERP Section 2, Part 5)**

16           **a. Pre-Event Preparations - ERP, Section 2, Part 5(a), page 42**

17           CMP's pre-event planning preparations for the December 23, Winter Storm  
18          Elliott began on December 18, 2022, and continued as follows:

- 19           • 12/18/2022 – 12/22/2022: Review of weather reports indicating  
20           possible significant weather events for rain, snow, and hazard wind  
21           gusts up to 60 mph; sustained winds between 30-40 mph.
- 22           • 12/20/2022: Engaged Managers of Electric Operations (Incident  
23           Commanders) asking that they begin conversations with their Local  
24           EMAs regarding the predicted weather event.

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<sup>29</sup> ERP at 18.

- 1 • 12/21/2022 8:00 a.m. Incident Command Storm Team call held in  
2 preparation of impact of Winter Storm Elliott.
  
- 3 • 12/21/2022 Pre-Storm Event Planning email issued to Storm Team  
4 (Exhibit CMP-9):
  - 5 a. Situational Awareness
  - 6 b. Added coverage in all areas Friday, Saturday and Sunday.
  - 7 c. Began outreach to MEMA and local EMAs.
  - 8 d. Hold crews at end of day on Thursday.
  - 9 e. Damage Assessors, Patrollers & Line Resources asked to  
10 report Thursday morning with bags packed and ready to  
11 travel.
  - 12 f. Established 5:00 a.m. reporting time for all storm resources  
13 on Friday morning.
  - 14 g. Area Command Planning was asked to secure 500-line  
15 contractor crews and Area Command Planning for Veg to  
16 secure 223 crews.
  - 17 h. Preliminary Event Level set (5 to Level 4) with caveat that  
18 AC would continue to evaluate.
  - 19 i. Secured 90 Patrollers
  - 20 j. Built 203 Storm Kits
  - 21 k. Restocked Mobile storm trailers and redeployed to pre-  
22 determined locations.
  - 23 l. Mobile Command center prepared to deploy and secured  
24 York County EMA Command Center
  - 25 m. Staffed Customer Contact Center with 12-hour shifts
  - 26 n. All vacations were cancelled.
  - 27 o. Facilities ensured all generators were tested and Mechanical  
28 service was put on call for the weekend.
  - 29 p. Logistics worked on lodging, rentals and meals including  
30 lining up caterers and buffets for Christmas meals for storm  
31 teams.
  
- 32 • 12/21/2022: CMP Press Release on storm preparations issued.
  
- 33 • 12/21/2022: CMP President issues communication to all CMP  
34 employees and customers.
  
- 35 • 12/22/2022: Call with CMP Storm Team advising of plans for end  
36 of day and early report for 12/23/2022 and situational awareness  
37 ahead of the event.
  
- 38 • 12/22/2022: Regular cadence of storm team calls scheduled.
  
- 39 • 12/23/2022: Storm Mode declared by AC at 4:42 a.m.

- 1 • 12/23/2022: NTK Sent to MPUC at 5:01 a.m; System Emergency  
2 Declared at 6:27 a.m.
- 3 • 12/23/2022: Incident Command Storm Call for situational  
4 awareness and report out from incident command team.
- 5 • 12/23/2022: Storm call for large CMP storm team (all areas  
6 including executives) for situational awareness, setting objectives  
7 for day one of storm and report out from Incident Commanders and  
8 all key business areas.

9 **b. Weather Forecasts - ERP, Section 2, Part 5(b), page 43**

10 CMP began monitoring weather events on December 18, 2022. CMP  
11 monitored weather events daily from that date through December 23, 2023,  
12 which was the day of impact.

13 **c. Communications Preparedness – ERP, Section 2, Part 5(c), page 44:**

14 CMP began communication with its external stakeholders such as MEMA  
15 and EMAs well ahead of the event on December 23, 2022. CMP Public  
16 Communications also began press releases on December 21, 2022 and  
17 issued press releases on a regular cadence through the end of the event.

18 Governor Mills in conjunction with MEMA issued a press release for  
19 Mainers to prepare.

20 **d. Internal Briefings/Conference Calls – ERP, Section 2, Part 5(e), page**  
21 **44:**

22 Pre-event conference calls began on December 21, 2022 at 8:00 p.m. and  
23 event conference calls were held at 8:00, 2:00 and 8:00 each day throughout  
24 the event ending with the last call on December 27 at 8:00 a.m. These calls  
25 were run by the Area Commander and required updates from all Area  
26 Command and Incident Command levels.

27 CMP went into storm mode on December 23, 2022 at 4:42 a.m. and Area  
28 Commander issued a system emergency on that date at 6:27 a.m.

29 **e. Pre-Staging Resources – ERP, Section 2, Part 5(e), page 45:**

30 On December 20, 2022, Area Command Planning began communicating  
31 with MEMA regarding the need to hold Canadian crews through the Winter  
32 Storm Elliott event. (See Exhibits CMP-10 and CMP-11).

33 MEMA approves CMPs request to maintain the Canadian crews.

1 Initial pre-staging of line resources issued on 12/21/2022. (See Exhibit  
2 CMP-12)

3 **f. Mutual Assistance/External Resources – ERP, Section 2, Part 5(f), page**  
4 **45:**

5 Based on the forecast, conditions in the field, the Company initially set its  
6 target for external crews at 400, but then increased that target to 500 crews,  
7 which corresponded to a Level 2 event. At that time, the Company had 540  
8 crews already working to respond to Winter Storm Diaz, but it expected  
9 crew losses due to the holiday, expected pay increases, and expected  
10 bonuses.

11 On December 15, 2022, CMP began working with MEMA to secure  
12 Canadian crews from New Brunswick. As part of Winter Storm Diaz, there  
13 were six different requests for Canadian Crews that went to MEMA  
14 between December 15 and December 17. The Company did not release  
15 these crews to travel back to New Brunswick and instead on December 20,  
16 2022, CMP began working with MEMA to hold them over due to the  
17 forecast and the anticipated challenge of securing additional resources to  
18 respond to Winter Storm Elliott. (See Exhibits CMP-10 and CMP-11).

19 The decision to bring on additional resources or retain above the estimated  
20 range provided in the Emergency Response Plan was based on the weather  
21 forecasts, past historical storms, conversations with meteorologists on their  
22 confidence levels as well as information coming in from utilities south of  
23 CMP's service territory and what they would be preparing for with  
24 resources. CMP requested a comparison of the predicted weather event to  
25 the 2017 October Wind storm to further confirm its belief that there was a  
26 high likelihood of widespread damage and the challenge it would be to get  
27 additional resources based on the demand at other utilities, Area Command  
28 recommended to Company executives based on a variety of factors  
29 previously outlined that they secure all available resources currently on  
30 property.

31 On December 21, 2022, at 9:18 p.m., the Company's decided to hold all  
32 crews. This decision was communicated to planning and notifications  
33 began.

34 CMP also reached out to MEMA to determine if the Company could get  
35 approval to bring an additional contingency of Canadian crews to travel on  
36 12/22/2022.

37 Market influences, however, began to impact the existing restoration  
38 efforts. With the forecast calling a bombogenesis type storm of record size  
39 and impacts, utility-based crews were being recalled. Contractors that had

1 MSA agreements with other utilities were recalled and independent  
2 contractors were asking about their release time so they could work for  
3 other utilities that were to be impacted by Winter Storm Elliot, prior to  
4 CMP. Demand market pricing ensued. There were cash signing bonuses for  
5 lineman and promises of double time or higher for working Christmas.

6 In total, CMP was able to hold approximately 429 contracted/mutual aid  
7 resources for initial deployment for this event. (See Exhibit CMP-12).

8 **Activation and Incident Level Classification (ERP Section 2, Part 6)**

9 **a. Event Level Classification, Weather Predictors & Staffing - ERP,**  
10 **Section 2, Part 6(a)-(c), pages 47-51**

11 Pre-storm, CMP designated Winter Storm Elliott as a Level 4 event. As  
12 demonstrated in the following Figures reproduced from the Emergency  
13 Response Plan, the actual impact of Winter Storm Elliott crossed over many  
14 different event levels. The highlighted values represent the several points  
15 of information Area Command used to set and adjust the event level and to  
16 determine the number of resources needed to respond to the event.

WEATHER PREDICTORS	EVENT LEVEL							
	5 MINOR	5 MODERATE	5	4	3	2	1A	1
<b>Rain and Wind without Foliage</b>								
Sustained winds (mph)	-	35-40	40-50	50-60	-	-	-	-
Wind gusts (mph)	-	>40	>50	>60	-	-	-	-
Rain (inches)	-	>2	>3	>4	-	-	-	-
<b>Rain and Wind with Foliage</b>								
Sustained winds (mph)	-	25-35	35-45	40-50	40-50	50-60	-	-
Wind gusts (mph)	-	>40	>50	>50	>60	>70	-	-
Rain (inches)	-	>1	>1	>1	>1	>1	-	-
<b>Derecho</b>								
Sustained winds (mph)	-	-	-	-	-	50-75	75-95	-
Wind gusts (mph)	-	-	-	-	-	>80	>100	-
Rain (inches)	-	-	-	-	-	>1	>1	-
<b>Thunderstorm</b>								
Sustained winds (mph)	-	25-35	35-45	40-50	40-50	-	-	-
Wind gusts (mph)	-	>40	>50	>50	>60	-	-	-
Rain (inches)	-	>1	>1	>1	>1	-	-	-
<b>Heat</b>								
Days > 90 Degrees	3	4	5	-	-	-	-	-
<b>Tornado</b>								
Fujitsu Scale	-	-	1	2	≥3	-	-	-
<b>Nor'easter</b>								
Sustained winds (mph)	30-40	40-50	40-50	40-50	-	-	-	-
Wind gusts (mph)	>50	>50	>60	>60	-	-	-	-
Rain (inches)	>1	>1	>1	>1	-	-	-	-
Snow (inches)	>1	>1	>1	>2	-	-	-	-

WEATHER PREDICTORS	EVENT LEVEL							
	5 MINOR	5 MODERATE	5	4	3	2	1A	1
<b>Tropical Storm</b>								
Sustained winds (mph)	-	-	-	39-49	50-65	65-73	-	-
Wind gusts (mph)	-	-	-	45-55	55-65	65-85	-	-
Rain (inches)	-	-	-	1 to 2	2 to 4	2 to 4	-	-
Storm Surge	-	-	-	-	-	2 ft - to 4 ft	-	-
<b>Hurricane Cat 1</b>								
Sustained winds (mph)	-	-	-	-	-	-	74-95	-
Wind gusts (mph)	-	-	-	-	-	-	>100	-
Rain (inches)	-	-	-	-	-	-	2 to 14	-
Storm Surge	-	-	-	-	-	-	4 ft to 6 ft	-
<b>Hurricane Cat 2</b>								
Sustained winds (mph)	-	-	-	-	-	-	-	96-110
Wind gusts (mph)	-	-	-	-	-	-	-	>110
Rain (inches)	-	-	-	-	-	-	-	2 to 14
Storm Surge	-	-	-	-	-	-	-	> 6 ft to 9 ft
<b>Snow with Foliage</b>								
Sustained winds (mph)	-	40-50	40-50	40-50	50-60	-	-	-
Wind gusts (mph)	-	>50	>50	>60	>70	-	-	-
Wet Snow (inches)	-	>2	>3	>4	>6	>9	>12	>14
<b>Snowstorm / Blizzard</b>								
Sustained winds (mph)	25-35	35-45	40-50	40-50	50-60	-	-	-
Wind gusts (mph)	>40	>50	>50	>60	>70	-	-	-
Powder Snow	>12	>18	>24	-	-	-	-	-
Wet Snow (inches)	>3	>4	>5	>6	-	-	-	-
<b>Ice</b>								
Ice Storm (inches of ice)	<1/4	>1/4-<1/2	>1/2-3/4	>3/4-1	1-1.5	1.5-2	>2-2.5	-
Sustained winds (mph)	-	20-30	20-30	20-30	20-30	20-30	20-30	-
Wind gusts (mph)	-	>40	>40	>40	>40	>40	>40	-

PARAMETER	EVENT LEVEL CLASSIFICATION							
	5 MINOR	5 MODERATE	5	4	3	2	1A	1
CUSTOMER OUTAGES	≤10,000	>10,000 - <20,000	>20,000 - <64,000	≥64,000 - <192,500	>192,500 - <321,000	>321,000 - <449,250	>449,250 - 577,600	>577,600
PERCENTAGE OF CUSTOMERS AFFECTED*	Up to 1.6%	≥ 1.6% - < 3.15%	≥ 3.15% - < 10%	≥ 10% - < 30%	≥ 30% - < 50%	≥ 50% - < 70%	≥ 70% - < 90%	≥ 90% - 100%
FEEDER / CIRCUIT LOCKOUTS	-	Up to 5	>5	>10	>25	>50	>100	>200
OMS OUTAGE ORDERS	-	≥25 - <50	≥50 - <75	≥75 - <400	≥400 - <1,000	≥1,000 - <2,000	≥2,000 - <3,000	≥3,000
TROUBLE ORDERS (PARTIAL SERVICE / NON-OUTAGE ORDERS)	-	≥50	≥75 - <100	≥100 - <500	≥500 - <1,000	≥500 - <1,000	≥1,000 - <2,500	≥2,500
WIRE DOWN ORDERS	-	≥25	≥50 - <75	≥75 - <100	≥100 - <250	≥250 - <700	≥700 - <1,500	≥1,500
GLOBAL ESTIMATED RESTORATION TIME (FROM PEAK)	<12 hrs.	≥12 hrs. - <24 hrs.	≥24 hrs. - <48 hrs.	>2 days - <5 days	≥5 - <7 days	≥7 - <9 days	≥9 - <14 days	≥14 days
SUBSTATION PROBLEMS	-	1	1	2	3	≥4 - <10	≥10 - <14	≥14

\*Percent of customers affected is based on the total number of customers 641,791.  
\*\*Global Estimated Restoration Time is based on historical data and prior to completion of field verified damage assessments.

MUTUAL ASSISTANCE / CONTRACTOR FIELD RESOURCES	EVENT LEVEL							
	5 MINOR	5 MODERATE	5	4	3	2	1A	1
Overhead Line Construction Crews (Defined as 2 person crews)	-	25-50	50-125	125-175	175-325	325-500	500-1000	1000-2000

1 **b. Plan Activation - ERP, Section 2, Part 6(d), page 52:**

2 Early morning on December 23, 2022, the CMP service territory began to  
3 be impacted by Winter Storm Elliott bringing with it rain in most areas and  
4 snow in the Northern regions along with hazardous wind gusts. By 8:00  
5 a.m. that morning 39,661 customers had been impacted and weather  
6 conditions continued throughout the day resulting in 300,765 customers  
7 being impacted by this event. Area Command elevated the storm to a Level  
8 3 event.

9 To address the actual damage sustained to CMP's system, the Company  
10 deployed a total of 637 crews during storm restoration. (See Exhibit CMP-  
11 13).

12 Make safe, road openings and damage assessment were top priorities on the  
13 first day of the storm and restoration efforts ran in parallel where possible.  
14 Due to the high wind gusts, restoration was challenging as crews are not  
15 allowed to fly their buckets for gusts over 35 mph.

16 A regular cadence of storm calls with the Incident Command team were  
17 held three times a day to address resource needs, urgent matters, and other  
18 issues. Constant communication assisted the Company to shift resources  
19 where needed to have the most efficient restoration effort and ensure that all  
20 resources were in and working to restore power to customers.

21 Restoration efforts followed the general sequence of service restoration set  
22 forth in Section 1, Part 3 of the Company's Emergency Response Plan.

23 Restoration activities continued until December 27, 2022. By 6:00 p.m. on  
24 December 27, 2022, CMP had restored service to all customers and the  
25 Company was taken out of storm mode. (See Exhibit CMP-14).

26 As per the Emergency Response Plan, CMP began demobilization of its  
27 mutual aid and contractor resources as they became available and were no  
28 longer needed. Demobilization began at 7:00 a.m. on December 27, 2022,  
29 and continued throughout the day as crews cleaned up assignments and  
30 were no longer needed. All mutual aid and contractor resources were  
31 released by 7:00 p.m. that day. (See Exhibits CMP-13 and CMP-14).

32 Demobilization of internal resources began at 10:00 p.m. on 12/27/2022.  
33 Any resources that were no longer being utilized for storm response were



1 released, except for line crews who would continue with restoration and  
2 trouble clean up into the next day.

3 Restoration efforts for Winter Storm Elliott took CMP three days, 13 hours  
4 and 41 minutes, which is within the Estimated Restoration Time range in  
5 the Emergency Response Plan for an Event Level 4 storm. This represents  
6 a tremendous success, which minimized the number of customers that were  
7 without power on Christmas and during the days between Christmas and  
8 New Year's.

9 Had CMP staffed to a Level 3 event, the Estimated Restoration Time would  
10 have been 5 to 7 days. However, as shown below, the actual damage  
11 sustained during Winter Storm Elliott was consistent with Level 1, Level  
12 1A and Level 2 events.

- 13 • 86 Feeder/Pole Top Breaker Issues – Level 2
- 14 • 1,500 EMA requests addressed – Level 1A
- 15 • 4,507 Incidents – Level 1
- 16 • 3,422 Trouble Orders – Level 1

17 The Company's Emergency Response Plan reflects that the Estimated  
18 Restoration Time for events of that severity range from 7 to 14 days. The  
19 Plan also calls to staff events of that severity with anywhere between 325  
20 and 2000 external crew resources. CMP's actual external crew complement  
21 fell within the 1A level, and using these crews the Company was able to  
22 restore service to all customers in less than 4 days. This demonstrates how  
23 efficiently CMP used its internal and external crews to respond to this  
24 severe weather event, making sure that they were engaged and working in  
25 an efficient and safe manner. It also confirms that CMP's management  
26 properly and effectively exercised the discretion provided for in the  
27 Emergency Response Plan to determine the appropriate number of external  
28 resources, based on the actual damages sustained, to restore service to  
29 customers as quickly and safely as possible.

30 **Q. Were there other unique circumstances worth mentioning with respect to the**  
31 **Company's response to Winter Storm Elliott?**

32 A. Yes. Winter Storm Elliott struck right on the heels of Winter Storm Diaz on December 23,  
33 2022, just two days before Christmas. This meant that many CMP employees and the  
34 Company's internal and external crews had already worked several days prior to the  
35 impact of this storm event. Many also had to work long hours on days that would have

1 otherwise been spent preparing for holiday celebrations with their families and friends so  
2 that they could restore electric service customers who were trying to celebrate the holidays  
3 with their own families. Under these circumstances, this storm truly became an all-hands-  
4 on-deck event. Back-office support made over 3,000 sandwiches and coordinated meals  
5 across the Company's service territories to make sure that crews were fed appropriately  
6 and could have a holiday meal during restoration. Due to it being Christmas, there were  
7 limited restaurants for CMP crews to eat at so many local Rotary, VFW and Elks clubs  
8 also coordinated meals so that the crews could have a hot Christmas meal. Many CMP  
9 retirees who had not worked for the Company for years also reached out to offer their  
10 support to assist in any way needed.<sup>30</sup>

11 **Q. Did CMP also receive requests to aid other utilities in Maine during this storm?**

12 A. Yes. As CMP's restoration efforts were ongoing, the Company received requests from  
13 Eastern Maine Electric Co-Op which was facing resource challenges to get its customers  
14 restored. The Company's Area Command, Area Command Planning, and Executives met  
15 on December 26, 2022 to discuss that need and made sure that the Company was able to  
16 move resources to the Co-Op to assist in its restoration efforts as well. CMP released four  
17 bucket crews to the Co-op to assist with its restoration efforts at 7:30 a.m. on December  
18 27, 2023. In addition, CMP offered resources to Versant prior to completely releasing all  
19 crews but Versant declined to accept those resources. CMP's ability to ramp up during a  
20 major event using its MSA contractors as well as resources from its affiliates is critical to  
21 CMP's restoration success. However, the Company also understands that whenever

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<sup>30</sup> See Exhibit CMP-14.

1 possible, it will assist other utilities within the State as the Company is able without  
2 inhibiting its own restoration plan.

3 **Q. Did CMP receive any recognition for the Company’s performance responding to**  
4 **Winter Storm Elliott?**

5 A. Yes. Edison Electric Institute (“EEI”) awarded CMP (along with two other Avangrid  
6 companies) with an Emergency Response Award for their extraordinary performance  
7 during recovery and restoration efforts from Winter Storm Elliott. In a public  
8 announcement at EEI’s summer meeting, the President and CEO of EEI said this:

9 Ensuring the safety of our customers, communities, and crews is our  
10 industry’s top priority. Safety is especially critical during severe storms  
11 and extreme weather events, such as hurricanes, tornadoes, and winter  
12 storms,” . . . “I commend Avangrid’s commitment to restoring service for  
13 its customers safely and efficiently under challenging conditions following  
14 Winter Storm Elliott. Avangrid and its storm response team are extremely  
15 deserving of this national recognition, and I am honored to present them  
16 with this well-earned recovery award.<sup>31</sup>

17 **V. CMP’S RESPONSE TO THE OPA’S ERP GUIDELINES ADJUSTMENT**

18 **Q. How is the OPA’s ERP Guidelines Adjustment calculated?**

19 A. As reflected in Exhibit 2 to the OPA’s testimony, the OPA’s ERP Guidelines Adjustment  
20 is calculated in two steps. First, the OPA calculates a percentage reduction on a storm-by-  
21 storm basis by comparing (1) the number of external overhead line crews CMP retained in  
22 response to each storm event in 2022, and (2) the upper end guideline identified in CMP’s  
23 Emergency Response Plan for the number of external overhead line crews for an event of  
24 that severity. Second, the OPA applies the resulting percentage for each storm to the total

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<sup>31</sup> Press Release, Avangrid, Avangrid Companies Receive EEI Emergency Response Award (Jun. 13, 2023),  
<https://www.avangrid.com/w/avangrid-companies-receive-eei-emergency-response-award>

1 amount of external contractor expenses CMP incurred respond to that storm to arrive at its  
2 recommended reduction.<sup>32</sup>

3 **Q. Does CMP have any concerns with the OPA’s ERP Guidelines Adjustment?**

4 A. Yes, CMP has several concerns with the OPA’s ERP Guidelines Adjustment and the  
5 calculations that support it. These concerns are summarized in the bullets below and  
6 described in more detail throughout the remainder of this section of the Company’s  
7 testimony.

- 8 • The OPA inappropriately interprets the staffing level ranges reflected in CMP’s  
9 Emergency Response Plan as rigid requirements. While this premise is the core  
10 assumption underpinning the OPA’s Emergency Response Plan Guidelines  
11 Adjustment, CMP’s Emergency Response Plan clearly states that “[d]ue to the  
12 varied nature of emergency events, actual response activities and resource needs  
13 can vary significantly, and these will be determined on a case by case basis.  
14 Therefore, the guidance contained in this section is not intended to be an absolute  
15 requirement or a required level of resources, nor should they be interpreted as such.  
16 This information is intended to be used as a guideline to aid decision making.”<sup>33</sup>
- 17 • The OPA fails to account for the increased work per crew that would be required  
18 from the reduced number of crews reflected in the OPA’s ERP Guidelines  
19 Adjustment. For example, if the number of crews used by CMP were cut in half, it  
20 would take the reduced number of crews at least twice as long to restore service.  
21 By simply applying a basic ratio (*i.e.*, comparing the number of crews CMP

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<sup>32</sup> See also 11/15/2023 Tech. Conf. Tr. at 126:7-127:4.

<sup>33</sup> ERP at 52. Notably, Mr. Houck did not highlight this language in the Emergency Response Plan he reviewed, nor mention it in his testimony. ODR-003-001, Attachment A.

1 retained to the guideline crew levels set forth in its Emergency Response Plan)  
2 without any adjustment for the resulting increase in work (and, by extension, cost)  
3 per crew, the OPA’s ERP Guidelines Adjustment is grossly oversimplified.

- 4 • The OPA’s analysis fails to consider the financial costs CMP’s customers would  
5 bear for the longer outages that would result from the OPA’s recommendations.

6 This cost is measured in the tens of millions of dollars using even quite  
7 conservative assumptions.<sup>34</sup>

- 8 • The OPA’s analysis includes costs associated with CMP’s tree crews in the  
9 calculation of the OPA’s ERP Guidelines Adjustment, even though the basis for  
10 this adjustment (*i.e.*, the staffing level range provided in CMP’s Emergency  
11 Response Plan) is a guideline for the number of external overhead line crews rather  
12 than tree crews. Correcting for this error results in a reduction in the OPA’s ERP  
13 Guidelines Adjustment of \$5,414,577.

- 14 • Even if it were otherwise correct, as Mr. Houck concedes,<sup>35</sup> the OPA’s analysis  
15 double counts affiliated service costs in the amount of \$1,004,952.

- 16 • The OPA’s ERP Guidelines Adjustment would necessarily result in longer outages  
17 in the future, which would be contrary to customer and community expectations  
18 and Maine’s efforts to promote beneficial electrification and greenhouse gas  
19 emission reductions. Furthermore, longer outages with a reduced number of crews  
20 undermines CMP’s ability to restore power in an efficient and safe manner, putting

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<sup>34</sup> 11/15/2023 Tech. Conf. Tr. at 97:17-24 (“MR. DES ROSIERS: ... So is it fair to understand that you did not in any way try to analyze the burden on customers for the outage duration that would -- the difference in outage duration that would have resulted from your recommendation? MR. HOUCK: Right, we did not consider that.”).

<sup>35</sup> 11/15/2023 Tech. Conf. Tr. at 126:7-128:1.

1 the public, contractors and CMP's employees in a position where severe injuries or  
2 worse could occur.

3 Because of these fatal flaws, the OPA's ERP Guidelines Adjustment should be  
4 rejected.

5 **A. The OPA's ERP Guidelines Adjustment Inappropriately Treats the Staffing**  
6 **Level Guidelines in CMP's Emergency Response Plan as Rigid Requirements**

7 **Q. How does the OPA's Emergency Response Plan Guidelines Adjustment interpret the**  
8 **external staffing guidelines in CMP's Emergency Response Plan as rigid**  
9 **requirements?**

10 A. The OPA, through the initial testimony of Mr. Houck, repeatedly refers to the upper end of  
11 the external staffing guidelines presented on page 51 of CMP's Emergency Response Plan  
12 as the "maximum" recommendation. For example, Mr. Houck describes his analysis as  
13 follows in his initial testimony:

14 My analysis of the storms included in CMP's filing shows that CMP  
15 exceeded the maximum recommendation for external staffing needs for 12  
16 out of 23 storms included in its filing. In performing this analysis, I looked  
17 at both CMP's predicted event level and actual event level. I compared the  
18 maximum staffing recommendation for the more severe of the predicted or  
19 actual event level for each storm, with the actual resources secured by  
20 CMP for the storm.<sup>36</sup>

21 This methodology was then reiterated in response to data requests from CMP and Staff.

22 For example, in response to CMP-001-020, the OPA stated (underlining added):

23 Mr. Houck used the maximum number of crews recommended per CMP's  
24 ERP for the more severe of the predicted or actual event level. Mr. Houck  
25 then compared this value to the number of external crews retained by  
26 CMP for the storm. To the extent the number of crews retained by CMP  
27 exceeded the guidelines in the ERP, Mr. Houck converted the excess crew

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<sup>36</sup> OPA Testimony at 8 (underlining added).

1 amount to a percentage and applied this percentage as a reduction to the  
2 incremental external crew cost amount for the storm.<sup>37</sup>

3 **Q. Do the staffing level guidelines reflected in CMP’s Emergency Response Plan cap the**  
4 **number of external overhead line crews CMP can prudently retain?**

5 A. No, they do not. CMP’s Emergency Response Plan clearly indicates that the staffing level  
6 guidelines relied on by the OPA are just that – guidelines – and not absolute requirements.  
7 For example, the text immediately following the “Staffing Needs by Event Level” table  
8 relied upon by the OPA is as follows:

9 Due to the varied nature of emergency events, actual response activities  
10 and resource needs can vary significantly, and these will be determined on  
11 a case by case basis. Therefore, **the guidance contained in this section is**  
12 **not intended to be an absolute requirement or a required level of**  
13 **resources, nor should they be interpreted as such. This information is**  
14 **intended to be used as a guideline to aid decision making.**<sup>38</sup>

15 This emphasis on analyzing the actual damage associated with each event is reiterated  
16 elsewhere in the Emergency Response Plan. For example:

17 Any single weather indicator does not establish the event level. **Actual**  
18 **damage, used in conjunction with additional incident information,**  
19 **will determine the appropriate level of response.** Weather forecast  
20 information can be used as a guideline to predict an anticipated level of  
21 impact during the planning phase for an event, but **the actual impact of a**  
22 **weather event will determine the appropriate level of response.**<sup>39</sup>

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<sup>37</sup> See also 11/15/2023 Tech. Conf. Tr. at 19:14-20:13 (“MR. DES ROSIERS: Okay. But is the ultimate determination of the number of crews tied to the damage or tied to the event level that’s on this chart on page 51? MR. HOUCK: My understanding is it’s the event level. MR. DES ROSIERS: And what’s the basis of that understanding? MR. HOUCK: This chart right here.”).

<sup>38</sup> ERP at 52 (emphasis added).

<sup>39</sup> ERP at 49 (emphasis added). Mr. Houck did highlight a portion of this language in the Emergency Response Plan he reviewed but does not mention it in his testimony. ODR-003-001, Attachment A.

1 **Q. How did the actual impacts of Winter Storms Diaz and Elliott inform CMP’s staffing**  
2 **decisions when responding to those storms?**

3 A. As described in Section IV above, CMP selects an event level for each storm based on a  
4 variety of factors. For Winter Storms Diaz and Elliott, like most storm events, some of  
5 those factors suggested a more moderate event level and others suggested a more severe  
6 event level. While CMP post-storm designated Winter Storms Diaz and Elliott as Event  
7 Level 4 and Event Level 3 events, respectively, based on the number of customer outages,  
8 most of the damage-related indicators were consistent with more severe event levels.  
9 Figure 1 below compares the number of OMS outage orders, trouble orders, wire down  
10 orders, and feeder / circuit lockout orders associated with Winter Storm Diaz to the  
11 parameters for those same metrics for a Level 4 event (*i.e.*, Winter Storm Diaz’s assigned  
12 event level). In every case, the actual impacts CMP sustained exceeded the guideline  
13 ranges for an event of Winter Storm Diaz’s event level.

14 **Figure 1: Winter Storm Diaz – Actual Damage vs. Event Level 4 Guidelines**

<b>Parameter</b>	<b>Event Level 4 Range</b>	<b>Winter Storm Diaz Actuals</b>
OMS Outage Orders	75-400	4,599
Trouble Orders	100-500	2,376
Feeder/Circuit Lockouts	10-25	55
Wire Down Orders	75-100	374

15 Figure 2 below provides comparable information for Winter Storm Elliott, a designated  
16 Level 3 event. As with Winter Storm Diaz, in every case, the actual impacts CMP  
17 sustained exceeded the guideline ranges for an event of Winter Storm Elliott’s event level.



1 **Figure 2: Winter Storm Elliott – Actual Damage vs. Event Level 3 Guidelines**

Parameter	Event Level 3 Range	Winter Storm Elliott Actuals
OMS Outage Orders	400 – 1,000	4,507
Trouble Orders	500 – 1,000	3,422
Feeder/Circuit Lockouts	25 – 50	86
Wire Down Orders	100 – 250	1,500

2 Exhibit CMP-15 provides the actual impacts for all the 2022 storms that struck  
3 CMP’s system. The Company’s storm restoration staffing levels and actions were based  
4 on the actual damage sustained during these storms, as this damage represented the work  
5 necessary to restore service to all customers.

6 **Q. What do you conclude from this information?**

7 A. CMP’s Emergency Response Plan requires the Company to consider the actual damage its  
8 system sustains in each storm event when determining resource needs. In accordance with  
9 this requirement, CMP retained the number of external overhead line crews needed to  
10 respond to Winter Storms Diaz and Elliott safely and efficiently. In contrast, the OPA’s  
11 ERP Guidelines Adjustment interprets the staffing level guidelines set forth in CMP’s  
12 Emergency Response Plan as rigid or absolute requirements, when the Emergency  
13 Response Plan itself makes clear that they should not be interpreted as such. In fact, the  
14 OPA’s initial testimony on this matter does not appear to include any discussion of the  
15 actual damage to CMP’s system caused by the 2022 storm events, outside of a single  
16 reference to the number of poles CMP replaced in each storm.<sup>40</sup> The OPA’s ERP  
17 Guidelines Adjustment therefore fails to consider the very criteria that drive staffing  
18 determinations, making it impossible for the underlying calculations to be accurate.

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<sup>40</sup> OPA Testimony at 8; *see also* 11/15/2023 Tech. Conf. Tr. at 96:23-97:5.

1           **B.       The OPA’s ERP Guidelines Adjustment Fails to Account for the Increased**  
2           **Work Per Crew that Would be Required with Fewer Crews in the Field.**

3   **Q.       Does the OPA account for the effect of retaining fewer crews on the amount of time**  
4   **the remaining crews would need to work?**

5   A.       No, it does not. The OPA’s ERP Guidelines Adjustment assumes that CMP’s incremental  
6       storm costs scale ratably based on the number of external overhead line crews it retains. In  
7       other words, the OPA’s ERP Guidelines Adjustment reflects the assumption that CMP  
8       would have only incurred half the costs if CMP had only retained half the number of  
9       external overhead line crews.

10 **Q.       Is that a reasonable assumption?**

11 A.       No, it is not. If CMP had retained just the level of external overhead line crews the OPA is  
12       recommending for each storm, those crews would have needed to work significantly longer  
13       to perform the same overall amount of work that the Company needed to complete to  
14       restore power. Using the high-level assumptions that those overhead line crews would  
15       need to work the same number of hours overall as CMP’s external overhead line crews  
16       actually worked, and that those increased hours per overhead line crew would occur at the  
17       same average cost per hour as the external overhead line crews CMP retained, there would  
18       be no difference financially between retaining more crews, as CMP did to ensure power  
19       was restored quickly, or retaining fewer crews, as the OPA is recommending. Figure 3  
20       below provides a simplified example illustrating this phenomenon.

1 **Figure 3: Illustrative Example of External Overhead Line Crew Staffing Levels**

Line No	Description	Simplified Illustrative Example		Notes
		CMP "Actual" Experience	Counterfactual OPA Recommendation	
1	Crews Retained	200	100	Simplified for illustrative purposes
2	Hours Worked	5,000	5,000	
3	Hours/Crew	25	50	Fewer Crews = More Work / Crew
4	Average Cost (\$/Hour)	\$ 300	\$ 300	
5	Total Storm Cost	\$ 1,500,000	\$ 1,500,000	Line 2 x Line 4
6	Crew Cost "Savings"		\$ -	

2 **Q. Has CMP previously described the relationship between the number of external**  
 3 **overhead line crews and the amount of work required from each crew?**

4 A. Yes, CMP described this relationship at the May 10, 2023, technical conference in this  
 5 proceeding. Specifically, Mr. Desrosiers testified as follows:

6 [O]ne thing we're constantly aware of is the more crews we bring in,  
 7 depending on what we expect for damage, the quicker we can restore  
 8 power. So either you have 175 crews here for five days or you have 500  
 9 crews here for two days. The constant feedback we get from the  
 10 customers is we want our power back as quickly as possible. So we – our  
 11 goal is always to restore power as quickly as possible, and if it means  
 12 getting it done a couple days earlier by bringing in more crews than what  
 13 our ERP recommends, we certainly look to do that to get the power on  
 14 sooner.<sup>41</sup>

15 **Q. Did the OPA opine on the relationship between the number of external crews**  
 16 **retained and the amount of work required per crew?**

17 A. Not directly, no. However, in response to CMP-001-001, which requested “all  
 18 workpapers, notes, calculations, spreadsheets, or other documents considered, relied upon,  
 19 and/or used in preparing the initial testimony of Jesse Houck,” the OPA produced CMP-

<sup>41</sup> 5/10/23 Tech. Conf. Tr at 27:1-10.

1 001-001 Attachment A. While the OPA’s narrative response to CMP-001-001 included no  
 2 explanation of the accompanying attachment, the “Staffing Exercise” tab of CMP-001-001  
 3 Attachment A appears to calculate the cost of a hypothetical storm event under four  
 4 different external crew staffing levels. That same tab also provides the restoration time, in  
 5 hours, associated with each scenario. Figure 4 summarizes the total cost and restoration  
 6 time for each scenario provided by the OPA in CMP-001-001 Attachment A.

7 **Figure 4: Summary of CMP-001-001 Attachment A**

	<b>External Crews</b>	<b>Total Cost</b>	<b>Restoration Time (Hours)</b>
Scenario 1	100	\$12,079,680	144
Scenario 2	300	\$12,477,096	72
Scenario 3	500	\$9,457,176 <sup>42</sup>	36
Scenario 4	162.3	\$12,139,247	108.6

8 **Q. How did the OPA calculate the “Total Cost” of each scenario in CMP-001-001**  
 9 **Attachment A?**

10 A. The total cost of each scenario reflected in CMP-001-001 Attachment A is calculated by  
 11 multiplying the average hourly cost, inclusive of labor, meals, and equipment costs, of  
 12 CMP’s crews (with different rates applicable to internal and external crews) by the number  
 13 of crews in each scenario and the restoration time in each scenario.

14 **Q. Why is this significant?**

15 A. The analysis provided by the OPA on the “Staffing Exercise” tab of CMP-001-001  
 16 Attachment A, summarized in Figure 4 above, demonstrates two of CMP’s primary  
 17 criticisms of the OPA’s ERP Guidelines Adjustment.

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<sup>42</sup> See *supra* note 8.

1 First, it demonstrates that there is a direct relationship between the number of  
2 external crews CMP retains and the amount of work required per crew. Consider, for  
3 example, Scenarios 1 and 2. In Scenario 2, CMP retains three times the number of external  
4 crews as in Scenario 1. According to the OPA's own analysis, that significant increase in  
5 external crew count causes just a 3 percent increase in total cost because each crew works  
6 half as long (*i.e.*, 72 hours vs. 144 hours).

7 Consider the hypothetical instance where Scenario 1 was consistent with the  
8 staffing level guidelines in CMP's Emergency Response Plan and Scenario 2 was  
9 consistent with CMP's actual storm response. In this hypothetical example, the OPA's  
10 ERP Guidelines Adjustment would result in a 66.67% recommended disallowance (*i.e.*,  
11 300 divided by 100) of external costs (*i.e.*, \$9,655,884), or \$6,437,256 (*i.e.*, \$9,655,884 x  
12 66.67%).<sup>43</sup> However, the OPA's own analysis demonstrates that CMP's actions (in this  
13 hypothetical scenario) resulted in just a 3% increase in cost, or \$397,416 (*i.e.*, \$12,477,096  
14 minus \$12,079,680). This demonstrates that the OPA's ERP Guidelines Adjustment is too  
15 oversimplified and produces a proposed disallowance amount that is unreasonable and  
16 does not reflect reality.

17 Second, it correctly reflects the direct relationship between the number of external  
18 crews CMP retains and restoration time. According to the OPA's own analysis, restoration  
19 time goes down as the number of external crews CMP retains goes up. However, the OPA  
20 inexplicably fails to assign a value to that variance in restoration time.

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<sup>43</sup> ODR-003-003.

1 **Q. Did the OPA use the analysis in the “Staffing Exercise” in formulating its testimony**  
2 **and calculations of its ERP Guidelines Adjustment?**

3 A. No. While he acknowledged that this analysis was an effort to examine the impact on  
4 costs from different staffing mixes, Mr. Houck testified at the November 15, 2023  
5 technical conference that the Staffing Exercise “just didn’t end up kind of being the route  
6 that [he] went in [his] analysis and [his] testimony.”<sup>44</sup> Mr. Houck further explained that  
7 “[w]e just decided we didn’t, I guess, need the specific analysis in the testimony. . . .”<sup>45</sup>

8 **C. The OPA’s ERP Guidelines Adjustment Fails to Account for the Significant**  
9 **Costs Customers Would Incur in Extended Outages.**

10 **Q. Does the OPA’s analysis reflect the financial costs or other impacts on customers**  
11 **experiencing extended outages due to the OPA’s recommended staffing levels?**

12 A. No, it does not. While the OPA purports to “recognize that for affected customers, any  
13 delay in restoration of service can be a burden,” it makes no adjustment to recognize this  
14 burden in its financial analysis.<sup>46</sup> When asked in CMP-001-021 to provide any report,  
15 workpaper, memorandum, or other document reflecting any analysis, quantification, or  
16 study the OPA has performed concerning this burden, the OPA responded that it “has no  
17 responsive documents in its possession.” In response to EXM-002-003, Mr. Houck  
18 likewise stated that he “does not know how you could reasonably calculate the value of  
19 lost load during storms.”<sup>47</sup>

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<sup>44</sup> 11/15/2023 Tech. Conf. Tr. at 142:2-8.

<sup>45</sup> *Id.* at 150:5-15.

<sup>46</sup> OPA Testimony at 9.

<sup>47</sup> *See also* 11/15/2023 Tech. Conf. Tr. at 98:9-17 (“MR. DES ROSIERS: Now, if you could turn to Examiners 02-03, staff asked in this data request did you consider the value of lost load in determining whether customers would have benefited from faster storm recovery than what the ERP targets? Your answer says you do not know how you could reasonably calculate the value of lost load during storms. And I take that to be that you didn’t do anything to a value -- evaluate the value of lost load as part of your analysis? MR. HOUCK: No, I didn’t, did not.”).

1 **Q. Does the OPA’s testimony acknowledge that its recommendations would result in**  
2 **longer outage times?**

3 A. Yes, it does. Specifically, Mr. Houck notes that “storm restoration is a balance between  
4 restoring power quickly on the one hand and cost on the other. By hiring excessive  
5 external contractors to restore power to customers as fast as possible, CMP has incurred  
6 much greater storm costs than it otherwise would have had the Company used the staffing  
7 levels and restoration timelines in its emergency response plan.”<sup>48</sup> This testimony makes  
8 clear that the OPA is recommending CMP retain fewer external overhead line crews and  
9 restore power more slowly following storm events. This would mean that affected  
10 customers would be without power for longer periods of time.

11 **Q. Has CMP estimated the incremental amount of time it would have taken to restore**  
12 **power with the number of external overhead line crews recommended by the OPA?**

13 A. Yes, it has. Specifically, CMP calculated the increase in outage time by dividing the actual  
14 number of outage hours in each storm by the OPA’s recommended percentage reduction in  
15 external overhead line crew count, adjusted to include the 100 internal CMP crews that  
16 worked every storm. For example, if CMP utilized 100 internal crews and 500 external  
17 overhead line crews in response to a particular storm event (for a total of 600), and the  
18 OPA took the position that CMP should have only retained 200 external overhead line  
19 crews (for a total of 300, after including the 100 internal crews), then CMP assumed it  
20 would take twice as long to restore power (*i.e.*,  $600 / 300 = 2$ ). Exhibit CMP-16 provides  
21 the incremental outage time per storm produced by this assumption. As reflected therein,  
22 this analysis suggests that CMP’s customers would have endured more than four million

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<sup>48</sup> OPA Testimony at 9.

1 incremental outage hours in 2022, had CMP adopted the approach recommended by the  
2 OPA. Please note that this calculation is conservative because it makes no adjustment for  
3 the lower efficiency and increased travel time impacts that would be expected from using  
4 fewer external crews in responding to storm events, as discussed below.

5 **Q. Is the Company’s approach to estimating the increase in customer outage hours that**  
6 **would have occurred if CMP had followed the OPA’s recommendations with respect**  
7 **to overhead line crew staffing levels reasonable in the Panel’s view?**

8 A. Generally, yes. It is, of course, impossible to know precisely what would have occurred in  
9 the counterfactual scenario where CMP retained fewer external overhead line crews than it  
10 actually retained to respond to storm events in 2022. However, as the OPA acknowledges,  
11 there is undeniably a relationship between the number of external overhead line crews  
12 retained by the Company and how quickly power can be fully restored. The methodology  
13 reflected in Exhibit CMP-16 is a simplified approach to quantify this relationship that  
14 avoids the need for an extraordinarily detailed, complex, and assumption-laden exercise. If  
15 the OPA, Staff, or another intervenor has an alternative approach to quantifying the  
16 increase in outage hours that would result from the Company retaining the number of  
17 external overhead line crews recommended by the OPA, CMP is open to considering such  
18 methodology. That said, when asked in CMP-001-019 to provide any reports, analyses, or  
19 other documents related to any assessment of what the event durations for 2022 storms  
20 would have been had CMP capped its retention of external crews to the crew level  
21 guidelines in the Company’s Emergency Response Plan, the OPA simply responded that it  
22 “has no responsive documents or analysis other than what is provided in Mr. Houck's  
23 testimony and exhibits.”



1 **Q. Has CMP estimated the incremental financial cost that customers would have borne,**  
 2 **had it taken CMP longer to restore power following 2022’s storm events?**

3 A. Yes. The true financial cost to customers of extended outages is impossible to quantify  
 4 with certainty. There is no way to know, for every single impacted customer, the full cost  
 5 of spoiled food, missed work, frozen pipes, alternative lodging, lost business revenue,  
 6 generator fuel, and other such costs incurred in extended outages. However, that does not  
 7 mean those costs are not real. For illustrative purposes, CMP has assumed that outages  
 8 cost customers between \$5 per hour and \$10 per hour. Based on that assumption, the  
 9 extended outage times that would have been produced by the OPA’s ERP Guidelines  
 10 Adjustment would have resulted in impacted customers bearing \$20 million to \$40 million  
 11 in incremental costs in 2022. Figure 5 presents the calculation of these values by storm.

12 **Figure 5: Incremental Customer Cost Due to OPA’s ERP Guidelines Adjustment**

Line No	Storm Date	Incremental Customer Outage Hours Due to OPA Recommendation	Assumed Customer Cost per Outage Hour Range	Incremental Customer Cost Recommended by OPA	
				Low End	High End
1	1/17/2022	28,131	\$5 - \$10	\$ 140,657	\$ 281,314
2	1/29/2022	1,266	\$5 - \$10	6,331	12,662
3	2/17/2022	248	\$5 - \$10	1,239	2,478
4	2/23/2022	61,962	\$5 - \$10	309,812	619,623
5	3/12/2022	4,205	\$5 - \$10	21,027	42,054
6	7/25/2022	226	\$5 - \$10	1,132	2,263
7	8/26/2022	3,909	\$5 - \$10	19,543	39,086
8	10/14/2022	137,367	\$5 - \$10	686,835	1,373,670
9	11/11/2022	1,997	\$5 - \$10	9,983	19,965
10	11/30/2022	7,050	\$5 - \$10	35,252	70,504
11	12/16/2022	798,751	\$5 - \$10	3,993,757	7,987,514
12	12/23/2022	2,976,736	\$5 - \$10	14,883,678	29,767,355
13	Subtotal	<b>4,021,849</b>		<b>\$ 20,109,244</b>	<b>\$ 40,218,488</b>

1 In comparison, the OPA’s recommended disallowances would reduce an average  
2 residential customer’s bill by approximately \$5.20 per month for a year and an average  
3 SGS customer’s bill by approximately \$7.40 per month for a year.

4 **Q. How did CMP select its estimated range of \$5 to \$10 per hour?**

5 A. Quantifying the cost to customers of extended outages intrinsically requires making  
6 significant assumptions. However, CMP selected this estimated range after considering  
7 three indicators: (1) academic literature regarding the value of lost load (“VOLL”), (2) the  
8 service quality indicators (“SQIs”) established in CMP’s recently completed rate case,  
9 Docket No. 2022-00152, and (3) the public comments received to date in this proceeding.  
10 If the OPA, Staff, or other intervenor has an alternative approach to valuing the financial  
11 burden customers would have experienced from the increased outage hours resulting from  
12 retaining fewer external overhead line crews as recommended by the OPA, CMP is open to  
13 considering such methodology.

14 **Q. What academic literature regarding the VOLL did CMP consider?**

15 A. CMP reviewed a variety of academic papers regarding the VOLL. While the studies  
16 reviewed by CMP utilized various methodologies for measuring the VOLL (*e.g.*, survey-  
17 based tools, revealed-preference consumer analysis, macroeconomic modeling, etc.) and  
18 applied to a variety of different contexts, one common theme emerged: the VOLL is high.  
19 For example, Will Gorman, a doctoral candidate at the University of California, Berkeley,  
20 and a researcher at Lawrence Berkeley National Laboratory, noted the following in a 2022  
21 paper published in *The Electricity Journal* summarizing the academic literature regarding  
22 the VOLL:

1 Society depends on electric power for virtually all individual, household,  
2 commercial, industrial, and government activity, making the inherent  
3 value of electricity service high. One would appropriately assume that the  
4 benefits of reducing or avoiding power outages to be, therefore,  
5 correspondingly high.<sup>49</sup>

6 Mr. Gorman went on to summarize the challenges of measuring the VOLL as follows:

7 There are serious challenges to using a point estimate for the VoLL. The  
8 VoLL varies not only by each individual end-user (e.g. industrial vs.  
9 residential) and electricity use-case (e.g. manufacturing vs. lighting) but  
10 also by the electricity consumption context (i.e. geographic location and/or  
11 exposure, outage timing/duration, and advanced warning). By focusing on  
12 population averages, the VoLL tends to obfuscate the inherent complexity  
13 of electricity consumption: multiple end-uses consumed at a variety of  
14 times with different available substitution options.<sup>50</sup>

15 That said, there are a variety of indicative data points regarding the VOLL. For  
16 example, one paper published by ICF Consulting in 2003 calculated the economic cost of a  
17 large-scale blackout in the Northeast United States utilizing a VOLL value of 80 to 120  
18 times the retail price of electricity.<sup>51</sup> This translates to \$16.48 to \$24.72 per kWh for CMP  
19 residential customers based on the 2022 total rate of \$.206/kWh, and even more based on  
20 current residential rates. The Midcontinent Independent System Operator, Inc. (“MISO”)  
21 utilizes a VOLL value of \$3,500 per MWh (\$3.50 per kWh) during certain emergency  
22 events, such as periods of transmission or generation capacity shortage, to administratively  
23 set locational marginal prices (“LMPs”) when the market does not clear.<sup>52</sup> In 2013,  
24 London Economics International LLC (“LEI”) estimated the VOLL for the Electric

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<sup>49</sup> Will Gorman, *The Quest to Quantify the Value of Lost Load: A Critical Review of the Economics of Power Outages*, 35 *The Electricity Journal*, no.107187 (2022) <https://www.sciencedirect.com/science/article/pii/S1040619022001130>.

<sup>50</sup> *Id.*

<sup>51</sup> ICF Consulting, *The Economic Cost of the Blackout: An Issue Paper on the Northeastern Blackout, August 13, 2003*, <https://www.solarstorms.org/ICFBlackout2003.pdf>.

<sup>52</sup> See generally FERC Docket No. ER21-2801, including MISO’s August 31, 2021, electronic filing and FERC’s October 26, 2021, letter order.

1 Reliability Council of Texas, Inc. (“ERCOT”) using indicative macroeconomic analysis to  
2 be in the range of \$6,000 per MWh (\$6 per kWh) for commercial and industrial  
3 customers.<sup>53</sup> However, LEI also noted that “accurately estimating VOLL for a region is a  
4 challenging task” because of “the sensitivity of VOLL to specific regional and outage  
5 attributes such as customer profile, economic conditions, climate, and the length and  
6 duration of outages.”<sup>54</sup>

7 Notably, Mr. Houck reviewed the LEI paper, as well as a 2015 article in *Frontiers*  
8 *in Energy Research*, presenting a literature review of 21 academic studies on the VOLL, as  
9 part of his work on this case, but neither mentions the articles nor even the concept of the  
10 VOLL in his testimony.<sup>55</sup>

11 **Q. What did CMP conclude following its review of these studies?**

12 A. Ultimately, CMP did not specifically rely on any of the studies cited above to provide a  
13 precise measure of VOLL. As noted, the VOLL is highly dependent on the economic  
14 attributes of the region affected, the duration of the outage, the types of customers affected  
15 (*i.e.*, residential, customer, or industrial), and many other factors. However, the academic  
16 studies reviewed by CMP caused it to conclude that there is a VOLL, and it is material.

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<sup>53</sup> London Economics International LLC, *Estimating the Value of Lost Load: Briefing paper prepared for ERCOT by LEI*, at 63 (Jun. 17, 2013). Available at [https://www.ercot.com/files/docs/2013/06/19/ercot\\_valueoflostload\\_literaturereviewandmacroeconomic.pdf](https://www.ercot.com/files/docs/2013/06/19/ercot_valueoflostload_literaturereviewandmacroeconomic.pdf).

<sup>54</sup> *Id.* at 65.

<sup>55</sup> ODR-003-004, Attachments A & B. The literature review considered VOLL studies from around the world and found that for residential customers the VOLL was generally in the range of €10-25/kWh, which translates to \$10.94-27.34/kWh at current exchange rates. See ODR-003-004, Attachment A, at 9.

1 **Q. Did CMP also consider its current SQIs and related potential negative revenue**  
2 **adjustments in valuing the cost to customers of extended outages?**

3 A. Yes. The SQIs and related potential negative revenue adjustments for non-compliance  
4 established in CMP's recently completed base distribution rate case, Docket No. 2022-  
5 00152, provide another relevant indicator of the value of outages or more specifically the  
6 value of reducing outage duration and frequency.

7 **Q. How were CMP's current SQIs established?**

8 A. The establishment of the SQIs currently in effect for CMP and related potential negative  
9 revenue adjustments was one of the focal points of the Company's recently completed base  
10 distribution rate case. For example, Staff's Reply Bench Analysis in that proceeding noted  
11 that Staff's support of the Company's capital investment plan was "directly contingent  
12 upon a strong incentive mechanism aimed at ensuring that CMP will maintain and invest in  
13 its distribution system in a way that increases its reliability, both on a day-to-day basis and  
14 during storms."<sup>56</sup> Staff went on to note that "CMP has repeatedly promised in its Initial  
15 and Rebuttal testimonies that its capital investments will transform its electrical grid in the  
16 coming years. These promises lead to a responsibility to produce an increasingly reliable  
17 grid to serve its customers."<sup>57</sup> Staff also objected to the SQIs that CMP initially proposed,  
18 arguing that CMP's proposal was "structurally flawed" because "it would provide  
19 ineffective incentives for increased reliability."<sup>58</sup>

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<sup>56</sup> *Central Maine Power Company, Request for Approval of Distribution Rate Increase and Rate Design Changes Pursuant to 35-A M.R.S. § 307*, Docket No. 2022-00152, Reply Bench Analysis at 8-9 (Apr. 6, 2023).

<sup>57</sup> *Id.* at 9.

<sup>58</sup> *Id.* at 13.

1           After extensive settlement negotiations, CMP, the OPA and several other parties  
2           agreed upon a Stipulation, with Staff’s support, that settled the rate case.<sup>59</sup> That Stipulation  
3           established six SQIs designed, in part, to “ensure that customers realize the reliability  
4           benefits of the Company’s proposed capital investments during and after the Rate Plan  
5           Term.”<sup>60</sup> Of the six SQIs established in the Stipulation resolving Docket No. 2022-00152,  
6           three related to reliability: a customer average interruption duration index (“CAIDI”), a  
7           system average interruption frequency index (“SAIFI”), and a division SAIFI metric  
8           (collectively, the “Reliability Metrics”). Figure 6 below, excerpted from the Stipulation,  
9           summarizes the SQIs and the maximum negative revenue adjustment that could result from  
10          each SQI.

11                           **Figure 6: Summary of SQIs and Related Revenue Adjustments Established**  
12                           **in Docket No. 2022-00152**

	<b>Metric</b>	<b>Metric Weight</b>	<b>Adjustment Max</b>
1	CAIDI	30%	\$2,640,000.00
2	SAIFI	30%	\$2,640,000.00
3	Division SAIFI	25%	\$2,200,000.00
4	Calls Answered	5%	\$440,000.00
5	Calls Abandoned	5%	\$440,000.00
6	Bill Accuracy	5%	\$440,000.00
	<b>Total</b>	<b>100%</b>	<b>\$8,800,000.00</b>

<sup>59</sup> *Central Maine Power Company, Request for Approval of Distribution Rate Increase and Rate Design Changes Pursuant to 35-A M.R.S. § 307*, Docket No. 2022-00152, Order Approving Stipulation (Jun. 6, 2023), and Stipulation dated May 31, 2023 (hereinafter “Docket No. 2022-00152 Stipulation”).

<sup>60</sup> Docket No. 2022-00152 Stipulation ¶ 40; see also *Central Maine Power Company, Request for Approval of Distribution Rate Increase and Rate Design Changes Pursuant to 35-A M.R.S. § 307*, Docket No. 2022-00152, Order Approving Stipulation at 2.

1 **Q. How did CMP use those SQIs to value outage hours in this case?**

2 A. The Reliability Metrics established in Docket No. 2022-00152 do not explicitly state or  
3 rely on a value per customer outage hour. However, due to the well-recognized fact that  
4 CAIDI x SAIFI = SAIDI (*i.e.*, system average interruption duration index),<sup>61</sup> the CAIDI  
5 and SAIFI metrics reflected in the Stipulation, and the associated potential negative  
6 revenue adjustments, can be used to impute a value per outage hour. Figure 7 below  
7 summarizes this calculation.

8 **Figure 7: Value per Outage Hour Implied by CMP's SQIs**

Line No	Description	2023 Baseline Target	Threshold For Maximum Negative Revenue Adjustment	Implied Outage Hour Valuation
1	CAIDI	2.09	2.30	
2	SAIFI	1.89	2.08	
3	SAIDI	3.95	4.78	
4	Customers Served	664,869	664,869	
5	Implied Outage Hours	2,626,299	3,177,822	
6	Incremental Outage Hours			551,523
7	Maximum Negative Revenue Adjustment			\$ 5,280,000
8	<b>Value per Outage Hour (\$/Hour)</b>			<b>\$ 9.57</b>

<sup>61</sup> 65-407 C.M.R. ch. 320, § 2 (definitions of SAIDI, CAIDI and SAIFI).

1 **Q. Is this a perfect methodology for measuring the cost to customers of extended**  
2 **outages?**

3 A. No, it is not, for a few reasons. First, the negative revenue adjustments that could result  
4 from the SQIs established in CMP’s most recent base distribution rate case represent just  
5 that – revenue adjustments – and are not necessarily indicative of the cost to customers of  
6 going without power. Second, the Stipulation specifically noted that the SQIs will exclude  
7 “Major Event Days” as calculated under the IEEE 2.5 Beta Method.<sup>62</sup> Major storms, such  
8 Winter Storms Diaz and Elliott, are likely to be excluded as Major Event Days. Finally,  
9 the SQIs resulted from a negotiated settlement process that involved the weighing of  
10 multiple ratemaking and other considerations from multiple parties; they were not the  
11 result of a precise scientific study of the costs borne by CMP’s customers due to extended  
12 outages.

13 **Q. Then why did CMP consider the SQIs in its financial analysis in this case?**

14 A. While the SQIs are not a perfect indicator of the costs borne by CMP’s customers in  
15 extended outages, they are a clear and recent indicator that CMP, Staff, the OPA, and other  
16 parties value the reliability of the service the Company provides because that reliability is  
17 valuable to customers. If CMP, Staff, the OPA, and other parties value that reliability  
18 enough to (potentially) reduce the Company’s revenues (through a reduction in distribution  
19 rates paid by customers) more than \$5 million for what amounts to approximately 550,000  
20 incremental outage hours over an acceptable baseline in any given year, it stands to reason  
21 that those same parties place significant value on CMP’s ability to mitigate extended  
22 outages following storm events. Therefore, while the valuation methodology reflected in

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<sup>62</sup> Docket No. 2022-00152 Stipulation ¶ 40(c).



1 Figure 7 above is admittedly imperfect, it is one way to illustrate the value of avoiding an  
2 extended outage for the limited purpose of this proceeding.

3 **Q. How have the public comments received to date in this proceeding informed CMP's**  
4 **assessment of the value to customers of reducing outage durations?**

5 A. The public comments received to date in this proceeding are unambiguous: customers want  
6 power restored as quickly as possible because prolonged outages come with significant  
7 cost. Examples of public comments on the financial impacts of extended outages received  
8 to date in this proceeding include:

- 9 • The Saltwater Grille, a restaurant located on Casco Bay, noted that any “type of  
10 lengthy outage negatively impacts our employees and causes a significant financial loss  
11 to them and our business as a whole. It also takes an emotional toll on guests who have  
12 booked rehearsal dinners or other events. The uncertainty of an event being cancelled  
13 due to a lack of power is the last thing a couple needs to be concerned with right before  
14 their special day. CMP is very mindful of these factors when responding to storms and  
15 seeks to restore power as cost effectively and efficiently as possible. Because crews  
16 are paid on an hourly basis, there is very little cost difference of having 400 crews  
17 restore power in three days, or 200 crews restore power in six days. The only  
18 difference is that our customers must suffer the financial, health and safety  
19 consequences of being without power for longer.”<sup>63</sup>
- 20 • Sunday River Resort in Newry, Sugarloaf in Carrabassett Valley, and Pleasant  
21 Mountain in Bridgton collectively wrote that power outages during peak periods  
22 impact “thousands of guests and community members” and “can result in a loss of \$2  
23 million per day for the three resorts.”<sup>64</sup>
- 24 • The Biddeford & Saco Chamber of Commerce noted that it “is a strong advocate for  
25 CMP prioritizing disruption minimization vs. any short-term concern about spending  
26 minimization” because its “business members know how crucial it is to their operations  
27 and profitability to not suffer prolonged outages.”<sup>65</sup>
- 28 • Messer LLC, which operates an energy-intensive air separation plant in Kittery, Maine  
29 that produces atmospheric gases for various customers throughout Maine and New  
30 England, including oxygen for healthcare facilities, shared that Messer and its

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<sup>63</sup> Exhibit CMP-17 at 27-28.

<sup>64</sup> *Id.* at 3. Mr. Houck worked as an accountant at Sunday River for approximately 3 ½ years and testified that he has no reason to disagree with anything written in this public comment. 11/15/2023 Tech. Conf. Tr. at 104:20-23.

<sup>65</sup> Exhibit CMP-17 at 1.

1 customers “rely on power for day-to-day operations, and prolonged outages can have  
2 significant consequences.”<sup>66</sup>

- 3 • The Maine State Chamber of Commerce states that “CMP’s timely response has been  
4 critical to sustaining our members’ operations and the Maine economy” and “If the  
5 State hopes to continue to grow in-migration of businesses and the workforce, the  
6 timely restoration of power is a fundamental infrastructure requirement.”<sup>67</sup>

7 The public comments also demonstrate that the cost of extended outages cannot be  
8 measured purely as a financial issue. As noted in the following public comments, the  
9 health, safety, and quality of life of Maine’s citizens are also significantly threatened if  
10 swift restoration does not occur following storm events:

- 11 • Spectrum Generations, an organization whose mission “is to promote and advance the  
12 well-being and independence of older and disabled adults,” noted that it “believes  
13 restoration should be as quick as possible, knowing that customers without power can  
14 have significant health and financial impacts, especially those most vulnerable and  
15 with the lowest discretionary income. For much of our population the television and  
16 radio are their only source of companionship; no power can mean complete social  
17 isolation. Additionally limited food supplies may be lost from spoilage and care  
18 partners, or professional caregivers may not be able to get to a person’s home due to  
19 down power lines.”<sup>68</sup>
- 20 • Arthur W. Cleaves, York County EMA Director, noted that “Extended power outages  
21 can create critical situations for locations such as nursing homes, rehabilitation centers,  
22 medical facilities and residences whose occupants rely on durable medical equipment.  
23 Many Maine residents do not have a back-up heat source and extended power outages  
24 during winter months can cause hypothermia or even death.”<sup>69</sup>
- 25 • Eric Teele, Assistant Chief of the Bremen volunteer fire department, commented that  
26 “as much as we want to see CMP save as much as possible to lower our power bills,”  
27 when “trees go down taking wires and blocking roads, we are unable to respond  
28 properly to calls beyond those points. This creates life safety issues for the residents  
29 during these times. With these extra line crews they can get roads opened sooner. It is  
30 much safer for our residents.”<sup>70</sup>

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<sup>66</sup> *Id.* at 14.

<sup>67</sup> *Id.* at 8.

<sup>68</sup> Exhibit CMP-17 at 4.

<sup>69</sup> *Id.* at 34-35.

<sup>70</sup> *Id.* at 10.

- 1 • Chris Wolongevic, Brunswick Police Department Deputy, observed that “[t]he OPA is  
2 suggesting that we should endure not just longer outages, but longer wait times for pole  
3 setting crews, longer wait times for line workers to respond to a fire involving wires, or  
4 vegetation crews to respond to a downed line tangled with trees—this could mean the  
5 difference between life and death, not just for members of the community, but also  
6 EMS, fire, and police responding to these incidences. I would rather have a utility be  
7 over prepared if that means they are turning the lights on safely and swiftly.”<sup>71</sup>

8 Likewise, the public comments demonstrate that extended outages also have other  
9 important impacts on Maine’s communities that cannot be ignored:

- 10 • Leanna Ross Targett, the Town Manager for the Town of Kingfield, observed that  
11 “[d]eliberately prolonging restoration efforts to cut costs could pose severe risks to our  
12 community. It may hinder our municipality’s ability to provide essential services,  
13 especially during emergencies. Public safety and our residents’ quality of life must  
14 remain our top priorities.”<sup>72</sup>
- 15 • Mayor Michael T. Foley, Mayor for the City of Westbrook, writes “CMP prioritizes fast  
16 restoration in the face of major storms because they know it is critical to ensure the  
17 safety and security of our community which has come to depend on. In our view, CMP  
18 understands the needs of its customers and its more recent storm restoration efforts line  
19 up with what they have done in the past, and we are grateful for that. Far better to be  
20 over-prepared and safe, than understaffed and sorry.”<sup>73</sup>

21 Complete copies of each of the public comments quoted above and elsewhere in  
22 this testimony are provided in Exhibit CMP-17. While these comments do not support a  
23 precise valuation of the financial cost borne by customers in extended outages, they do  
24 make clear that such costs are very real and must be considered when determining the level  
25 of acceptable storm costs. The OPA’s analysis, however, completely ignores these costs.<sup>74</sup>  
26 In fact, when asked in EXM-002-003 whether the OPA considered the value of lost load,

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<sup>71</sup> *Id.* at 15.

<sup>72</sup> Exhibit CMP-17 at 32.

<sup>73</sup> *Id.* at 36.

<sup>74</sup> CMP-001-012, CMP-001-013, CMP-001-014, EXM-002-003; 11/15/2023 Tech. Conf. Tr. at 68:15-70:18. Mr. Houck, in fact, goes so far as suggesting that it would not be appropriate for the Commission to even consider in this proceeding the burden on customers of extended outages in deciding the prudence of CMP’s storm restoration actions. 11/15/2023 Tech. Conf. Tr. at 70:6-18.

1 the OPA simply responded that “Mr. Houck does not know how you could reasonably  
2 calculate the value of lost load during storms.”

3 **Q. Do extended outages have a particular impact on low-income and other vulnerable**  
4 **customers?**

5 A. Yes. The impacts of long-duration power outages disproportionately affect socially  
6 vulnerable groups and communities, including lower income and older populations.<sup>75</sup>

7 For instance, the impacts of an extended power outage are felt more severely when  
8 an individual or household is unprepared for the outage. Research shows that a lower  
9 income limits the ability to purchase non-perishable food, generators, and fuel, and is  
10 associated with increased stress from an extended outage.<sup>76</sup> For example, the New York  
11 City Department of Health and Mental Hygiene conducted a study that, among other  
12 things, analyzed the actual preparedness of different populations, defining preparedness as  
13 having a working flashlight, 3-day supply of food that would not spoil, and 3-day supply  
14 of drinking water.<sup>77</sup> This study reflected a positive correlation between income and  
15 preparedness for a long duration power outage.<sup>78</sup> Logically the inverse would also be true,  
16 that lower income correlates to a lesser ability to be prepared for a long duration outage.

17 In the summer and winter months, when energy costs are at their highest due to  
18 increased heating or cooling costs, low-income individuals can be faced with what is  
19 referred to as the “heat-or-eat” dilemma, where “households must decide whether to

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<sup>75</sup> Jesse Dugan, *Social Vulnerability to Long-Duration Power Outages*, 85 Int’l J. of Disaster Risk Reduction, no. 103501(2023), <https://www.sciencedirect.com/science/article/pii/S2212420922007208>.

<sup>76</sup> *Id.*

<sup>77</sup> Christine Dominianni et al., *Power Outage Preparedness and Concern among Vulnerable New York City Residents*. 85 J. Urban Health 716, 716–726 (2018). <https://doi.org/10.1007/s11524-018-0296-9>.

<sup>78</sup> *Id.*

1 expend resources on proper nutrition or adequate energy services because they cannot  
2 access or afford both.”<sup>79</sup> Food requiring refrigeration often goes bad during long-duration  
3 outages, exacerbating this dilemma. Similarly, studies indicate that increased instances of  
4 gastrointestinal illness attributable to the consumption of spoiled food after long-duration  
5 outages.<sup>80</sup>

6 A review of the literature also suggests that elderly populations are more  
7 vulnerable to long-term duration outages.<sup>81</sup> For example, according to *Understanding the*  
8 *Social Impacts of Power Outages in North America: a Systemic Review*, an article  
9 published in *Environmental Research Letters* in May 2023, older populations are at greater  
10 risk during power outages “as they are more likely to be dependent on medical equipment  
11 for chronic illness and increased mental health impacts,” and “experience greater  
12 psychological symptoms during a power outage, such as increased stress, anxiety,  
13 depression, and the overall need for greater support.”<sup>82</sup> Longer outages especially  
14 endanger electricity dependent durable medical equipment users due to possible limited  
15 battery life of the equipment.<sup>83</sup>

16 Moreover, long duration power outages cause certain populations to use alternative  
17 forms of generators, which often results in the emission of carbon monoxide. Research

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<sup>79</sup> Jessel S. Sawyer et al., *Energy, Poverty, and Health in Climate Change: A Comprehensive Review of an Emerging Literature*, 7 *Frontiers in Public Health*, no. 357 (2019) <https://www.frontiersin.org/articles/10.3389/fpubh.2019.00357/full>.

<sup>80</sup> Joan A. Casey et al., *Power Outages and Community Health: A Narrative Review*, 7 *Current Environ. Health Reps.* 371, 371–383 (2020), <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC7749027/>; see also Melissa A. Marx et al., *Diarrheal illness detected through syndromic surveillance after a massive power outage New York City*, 96 *Am. J. Publ. Health* 547, 547–553 (2003) <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1470517/>.

<sup>81</sup> Adam X. Andresen et al., *Understanding the social impacts of power outages in North America: a systemic review*, 18 *Environ. Res. Lett.*, no. 5 (2023) <https://iopscience.iop.org/article/10.1088/1748-9326/acc7b9/pdf>.

<sup>82</sup> *Id.*

<sup>83</sup> Vivian Do et al., *Spatiotemporal distribution of power outages with climate events and social vulnerability in the USA*, 14 *Nature Commc’n*, no. 2470 (2023), <https://doi.org/10.1038/s41467-023-38084-6>.

1 suggests that older individuals are more likely succumb from carbon monoxide  
2 poisoning.<sup>84</sup>

3 **Q. Is the impact of extended outages on vulnerable customers significant to the OPA’s**  
4 **proposed disallowances in this proceeding?**

5 A. Yes. Notwithstanding its statutory duty to give priority to representing low-income  
6 consumers,<sup>85</sup> the OPA did not consider the impacts of outages on low-income, elderly or  
7 otherwise disadvantaged customers in formulating its recommendation that CMP should be  
8 penalized for retaining “too many” external crews in responding to storms during 2022,  
9 notwithstanding that the Company’s response shortened outage durations.<sup>86</sup> This is  
10 significant because Maine is the oldest state in the country, as measured by the median age  
11 of its residents and by the percentage of its residents over the age of sixty-five, and has a  
12 sizeable population of low-income households, particularly in rural areas of the State, as  
13 shown in Exhibit CMP-18. In fact, the prevalence of Mainers with electric dependent  
14 durable medical equipment is highest in Maine’s rural counties, including those in CMP’s  
15 service territory.<sup>87</sup> If adopted, the OPA’s recommendations, however, would create a  
16 financial incentive for CMP to retain fewer external crews to respond to storms, thereby  
17 increasing the duration of outages. These longer outages would in turn expose these more  
18 vulnerable customers to more outage-related impacts, including increased stress, exposure  
19 to the cold, food insecurity, and potentially other serious medical risks. Ironically, one of

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<sup>84</sup> Andresen, *supra* note 81 at 6 (*citing* G. Brooke Aderson et al., *Lights out: impact of the August 2003 power outage on mortality in New York*, 23 *Epidemiology* 189, 189–93 (2012) <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3276729/>).

<sup>85</sup> 35-A M.R.S. § 1702-A(3)(A).

<sup>86</sup> CMP-001-013; 11/15/23 Tech. Conf. Tr. at 104:25-105:7.

<sup>87</sup> Exhibit CMP-18, Figure 5.

1 the very few complaints the OPA received concerning CMP's storm restoration  
2 performance in 2022 highlights this concern. On December 24, 2022, a 65-year-old  
3 customer with health issues complained that she had been without power for over 12 hours  
4 and was currently freezing.<sup>88</sup> Yet, the OPA's recommendations likely would result in  
5 longer outages in the future for this and other similar customers.

6 **Q. What do you conclude regarding the costs to customers of the OPA's ERP Guidelines**  
7 **Adjustment?**

8 A. The OPA's disregard for the financial costs borne by CMP's customers during extended  
9 outage events is troubling. While the OPA purports to recognize this burden, it makes no  
10 adjustment to its financial analysis to recognize the increase in cost that CMP's customers  
11 would have borne if it had taken CMP longer to restore power following storm events in  
12 2022. While this adjustment is, admittedly, challenging to quantify, the OPA's failure to  
13 make any adjustment leaves its analysis incomplete and unreliable.

14 **D. CMP's Revised Version of the OPA's ERP Guidelines Adjustment**

15 **Q. Has CMP developed a more refined version of the OPA's ERP Guidelines**  
16 **Adjustment?**

17 A. Yes, CMP has redone the analysis developed by the OPA using more refined assumptions.  
18 Specifically, CMP modified the OPA's ERP Guidelines Adjustment to incorporate the  
19 effect of retaining fewer crews on (1) the average cost per hour of its crews, and (2) the  
20 total number of hours of work required from those remaining crews.

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<sup>88</sup> See CMP-001-007, Attachment A, at 7. The two other complaints the OPA received concerning CMP's 2022 storm restoration performance also complained about the duration of the outages. See *id.* at 5-6 (customer complaining on December 19, 2023, about duration of outage resulting from Winter Storm Diaz and the impacts of the outage on her neighbors (two senior citizens and one family with small children)) & CMP-001-007, Attachment B (customer complaining that she was out of power for three days following Winter Storm Elliott).

1 **Q. Please provide an overview of CMP’s more refined version of the OPA’s ERP**  
2 **Guidelines Adjustment.**

3 A. CMP developed its more refined version of the OPA’s ERP Guidelines Adjustment in  
4 multiple steps. First, the Company calculated its actual average cost per outage hour per  
5 crew for both internal and external crews in Winter Storms Diaz and Elliott. Second, the  
6 Company adjusted the average cost per outage hour per external crew downward and the  
7 total number of hours of work upward according to the analyses described below. Finally,  
8 the Company used those adjusted average costs per outage hour per internal and external  
9 crew and hours of work values to recalculate what its costs would have been had it  
10 followed the OPA’s recommendations. Exhibit CMP-19 summarizes this analysis.

11 **Q. How did CMP measure the effect of reduced crew levels on the average cost per hour**  
12 **of its crews?**

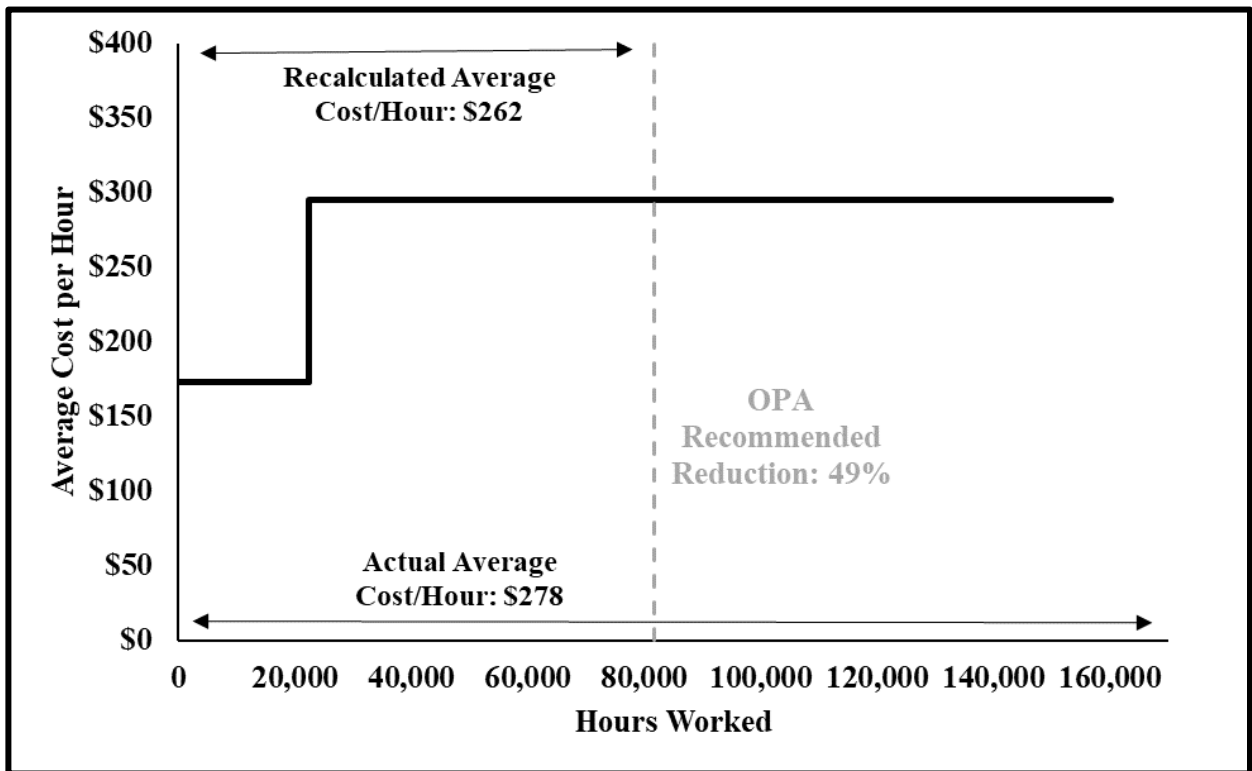
13 A. CMP began this analysis by calculating the average cost per hour of work from each of  
14 two general categories of contractors: (1) contractors for which CMP has a master services  
15 agreement (“MSA”), and (2) contractors for which CMP does not have a MSA (“non-  
16 MSA”). CMP used the resulting average costs per hour to construct a pseudo “supply  
17 curve,” where supply is hours of work.

18 After constructing this supply curve, CMP then calculated the average cost per hour  
19 of work of the cheapest crews, up to the external overhead line crew level recommended  
20 by the OPA. In other words, if the OPA recommended a 50 percent reduction for a  
21 particular storm, CMP calculated the average cost per hour of the cheapest 50 percent of its  
22 crews. CMP then compared this recalculated average cost per hour of work to its actual  
23 average cost per hour of work to arrive at the percentage reduction reflected in its more



1 refined version of the OPA's ERP Guidelines Adjustment. Figure 8 below illustrates this  
2 concept using data from Winter Storm Elliott, and Exhibit CMP-20 provides the data by  
3 storm and contractor supporting this Figure.

4 **Figure 8: Recalculation of Average Cost/Hour of Work**



5 **Q. Did CMP develop this analysis for every storm?**

6 A. No. Due to the degree of complexity and work involved in this approach, CMP only  
7 developed this analysis for Winter Storms Diaz and Elliott. These two storm events are  
8 responsible for approximately 95 percent of the reduction produced by the OPA's ERP  
9 Guidelines Adjustment.

1 **Q. How would retaining fewer external overhead line crews impact the number of hours**  
2 **those crews need to work?**

3 A. As described above, if CMP had retained fewer external overhead line crews as the OPA is  
4 recommending, those external overhead line crews would still need to perform the same  
5 amount of overall work as CMP performed following storm events. The same broken  
6 poles or other equipment would have to be replaced and the same downed wires repaired.  
7 Therefore, at a minimum, those remaining external overhead line crews would have still  
8 needed to work at least the same number of overall hours as CMP’s external overhead line  
9 crews worked in each storm event. This is true because the OPA neither claims in Mr.  
10 Houck’s testimony nor offers any other evidence suggesting that the actual number of  
11 crews responding to each of the identified 2022 storm events performed the necessary  
12 restoration work inefficiently.<sup>89</sup>

13 In fact, it is likely that those fewer remaining external overhead line crews would  
14 have taken longer to complete the necessary restoration work in each storm event for at  
15 least two reasons. First, the efficiency of any external overhead line crew is likely to  
16 decline over time after working numerous 17-hour shifts. This is particularly true with

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<sup>89</sup> 11/15/2023 Tech. Conf. Tr. at 116:2-22. In any case, any such claim would be refuted by the numerous storm restoration contractors that have provided public comments in this proceeding. *See, e.g.*, On Target Utility Services Public Comment (Sep. 28, 2023), Exhibit CMP-17 at 12 (“We are a utility contractor with offices in Portland and Gardiner, we regularly work for CMP and have vast experience in storm restoration for utilities throughout New England. We clearly see that CMP is outstanding at planning and communication before and during storm events. Their planning results in an organized deployment of resources and maximizes efficiencies assuring that crews stay engaged and busy, reducing the duration of each storm event.”); Lucas Tree Experts Public Comment (Sep. 29, 2023), *id.* at 13 (“Working with many utilities small and large, we are impressed and appreciative with CMP’s preparation, communication, and coordination with restoration partners like ourselves. These proactive storm recovery efforts afford us the opportunity to begin the storm recovery process quickly, operate efficiently and most importantly keep our workers safe. Their level of organization and preparedness is not seen across the board on other electric systems which significantly impacts the time for recovery from the event.”); Ironwood Heavy Highway LLC Public Comment (Sep. 28, 2023), *id.* at 16 (“CMP puts a tremendous amount of effort and resources into restoring power as efficiently and safely as possible. An example of this being an understanding that bringing in 100 crews to restore power in two days is the same cost, at hourly rates, as bringing in 50 crews and restoring power in 4 days, the only difference is the adverse impact of extended outages on Maine’s residents and businesses.”); *see also supra* note 27.

1 respect to Winter Storms Diaz and Elliott, two major storm events occurring just seven  
2 days apart. This phenomenon is referred to herein as the “Productivity Factor.” Second,  
3 CMP’s service territory is relatively large. CMP serves over 650,000 customers spread  
4 throughout an 11,000 square-mile service area in central and southern Maine. If CMP had  
5 retained fewer external overhead line crews, each remaining external overhead line crew  
6 would have needed to travel farther on a per crew basis. This phenomenon is referred to  
7 herein as the “Travel Time Factor.”<sup>90</sup>

8 **Q. Did the OPA submit evidence regarding these factors?**

9 A. No. Mr. Houck has conceded that he did not expressly consider these factors as part of his  
10 testimony or the calculations supporting the OPA’s ERP Guidelines Adjustment.<sup>91</sup>

11 **Q. How did CMP reflect the Productivity Factor and Travel Time Factor in its revised**  
12 **version of the OPA’s ERP Guidelines Adjustment?**

13 A. While these two factors are very real operational considerations, they are difficult to  
14 quantify. For analysis purposes, CMP assumes that had the Company only retained the  
15 level of external overhead line crews the OPA recommended, those crews would have  
16 needed to work 15% more hours in Winter Storm Elliott, where the OPA recommended a  
17 49% reduction in CMP’s external overhead line crew count, and 20% more in Winter  
18 Storm Diaz, where the OPA recommended a 68% reduction in CMP’s external overhead  
19 line crew count. While the qualitative factors described above informed these percentages,  
20 CMP selected them based on the Company’s professional judgment, and they are not the

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<sup>90</sup> During the November 15, 2023, technical conference, Mr. Houck acknowledged that using fewer crews to respond to a storm could result in higher costs due to increased travel time and reduced productivity for crews. 11/15/2023 Tech. Conf. Tr. at 78:3-80:8.

<sup>91</sup> 11/15/2023 Tech. Conf. Tr. at 76:5-21.

1 result of any precise computation. However, in CMP's view, these percentages are  
 2 conservative measures of the Productivity Factor and Travel Time Factor that would have  
 3 resulted in Winter Storms Diaz and Elliott had the OPA's recommendations been adopted.  
 4 Several of the contractors retained by CMP for the December 23 storm had already worked  
 5 seven or more days responding to both the December 16 and December 23 storm events.  
 6 Asking those contractors to sustain the same level of output for an additional several days  
 7 with no loss in productivity is not reasonable.

8 **Q. Please summarize CMP's more refined version of the OPA's ERP Guidelines**  
 9 **Adjustment.**

10 A. Figure 9 below summarizes the results of CMP's more refined version of the OPA's ERP  
 11 Guidelines Adjustment for Winter Storms Diaz and Elliott. As shown, this analysis  
 12 demonstrates that CMP's overall costs would not have been lower if it had retained fewer  
 13 external overhead line crews as the OPA recommends. Rather, after accounting for the  
 14 effects on the cost per crew and on the overall number of hours of work needed, CMP  
 15 would have incurred almost \$3 million more in responding to Winter Storms Diaz and  
 16 Elliott, if it had retained the number of external overhead line crews recommended by the  
 17 OPA. Exhibit CMP-19 supports the figures summarized in Figure 9 below.

18 **Figure 9: CMP's Revised Version of the OPA's ERP Guidelines Adjustment**

<b>Line No</b>	<b>Description</b>	<b>Winter Storm Diaz</b>	<b>Winter Storm Elliott</b>
1	Actual Incremental Costs (\$M)	\$ 33.1	\$ 60.3
2	Recalculated Incremental Costs (\$M)	32.6	63.4
3	Cost Savings (Increases) Due to OPA Recommendations (\$M)	\$ 0.5	\$ (3.2)
4	Cost Savings (Increases) Due to OPA Recommendations for Diaz & Elliot (\$M)		<b>\$ (2.7)</b>

1 **Q. What do you conclude based on this analysis?**

2 A. CMP endeavored to redo the OPA's ERP Guidelines Adjustment using a more realistic set  
3 of assumptions than the oversimplified approach taken by the OPA. This revised analysis,  
4 while far more reasonable than the flawed results presented by the OPA, is still imperfect.  
5 For example, the Productivity Factor and Travel Time Factor, while operational realities,  
6 are challenging to quantify with any precision. The recalculation of the hourly cost of  
7 external contractor labor relies on information from contractor invoices that, while  
8 accurate, is not available to CMP until many months after storm response activities occur.  
9 Therefore, CMP has chosen to present this revised version of the OPA's ERP Guidelines  
10 Adjustment to illustrate the shortcomings of the OPA's analysis but does not rely on the  
11 revised results presented in Figure 9 above in its final conclusions.

12 **E. The OPA's ERP Guideline Adjustment Relies on an Inappropriate Apples-to-**  
13 **Oranges Comparison**

14 **Q. How is the OPA's ERP Guidelines Adjustment calculated?**

15 A. As reflected in Exhibit 2 to the OPA's testimony, the OPA's ERP Guidelines Adjustment  
16 is calculated in two steps. First, the OPA calculates a percentage reduction by comparing  
17 (1) the number of external overhead line crews CMP retained in response to each storm  
18 event in 2022, and (2) the upper end guideline identified in CMP's Emergency Response  
19 Plan for the number of external overhead line crews for an event of that severity. Second,  
20 the OPA applies that percentage to the total amount of external contractor expenses CMP  
21 incurred to arrive at its recommended reduction.

22 **Q. How is that an apples-to-oranges comparison?**

23 A. That is an apples-to-oranges comparison because CMP's total external contractor expenses  
24 include costs that are not associated with overhead line crews. Specifically, CMP's total

1 external contractor expenses include costs associated with digger crews and tree crews as  
2 well. By applying a percentage derived purely from a comparison of overhead line crew  
3 counts to costs that include more than just overhead line crew counts, the OPA's ERP  
4 Guidelines Adjustment is flawed.

5 **Q. Have you quantified the impact of this error?**

6 A. Yes. As shown in Exhibit CMP-21, the net effect of removing costs associated with tree  
7 crews for every applicable storm is a \$5,414,557 reduction in the calculated value of the  
8 OPA's ERP Guidelines Adjustment.

9 **Q. Did the OPA purport to opine on the number of tree crews and digger crews that**  
10 **CMP retained?**

11 A. No. While there is a question on page 8 of Mr. Houck's testimony that reads "[d]o you  
12 believe the number of external pole digger crews and tree crews retained for each storm  
13 were reasonable?" the answer relates exclusively to pole crews. The OPA does not appear  
14 to have offered any reason the number of tree crews CMP retained during the disputed  
15 2022 storms was excessive. In fact, the OPA stated that its "analysis does not include the  
16 number of pole digger crews or tree crews,"<sup>92</sup> but that is plainly inconsistent with the  
17 analysis it filed.

18 **Q. Are the OPA's findings with respect to the number of external digger crews CMP**  
19 **retained valid?**

20 A. No, they are not. The OPA erroneously assumes that the sole job of pole digger crews is to  
21 replace poles. This misses the fact that work done by pole digger crews includes  
22 straightening leaning poles, removing poles, replacing pole guys that might have pulled out

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<sup>92</sup> OPA Testimony at 8.

1 due to the storm impacts, and assisting line crews with restoration. Many of the diggers  
2 that are provided to the Company are part of the fleet that a contractor utilizes and have  
3 fully rated line workers operating the digger trucks or performing line work. Additionally,  
4 it is not possible for the Company to know ahead of time during preparation efforts how  
5 many poles will break, which is why the Company uses digger crews to perform other  
6 functions, as necessary. Therefore, the OPA's findings on this matter are without merit.  
7 However, to be conservative, the \$5,414,557 correction to the OPA's ERP Guidelines  
8 Adjustment calculated in Exhibit CMP-21 removes just tree crew costs from the  
9 calculation, giving the OPA the benefit of the doubt with respect to digger crew costs.

10 **F. The OPA's ERP Guidelines Adjustment Double Counts Affiliate Costs**

11 **Q. How does the OPA's analysis double count affiliate costs?**

12 A. As discussed above, the OPA is recommending disallowance of all costs charged to CMP  
13 by its affiliates, an amount that totals \$2,336,348. The OPA then includes these same costs  
14 again in the calculation of its adjustment for CMP allegedly not following its Emergency  
15 Response Plan guidelines. As Mr. Houck has admitted, this results in an incorrect double  
16 count.<sup>93</sup>

17 The financial effect of this double counting varies by storm depending on the  
18 percentage reduction the OPA applied. For example, for Winter Storm Elliott, \$699,425 of  
19 the \$53,266,963 in incremental external expenses that CMP incurred represent charges  
20 from affiliates.<sup>94</sup> The OPA therefore is recommending (1) fully disallowing the \$699,425

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<sup>93</sup> 11/15/2023 Tech. Conf. Tr. at 127:5-128:4.

<sup>94</sup> See Attachment 2, at 25, to CMP's March 31, 2023, filing in this docket. As reflected therein, the \$53,266,963 incurred by CMP in connection with the December 23, 2022, storm event included \$151,385 from Avangrid Service Company, \$69,887 from New York State Electric & Gas ("NYSEG"), and \$478,153 from the United Illuminating Company, for a total of \$699,425 charged to CMP by its affiliates for that storm.

1 in affiliate costs in the OPA’s Affiliate Cost Adjustment, and (2) additionally disallowing  
2 49% of the \$699,425 in the OPA’s ERP Guidelines Adjustment. This plainly represents  
3 double counting and must be corrected.

4 As shown in Exhibit CMP-21, the net effect of correcting this error for every  
5 applicable storm is a \$1,004,952 reduction in the calculated value of the OPA’s ERP  
6 Guidelines Adjustment.

7 **G. The OPA’s Comparison to 2020 Storm Costs to Support its ERP Guidelines**  
8 **Adjustment is Misguided.**

9 **Q. Please describe how the OPA compared the costs of Winter Storms Diaz and Elliott**  
10 **to CMP’s 2020 storm costs.**

11 A. The OPA compared the restoration cost per customer hour of interruption for Winter  
12 Storms Diaz and Elliott of \$52.9 and \$14.28, respectively, to CMP’s restoration cost per  
13 customer hour of interruption for two event level 3 storms CMP experienced in 2020.  
14 Specifically, the OPA calculated restoration costs per customer hour of interruption for one  
15 event that began on April 9, 2020, and another event that began on December 5, 2020, of  
16 \$4.88 and \$4.87, respectively. The OPA argues that CMP’s storm costs in 2020 “were  
17 much more reasonable.”<sup>95</sup>

18 **Q. How do you respond?**

19 A. The OPA’s analysis of CMP’s 2020 storm costs suffers from the same flaw as the OPA’s  
20 analysis of CMP’s 2022 storm costs: it does not reflect the actual damage CMP’s electric  
21 distribution system experienced during each storm event. As described in CMP’s  
22 Emergency Response Plan, and as quoted above, “the actual impact of a weather event will

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<sup>95</sup> OPA Testimony at 9.



determine the appropriate level of response.”<sup>96</sup> In other words, not all outages are created equal, even if the same number of customers lose power. For example, two outages, each impacting 1,000 customers, may have dramatically different restoration costs if one outage is attributable to a single incident while the other is attributable to ten incidents.

**Q. How does the damage sustained by CMP’s system during those 2020 storms compare to the damage sustained by CMP’s system during Winter Storms Diaz and Elliott?**

A. The damage that Winter Storms Diaz and Elliott caused CMP’s distribution system was more extensive than the damage to CMP’s distribution system during the April 9, 2020, and December 5, 2020, storms analyzed by the OPA. Specifically, the number of OMS outage orders, or “incidents,” CMP experienced in each 2022 storm was nearly double the number of OMS outage orders CMP experienced in each 2020 storm. Figure 10 below summarizes the number of incidents experienced during each storm event.

**Figure 10: OMS Outage Orders by Storm Event**

Storm Event Date	OMS Outage Orders
4/9/2020	2,586
12/5/2020	2,146
12/16/2022	4,599
12/23/2022	4,507

As Mr. Houck acknowledged during the November 15, 2023, technical conference, the OPA, however, did not consider the severity of the damage sustained during the 2020 and 2022 storms when making its comparison.<sup>97</sup>

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<sup>96</sup> ERP at 49.

<sup>97</sup> 11/15/2023 Tech. Conf. Tr. at 96:23-97:5, 117:3-7.

1 **Q. Are there any other flaws in the OPA’s comparison to CMP’s 2020 storm costs?**

2 A. Yes, there are. While the OPA cited testimony from a CMP witness regarding the effect of  
3 COVID-19 protocols (which were in effect during the 2020 storms, but not in 2022), the  
4 OPA failed to cite testimony from that same witness just moments later regarding the  
5 effect of inflation. Specifically, when asked to explain the increase in restoration costs per  
6 customer hour of interruption, the CMP witness, Mr. Desrosiers, explained that “we have  
7 seen significant increases in everything in the last 18 to 24 months. I mean, line crew costs  
8 have gone up, fuel’s up, all of those things, materials.”<sup>98</sup> When asked by the Commission  
9 in EXM-002-022 about the effect of inflation on this analysis, the OPA responded that its  
10 comparison “does not adjust for inflation and Mr. Houck agrees that a fair comparison  
11 would include such an adjustment.”

12 **H. The OPA’s Comparison to Versant’s Costs for the December 2022 Storms to**  
13 **Support its ERP Guidelines Adjustment is also Misguided.**

14 The OPA’s comparison of the costs CMP incurred in responding to Winter Storms Diaz  
15 and Elliott to Versant’s costs in responding to these storms is similarly misguided. The  
16 OPA’s comparison is premised on the percentage of customers impacted at each utility.  
17 Per Mr. Houck, since Versant had a greater percentage of customers without power, it is  
18 reasonable to expect that Versant’s restoration time would be longer. However, simply  
19 comparing the number of customer outages CMP experienced during Winter Storm Elliott  
20 to the number Versant experienced only provides one data point, and it is not necessarily a  
21 good indicator of the scope or costs for needed restoration work. A more reasonable  
22 comparison is the overall impact of the storm, as measured by both outages and damage

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<sup>98</sup> 5/10/12 Tech. Conf. Tr at 32:17-20.

1 sustained. Figure 11 below provides this comparison of the impacts both companies  
2 suffered because of Winter Storm Elliott.

3 **Figure 11: Winter Storm Elliott Impacts on CMP and Versant Service Territories**

	Versant	CMP
<b>Customers who reported outage at least one time</b>	<b>116,774</b>	<b>300,765</b>
<b>Peak Outages</b>	72,566	213,440
<b>Broken Poles</b>	97	300
<b>Trouble Tickets</b>	3500	3422
<b>Incidents</b>	1357	4507

4 This comparison shows that CMP’s system suffered significantly more damage that  
5 required repair. CMP thoughtfully prepared for this event, held over the crews that were  
6 working on its system during Winter Storm Diaz, and retained the additional external  
7 resources the Company believed necessary to efficiently restore power to the Company’s  
8 customers. And, notwithstanding the greater damage, the Company completed this  
9 restoration faster than Versant completed its work. Had CMP limited the number of  
10 external crews it retained, the Company’s restoration efforts would have been delayed,  
11 leaving more customers in the dark over Christmas and the days between Christmas and  
12 New Year’s.

13 In contrast, as Versant indicated during its presentation to the Commission earlier  
14 in this docket, it put in two requests to NAMAG for Winter Storm Elliott but was told  
15 there were no resources available. Versant had no choice but to rely on its 31 external  
16 crews under MSAs until other crews became available. Ultimately, Versant did secure

1 additional crews post impact; however, Versant’s restoration still took longer than CMP’s  
2 restoration efforts.

3 **I. The OPA’s Analysis Ignores the Impacts of Extended Outages on Maine’s**  
4 **Efforts to Promote Beneficial Electrification in Support of the State’s**  
5 **Greenhouse Gas Emission Reduction Requirements.**

6 **Q. Did the OPA consider the ramifications of its recommendations to the achievement of**  
7 **Maine’s greenhouse gas emissions reduction targets, including through the adoption**  
8 **of beneficial electrification?**

9 A. No. The OPA does not appear to have considered at all the impacts of the longer power  
10 outages that would result from its recommendation that CMP retain fewer external crews  
11 to restore electrical service after storms on the State’s efforts to promote beneficial  
12 electrification as a key component of its efforts to reduce greenhouse gas emissions.<sup>99</sup>

13 **Q. What is the significance of this omission?**

14 A. In executing its duties, the Commission is statutorily required to facilitate the achievement  
15 by the State of Maine of its greenhouse gas reduction targets, as set forth in 38 M.R.S. §  
16 576-A.<sup>100</sup> As set forth in the State’s 2020 *Maine Won’t Wait* Climate Action Plan, a key  
17 component of Maine’s efforts to reduce greenhouse gas emissions as quickly as possible is  
18 the electrification of both its transportation and heating sectors. To electrify Maine’s  
19 transportation sector, the *Maine Won’t Wait* plan calls for the rapid adoption of electric

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<sup>99</sup> CMP-001-016, CMP-001-017 & 11/15/2023 Tech. Conf. Tr. at 105:8-106:10. During the November 15, 2023, Technical Conference, Mr. Houck stated that he understood that CMP’s Emergency Response Plan takes into account the impacts that outage duration has on beneficial electrification and Maine’s greenhouse gas emission reduction targets. In ODR-003-005, he was asked to provide the basis for this statement. In response, Mr. Houck pointed to the testimony of CMP’s Electric Operations Panel in the Company’s recent rate case, Docket No. 2022-00252. While this testimony discusses the Emergency Response Plan, it does not mention beneficial electrification, electric vehicles, or Maine’s greenhouse gas emission reduction targets at all, never mind with respect to the Plan. See ODR-003-005, Attachment A.

<sup>100</sup> 35-A M.R.S. § 103-A.

1 vehicles in the State, setting the goal of 219,000 electric vehicles on the road by 2030.<sup>101</sup>

2 Through its recommended disallowances, the OPA would have the Commission take a step  
3 that would undermine, rather than promote, the adoption of electric vehicles in Maine.

4 The availability of reliable service, including after storms, is crucial to customers  
5 looking to convert from an internal combustion engine powered vehicle to an electric  
6 vehicle. This relationship is discussed in a recent study that investigated the barriers to  
7 adoption of electric vehicles through a thematic analysis of expressions gathered from  
8 major forums and social media.<sup>102</sup> This study identified unreliability as a barrier, finding:

9 Unreliability is further felt when it is necessary for users to calculate the  
10 trip beforehand as they must be prepared with the charging time and  
11 location of charging points beforehand. They find this particularly  
12 challenging as the charging infrastructure is different across locations and  
13 in many cases unreliable. The charging points could turn out to be out-of-  
14 order forcing detour or the charging point could be equipped with a low-  
15 capacity charger which could take a longer time to recharge, hence  
16 finishing the trip later than expected. This occurrence is overall sensed as  
17 unreliability. **They also state that the charging points installed at home**  
18 **are unreliable as they face blackouts frequently and unpredictably.**<sup>103</sup>

19 This should not be surprising. One needs reliable transportation. To convert to an  
20 electric vehicle, customers will understandably expect that the electricity needed to charge  
21 their vehicle will be available when needed. Real or perceived inability to charge your  
22 vehicle due to longer power outages after storms will only slow the transition to vehicles  
23 empowered by electricity, as opposed to gasoline that can be stored in a fuel can for  
24 emergencies.

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<sup>101</sup> *Maine Won't Wait* Climate Action Plan at 10 (Dec. 2020) available at [https://www.maine.gov/future/sites/maine.gov/future/files/inline-files/MaineWontWait\\_December2020.pdf](https://www.maine.gov/future/sites/maine.gov/future/files/inline-files/MaineWontWait_December2020.pdf)

<sup>102</sup> Gnanasekaran Krishna, *Understanding and identifying barriers to electric vehicle adoption through thematic analysis*, 10 *Transp. Rsch. Interdisc. Persps.* no. 100364 (2021), <https://www.sciencedirect.com/science/article/pii/S2590198221000713>.

<sup>103</sup> *Id.* (emphasis added).

1           The California Public Utilities Commission (“CPUC”) has recognized the  
2           importance of minimizing outages to EV adoption. In a 2018 proceeding to examine the  
3           rules allowing investor-owned electric utilities to de-energize power lines in the case of  
4           dangerous conditions that threaten life or property in California, such as wildfires, the  
5           CPUC made clear that “it is critical that EV owners are not left stranded during de-  
6           energization events.”<sup>104</sup> The Commission in this proceeding should likewise consider the  
7           impact that longer outages resulting from the OPA’s recommended disallowances would  
8           have on existing and future EV owners in Maine, and find them to be a further reason to  
9           reject the OPA’s position.

10   **VI.   CMP’S RESPONSE TO THE OPA’S AFFILIATE COST ADJUSTMENT**

11   **Q.    Please summarize the OPA’s proposed Affiliate Cost Adjustment.**

12   A.    In 2022, CMP incurred a total of \$2,336,348 in charges for incremental storm restoration  
13        services provided by CMP’s service company affiliates, Avangrid Service Company  
14        (“ASC”) and Avangrid Management Company (“AMC”) (collectively the “Service  
15        Company Affiliates”), and operating utility affiliates, New York State Electric and Gas  
16        (“NYSEG”), Rochester Gas & Electric (“RGE”) and United Illuminating (“UI”)  
17        (collectively the “Operating Utility Affiliates”). On the OPA’s behalf, Mr. Houck asserts  
18        that the Commission should disallow CMP’s recovery of all affiliate-related storm costs  
19        because: (a) the cap on affiliate service expense prevents CMP from recovering any

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<sup>104</sup> *Order Instituting Rulemaking to Examine Electric Utility De-Energization of Power Lines in Dangerous Conditions*, CPUC RM 18-12-005, Decision Adopting Phase 2 Updated and Additional Guidelines for De-Energization of Electric Facilities to Mitigate Wildfire Risk at 2 (May 28, 2020).

1 additional amounts in rates; and (b) CMP failed to obtain approval under 35-A M.R.S. §  
2 707 for these affiliate storm restoration services.<sup>105</sup>

3 **Q. Does the Company agree with Mr. Houck’s assertions that CMP should be denied**  
4 **recovery of these affiliate storm restoration costs?**

5 A. No. Mr. Houck’s assertions are wrong for the following reasons.

6 First, the Commission authorized CMP’s recovery of affiliate charges for  
7 incremental storm restoration services, including those provided by both CMP’s Service  
8 Company Affiliates, and Operating Utility Affiliates, in CMP’s 2007-2008 rate case  
9 (Docket Nos. 2007-215/2008-00111).<sup>106</sup> Starting with the 2010 Annual Compliance Filing  
10 (“ACF”) process for calendar year 2009, the Company has thereafter annually requested,  
11 and been permitted, recovery of the costs of affiliate-provided incremental storm  
12 restoration services. These storm restoration services were provided by the Service  
13 Company Affiliates and Operating Utility Affiliates in accordance with affiliate service  
14 agreements, and in Docket 2001-00178, the Commission first approved the affiliate service  
15 agreements between CMP and the entities that were, at the time, analogous to CMP’s  
16 current Service Company Affiliates and Operating Utility Affiliates.

17 Second, the cap on affiliate services charges (which is currently set at \$32.5 million  
18 for all Avangrid’s Maine subsidiaries, including CMP<sup>107</sup>) does not preclude the Company

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<sup>105</sup> OPA Testimony at 15-17.

<sup>106</sup> See generally *Central Maine Power Company, Request for Approval of Alternative Rate Plan*, Docket No. 2007-00215, Order Approving Stipulation (Jul. 1, 2008) & Stipulation, ¶ 11 (Jun. 6, 2008).

<sup>107</sup> *Central Maine Power Co. et. al, Request for Approval of Affiliated Interest Transaction for Two Service Agreements with Energy East Management Corporation*, Docket No. 2001-00178, Order Approving Stipulation at 4 (Allowing EEMC to bill no more than \$7 million during any calendar year); *Central Maine Power Company, Request for Approval of Reorganization and of Affiliated Interest Transactions to Create Energy East Shared Services Corporation*, Docket No. 2003-00321, Order Approving Stipulation at 4 (July 24, 2003) (increasing cap to \$10 million per year); *Central Maine Power Company, Request for Approval of Affiliated Interest Transaction to Increase*

1 from recovering charges for storm restoration services from its affiliates. Since its  
2 inception, the cap has never applied to charges by CMP's Operating Utility Affiliates, and  
3 the Commission's approvals in the ACF dockets each year since 2010 of the Company's  
4 requested incremental storm restoration costs charged by CMP's Service Company  
5 Affiliates confirm that those charges are also outside of the cap.

6 Third, the OPA's recommended disallowance of affiliate storm restoration services  
7 would be harmful to customers. CMP's affiliates represent the lowest cost and best option  
8 for external crews to respond to emergency storm conditions. Disallowing recovery of  
9 affiliate service costs would create a financial disincentive for using these resources to the  
10 detriment of customers.

11 **A. The Commission Has Approved CMP's Recovery of Incremental Storm Costs,**  
12 **Including Affiliate Charges.**

13 **Q. When did the Commission approve CMP's recovery of incremental storm charges**  
14 **from its affiliates?**

15 A. On July 1, 2008, in Docket Nos. 2007-00215 and 2008-00111, the Commission approved  
16 a stipulation dated June 6, 2008 (the "2008 ARP Stipulation"), allowing CMP to "defer,  
17 with carrying costs, 100% of the incremental costs of restoring service to customers who  
18 experiences outages from Extraordinary Storm Events," subsequently defined as Tier 1, 2  
19 and 3 events.<sup>108</sup> Recovery of these deferred storm costs would then occur annually through

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*Dollar Limit for the Energy East Shared Services Corp. & Energy East Management Corp. Support Services Agreement with Certain Energy East Affiliates*, Docket No. 2004-00435, Order Approving Stipulation (Oct. 29, 2004) (increasing the cap to \$25 million); *Central Maine Power Co. et. al., Petition to Increase the Annual Dollar Limit with Certain Iberdrola Affiliates*, Docket No. 2012-00530, Order Approving Stipulation at 4 (Jul. 2, 2013) (Increasing the cap to \$32.5 million annually).

<sup>108</sup> ARP 2008 Stipulation § 11; *Central Maine Power Co., Request for New Alternative Rate Plan (ARP 2014)*, Docket No. 2013-00168, Order Approving Stipulation at 5-6 (Aug. 25, 2014) (establishing multitier mechanism for storm recovery); *Public Utilities Commission, Investigation into Rates and Revenue Requirements of Central Maine Power Co.* Docket No. 2018-00194, Order at 24-25 (discussing storm cost recovery mechanism for different tiers of storms).



1 what is now called the ACF process.<sup>109</sup> Attachment 9 to the 2008 ARP Stipulation  
 2 presented the methodology for calculating the incremental storm costs as part of the ACF  
 3 process beginning in 2010 for calendar year 2009 and continuing thereafter.<sup>110</sup>

4 **Q. Has CMP requested recovery of affiliate storm restoration costs in accordance with**  
 5 **the Commission’s approval in Docket Nos. 2007-00215 and 2008-0111?**

6 A. Yes. Beginning in 2010 and continuing until the present, CMP has annually included  
 7 charges for affiliate storm restorations services in its ACFs. Figure 12 below summarizes  
 8 the amounts requested and allowed for recovery since 2010.

9 **Figure 12: Incremental Storm Cost Recovery of CMP Affiliates**

Year	NYSEG & RGE	United Illuminating/ UIL Holding Company	ASC/ AMC/ IUMC	Total Cost Recovery	Docket Number containing recovery
2010 [1]	\$ 325,865	-	\$ -	\$ 325,865	2011-00077
2011	40,637	-	142,774	183,411	2012-00063
2012	2,191	-	26,046	28,236	2013-00166
2013	1,361,903	-	48,136	1,410,039	2014-00056
2014	258,472	-	117,421	375,893	2015-00055
2015 [2]	-	-	-	-	2016-00035
2016	-	364,412	30,881	395,293	2017-00046
2017	4,603,329	2,118,226	431,444	7,152,999	2018-00069
2018	7,507	554,659	2,011	564,178	2019-00049
2019	835,085	2,028,647	209,399	3,073,131	2020-00065
2020	1,799,297	1,920,511	282,933	4,002,742	2021-00036
2021	416	221,417	18,685	240,518	2022-00041
2022	910,108	1,078,433	347,807	2,336,348	2023-00038

Notes  
 [1] Due to the passage of time and transition of accounting systems, CMP is unable to confirm with 100% certainty that the affiliate storm costs it incurred in 2010 were fully attributable to NYSEG and RGE. However, based on the legacy data that remains available today, CMP's best understanding is that the storm costs charged to it in 2010 by its affiliates reflects charges from NYSEG and RGE.  
 [2] No incremental affiliate expenses displayed for 2015. No Tier 2 or Tier 3 storm events were presented for recovery in Docket Number 2016-035.

<sup>109</sup> ARP 2008 Stipulation §§ 3 & 11.

<sup>110</sup> Attachment 9 to the ARP 2008 Stipulation is attached as Exhibit CMP-22.

1 CMP calculated the incremental affiliate storm restoration charges for storm costs in  
 2 accordance with Attachment 9 to the 2008 ARP Stipulation and categorized the charges in  
 3 its ACF filings, as shown in Figure 13 below.

4 **Figure 13: Cost Categorization of Affiliate Incremental Storm Restoration Costs**

Year	Non Service Co. Affiliates (NYSEG, RGE, UI, UIL)	Service Co. Affiliates (ASC, AMC, IUMC)
2010	Labor / Benefits	N/A
2011	Labor / Benefits	Other
2012	Labor / Benefits	Other
2013	Labor Inter-Company / Benefits - Inter-Company	Other
2014	Labor Inter-Company / Benefits - Inter-Company	Other
2015	N/A no Tier 2 or Tier 3 events in 2015	N/A no Tier 2 or Tier 3 events in 2015
2016	Contractors	Various
2017	Contractors	Contractors
2018	Contractors	Contractors
2019	Contractors	Contractors
2020	Contractors	Contractors
2021	Contractors	Contractors
2022	Contractors	Contractors

5 **Q. Has the Commission allowed recovery of the affiliate incremental storm restoration**  
 6 **charges in these ACF proceedings?**

7 A. Yes, the Commission allowed recovery of the requested affiliate incremental storm  
 8 restoration charges in each of the above referenced ACF proceedings since 2010, except in  
 9 2015 when CMP did not request any recovery for any major storm event costs.<sup>111</sup>

10 **Q. Has any party to the ACF proceedings ever objected to CMP’s recovery of the**  
 11 **affiliate storm charges?**

12 A. No party has objected to the recovery of affiliate incremental storm charges, including the  
 13 OPA, which was a party to each of the ACF proceedings referenced in Figure 12 above.

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<sup>111</sup> In OPA-001-008, the OPA asked the Company if specific orders were issued under Section 707 for storm restoration services provided by affiliates. As CMP states in its response, no specific orders were requested or issued. CMP did not request a specific order given the Commission’s prior storm cost related orders in Docket Nos. 2007-00215/2008-00111 and the various ACF dockets listed in Figure 12.

1 **Q. Are there any agreements between CMP and its affiliates that provide for the**  
2 **provision of storm restoration services to CMP?**

3 A. Yes, storm cost restoration services provided by the Operating Utility Affiliates and  
4 Service Company Affiliates were performed in accordance with certain affiliate service  
5 agreements entered between and among CMP and its affiliates.

6 **Q. Has the Commission ever approved these affiliate service agreements?**

7 Yes. The Commission approved the first of these agreements in Docket No. 2001-  
8 00178.<sup>112</sup> In Docket No. 2001-00178, the Commission approved two separate form service  
9 agreements, which it referenced as “Agreement A” and “Agreement B.” Agreement A  
10 allowed CMP and certain other affiliates to receive services from Energy East  
11 Management Company, the predecessor to the current Service Company Affiliates. The  
12 second form service agreement, Agreement B, allowed CMP and its operating utility  
13 affiliates to receive and provide services to one another. Exhibit CMP-23 provides copies  
14 of Agreements A and B, as filed in Docket No. 2001-00178.

15 Over time, the service company affiliates (*e.g.*, Energy East Management  
16 Corporation in 2001) providing services have changed because of Iberdrola’s acquisition  
17 of Energy East to form Iberdrola USA and the subsequent formation of Avangrid through  
18 the merger of Iberdrola USA and United Illuminating.<sup>113</sup>

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<sup>112</sup> *Central Maine Power Co. et. al, Request for Approval of Affiliated Interest Transaction for Two Service Agreements with Energy East Management Corporation*, Docket No. 2001-00178, Order Approving Stipulation (Jul. 10, 2001).

<sup>113</sup> *In Central Maine Power Company, Request for Approval of Affiliated Interest Transaction to Increase Dollar Limit for the Energy East Shared Services Corp & Energy East Management Corp Support Services Agreement with certain Energy East Affiliates*, Docket No. 2004-00435, Order Approving Stipulation (Oct. 29, 2004), the Commission established a \$25 million inter-company transaction limit for support services provided to Applicants by Utility Shared Services Corporation (“USSC”) and Energy East Management Corporation (“EEMC”). Subsequently, Energy East Corporation was acquired by Iberdrola, SA (Iberdrola) and the services formerly performed by USSC and EEMC were then performed by Iberdrola USA Management Corporation (“IUMC”). *See Central Maine Power Company*,

1 As originally accepted by the Commission in 2001, the form service agreement  
2 between CMP and its operating utility affiliates, Agreement B, expressly provided that the  
3 covered services may change from time to time.<sup>114</sup> Since 2001, CMP has entered into  
4 updated service agreements with its operating utility affiliates, including the Operating  
5 Utility Affiliates.<sup>115</sup> Similarly, CMP has entered into updated agreements with its Service  
6 Company Affiliates. At various times CMP has provided these agreements to the  
7 Commission.<sup>116</sup>

8 The service agreements between CMP and the Operating Utility Affiliates and  
9 between CMP and the Services Company Affiliates expressly cover the provision of

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*Request for Approval of Reorganization Acquisition of Energy East Corporation and Iberdrola, S.A.*, Docket No. 2007-00355 (Feb. 7, 2008). In December 2015, CMP’s American parent at the time, Iberdrola USA, merged with UIL Holdings Corporation of Connecticut to form AVANGRID, Inc., with Iberdrola, SA retaining a majority of Avangrid shares at the time of the closing, and the services performed by IUMC were then provided by Avangrid Service Company (“ASC”) and Avangrid Management Company (“AMC”). *See Public Utilities Commission, Investigation into Rates and Revenue Requirements of Central Maine Power Co.* Docket No. 2018-00194, Order at 55 (Feb. 19, 2020).

<sup>114</sup> Exhibit CMP-23, Agreement B, Att. A (allowing the description of services to be modified from time to time).

<sup>115</sup> Central Maine Power Co. Management Audit of Management Structure and Affiliate Services, TLCG-001-009, Attachments 23-24 (Aug. 13, 2020) (providing copies of the technical service agreements between and among the operating utility affiliates).

<sup>116</sup> *See Central Maine Power Co. et. al., Petition to Increase the Annual Dollar Limit with Certain Iberdrola Affiliates*, Docket No. 2012-00530, ODR-01-08 (Jan. 9, 2013) (providing cost allocation manual including service agreement with IUMC); *Central Maine Power Co., Request for New Alternative Rate Plan (ARP 2014)*, Docket No. 2013-00168, EXM-007-002, Attachment 2 (providing cost allocation manual, including a copy of the service company agreement with IUMC); *Public Utilities Commission, Investigation into Rates and Revenue Requirements of Central Maine Power Co.* Docket No. 2018-00194, EXM-001-008, Attachment 4 (Service Agreement between IUMC and CMP); Central Maine Power Co. Management Audit of Management Structure and Affiliate Services, TLCG-001-009, Attachment 1 (Form Avangrid Group Corporate Services Agreement (2016)), Attachment 5 (Form Avangrid Group Corporate Services Agreement (2017)), Attachment 9 (Form Avangrid Group Corporate Services Agreement (2018)), Attachment 13 (Service Agreement between Central Maine Power Co. and Avangrid Services Co. (2019)), Attachment 14 (Service Agreement between Central Maine Power Co. and Avangrid Management Co., LLC (2019)), Attachment 15 (Iberdrola USA Technical Services Agreement (2015), Attachment 21 (Avangrid Service Company Technical Services Agreement (2017)), Attachment 23 (Operating Companies Technical Services Agreement (2017)), Attachment 24 (Operating Companies Technical Services Agreement (2017) (executed)), Attachment 28 (Service Agreement between Central Maine Power Co. and Maine Electric Power Company, Inc. (2014)), and Attachment 29 (Service Agreement between Central Maine Power Co. and Iberdrola USA Networks, Inc. (2014)); *Central Maine Power Co., Request for Approval of a Rate Change*, Docket No. 2022-00152, OPA-001-001, Attachments 1-7 (Oct. 4, 2022) (providing affiliate service agreements with service company affiliates from 2015 through 2021).

1 “Transmission and Supply Services” and “Distribution Operation Services.”<sup>117</sup> Such  
2 transmission and distribution operation services are understood to include the provision of  
3 storm restoration services.

4 **B. The Affiliate Service Charge Cap Does Not Preclude Cost Recovery.**

5 **Q. Mr. Houck asserts that the cap on affiliate service charges precludes CMP from**  
6 **recovering the affiliate charges in 2022 for storm restoration services. Does the**  
7 **Company agree?**

8 A. No. The cap on affiliate service charges the Company may recover from customers, which  
9 is currently set at \$31.351 million for CMP (with the remainder of the \$32.5 million cap  
10 attributable to Avangrid’s non-CMP Maine affiliates), does not apply to the storm  
11 restoration charges at issue in this proceeding.

12 **Q. Please explain why the cap does not apply to affiliate incremental storm costs.**

13 A. The cap does not apply to CMP’s recovery of these storm restoration costs for two reasons.

14 First, the cap does not apply to charges for services provided by the Operating  
15 Utility Affiliates. Like previous years, most of the requested 2022 affiliate storm  
16 restoration costs derive from services provided by the Operating Utility Affiliates. As  
17 shown in Figure 12 above, \$1,988,551 of the \$2,336,348 that the OPA is seeking to  
18 disallow are attributable to services from the Operating Utility Affiliates. As confirmed in  
19 the Commission’s original approval of the Stipulation in Docket No. 2001-00178 and in  
20 the subsequent dockets approving increases to the cap on affiliate service charges, most  
21 recently in Docket 2012-00530, the charges for services provided by the Operating Utility

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<sup>117</sup> *E.g.*, Central Maine Power Co. Management Audit of Management Structure and Affiliate Services, TLCG-001-009, Attachment 24 (Service Agreement between CMP and operating utility affiliates, dated Mar. 1, 2017), App. A; *see also* Central Maine Power Co., *Request for Approval of a Rate Change*, Docket No. 2022-00152, OPA-001-001, Attachment 7 (Service Agreement between CMP and Service Company Affiliates, dated Jan. 1, 2021), App. A-2.

1 Affiliates are not subject to the cap.<sup>118</sup> Rather, the cap only applies to services provided to  
2 CMP by its service company affiliates, now ASC and AMC.<sup>119</sup>

3 Second, the Commission’s approval of the Stipulation in Docket Nos. 2007-00217  
4 and 2008-00111, which authorized CMP to recover 100% of incremental storm restoration  
5 costs and established the storm cost recovery mechanism, and the Commission’s  
6 subsequent approval in the subsequent ACF proceedings of CMP’s recovery of charges for  
7 storm restoration services provided by the Service Company Affiliates demonstrates that  
8 such charges are likewise not subject to the cap for cost recovery purposes. The  
9 Commission has never used the cap to disallow CMP’s recovery of affiliate storm  
10 restoration costs and prior to this docket no party in any of the ACF proceedings since  
11 2010 have argued that the cap precludes CMP’s recovery of charges for storm restoration  
12 services provided by either the Service Company Affiliates or the Operating Utility  
13 Affiliates. This makes sense because the storm restoration services provided by CMP’s

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<sup>118</sup> *Central Maine Power Co. et. al, Request for Approval of Affiliated Interest Transaction for Two Service Agreements with Energy East Management Corporation*, Docket No. 2001-00178, Order Approving Stipulation at 4 (“The waiver shall permit Energy East Management to bill Applicants no more than \$7 million during any calendar year.”); *Central Maine Power Company, Request for Approval of Reorganization and of Affiliated Interest Transactions to Create Energy East Shared Services Corporation*, Docket No. 2003-00321, Order Approving Stipulation; *Central Maine Power Company, Request for Approval of Affiliated Interest Transaction to Increase Dollar Limit for the Energy East Shared Services Corp. & Energy East Management Corp. Support Services Agreement with Certain Energy East Affiliates*, Docket No. 2004-00435, Order Approving Stipulation & Stipulation § 5 (“The annual dollar limit contained in paragraph 6 of the Stipulation approved in Docket No. 2003-00321 for support services provided to CMP by Utility Shared Services Corporation (“USS”) and Energy East Management Corporation (“EEMC”) is increased to \$25 million.”); *Central Maine Power Company, Request for Approval of Reorganization Acquisition of Energy East Corporation and Iberdrola, S.A.*, Docket No. 2007-00355 (Feb. 7, 2008) and Stipulation dated Jan. 9, 2008 § 30 (“CMP and MNG commit to continue to utilize Energy East's cost allocation methodologies and Energy East will allocate centralized costs from IBERDROLA to CMP or MNG only to the extent that such costs are properly chargeable to utility operations and accepted by the Commission.”); *Central Maine Power Co. et. al., Petition to Increase the Annual Dollar Limit with Certain Iberdrola Affiliates*, Docket No. 2012-00530, Order Approving Stipulation at 4 (“That effective beginning in calendar year 2013, the annual dollar limit that IUMC may charge Applicants is \$32.5 million.”)

<sup>119</sup> *Public Utilities Commission, Investigation into Rates and Revenue Requirements of Central Maine Power Co.* Docket No. 2018-00194, Order at 55-56 (Feb. 19, 2020) (retaining the \$32.5 million affiliate service charge cap for services provided by AMC and ASC).

1 affiliates are truly incremental, in the same way that the services provided by any third-  
2 party external crew the Company retains. Moreover, such services are cost effective and  
3 represent the lowest cost and best option for external storm restoration services.

4 **C. Affiliate Storm Restoration Services are Beneficial to Customers.**

5 **Q. Please explain why CMP's use of the Operating Utility Affiliates for storm**  
6 **restoration services is beneficial to customers.**

7 A. To the extent possible, CMP employs the lowest cost alternative when utilizing contractors  
8 for restoring services during storms, which includes the storm restoration services of its  
9 affiliates when such costs are the lowest alternative available. Besides being cheaper, there  
10 are other benefits to CMP's use of its affiliates, such as familiarity with internal Company  
11 practices and personnel that create additional synergies that are not otherwise provided by  
12 third-party contractors. For example:

- 13 • Affiliate crews are familiar with CMP's construction standards;
- 14 • Affiliate crews have access to CMP's internal Geographical Information System  
15 ("GIS") data, thus removing the need for assigned crew guides for affiliate crews;
- 16 • Common switching and tagging practices between CMP and the Operating Utility  
17 Affiliates obviates the need for a CMP switching and tagging qualified individual  
18 to work with affiliate crews to reenergize circuits after repairs are complete; and
- 19 • Affiliate crews can share safety personnel and mechanics during restoration efforts.

20 **Q. Are crews from the Operating Utility Affiliates cheaper than external crews?**

21 A. Generally, yes. Figure 14 below compares the average cost per hour of work from the  
22 Operating Utility Affiliates to the average cost per hour of work from MSA and non-MSA  
23 crews during Winter Storms Diaz and Elliott. As shown, the average cost per hour of work

1 performed by NYSEG, ASC, and UI was lower than the average cost per hour of work  
 2 from MSA and non-MSA crews during both storms.

3 **Figure 14: Affiliate Crew Cost Comparison**<sup>120</sup>

Line No	Description	Winter Storm Diaz			Winter Storm Elliott		
		Cost	Hours	\$/Hour	Cost	Hours	\$/Hour
1	NYSEG	\$ 305,357	2,890	\$ 106	\$ 69,794	792	\$ 88
2	ASC	67,056	635	106	151,385	1,381	110
3	UI	366,481	2,579	142	481,613	3,191	151
4	MSA	2,604,870	16,186	161	3,878,217	22,363	173
5	Non-MSA	20,356,609	67,362	302	40,734,761	137,836	296

4 **Q. What do you conclude regarding the OPA’s Affiliate Cost Adjustment based on this**  
 5 **information?**

6 A. Disallowing CMP’s recovery of its affiliate storm restoration costs would create a financial  
 7 disincentive for using the lowest cost and best option for external crews to the detriment of  
 8 customers. Accordingly, the OPA’s Affiliate Cost Adjustment should be rejected.

9 **VII. CMP’S RESPONSE TO THE OPA’S DOCUMENTATION ADJUSTMENT**

10 **Q. Please explain the OPA’s Documentation Adjustment.**

11 A. The OPA recommends disallowing \$452,740 related to three storms in which CMP  
 12 incurred costs but did not report utilizing any external crews.<sup>121</sup> The OPA also alleges that  
 13 CMP failed to preserve evidence related to storm events occurring on January 17, 2022,  
 14 and January 29, 2022, but does not appear to recommend a specific disallowance related to  
 15 this alleged failure.<sup>122</sup>

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<sup>120</sup> Please note that the MSA and non-MSA amounts denoted in this Figure only include amounts associated with contractors for which this information is available.

<sup>121</sup> OPA Testimony at 14.

<sup>122</sup> OPA Testimony at 15.



1 **Q. How do you respond?**

2 A. CMP responded to the OPA’s Documentation Adjustment by supplementing its response  
3 to ODR-001-001 on September 11, 2023. In that response, Mr. Desrosiers stated:

4 Due to the predicted weather associated with these three storms, on-  
5 system contractors were held on standby in case they were needed to  
6 support restoration efforts. Once the storms had passed these contractors  
7 were not needed and released from standby. The associated invoices were  
8 for the hours they were on standby. The reason the storm summary  
9 spreadsheet reflected zero external crews is because these resources were  
10 never engaged in restoration efforts. They were only on standby and paid  
11 accordingly.<sup>123</sup>

12 When asked by Staff what impact this additional information had on the OPA’s  
13 conclusions, the OPA responded “[n]one at this time. The OPA will consider additional  
14 information filed by CMP in its responsive testimony.”<sup>124</sup> Therefore, CMP is now  
15 including this information in its responsive testimony.

16 Based on the weather forecasts, the Company appropriately pre-staged crews for  
17 these events, but once it was determined that the actual sustained damage did not require  
18 their service, they were discharged. The standby costs incurred before their discharge were  
19 reasonable and appropriate and, therefore, should not be disallowed.

20 **Q. Has CMP subsequently produced the information that it allegedly failed to preserve?**

21 A. Yes, it has. Specifically, CMP retrieved the requested information from its archive storage  
22 and produced it in this proceeding as a supplemental response to ODR-001-002 filed on  
23 September 12, 2023.

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<sup>123</sup> CMP’s supplemental response to ODR-001-001, submitted September 11, 2023.

<sup>124</sup> EXM-002-015.

1 **VIII. CMP’S STORM RESTORATION PRACTICES IN 2022 REPRESENT GOOD**  
2 **UTILITY PRACTICE AND ARE CONSISTENT WITH THE PERFORMANCE OF**  
3 **OTHER UTILITIES IN THE NORTHEAST AND CUSTOMER AND**  
4 **COMMUNITY EXPECTATIONS.**

5 **Q. How do the Company’s storm restoration practices during 2022 compare to those of**  
6 **other utilities?**

7 A. CMP’s restoration practices and performance in 2022 was consistent with the practices of  
8 other utilities across the northeast and the instructive guidance provided to those utilities  
9 by their respective regulators. The Company’s restoration efforts during 2022 reflect the  
10 emerging and evolving industry standard that utilities be increasingly proactive and  
11 diligent in storm preparation, staffing, and response, to restore power to customers as  
12 quickly and safely as possible.

13 With respect to restoration times, there is a nationwide trend for utilities to restore  
14 power to customers more urgently than ever before. For instance, in Maryland, if there is  
15 an outage that interrupts service to the lesser of 40% or 400,000 of a utility’s customers,  
16 then the “utility shall restore service as quickly and safely as permitted.”<sup>125</sup> In 2018, Winter  
17 Storm Riley interrupted electric service to 774,821 Maryland customers, including 407,383  
18 Baltimore Gas and Electric Company (“BGE”) customers.<sup>126</sup> Despite BGE restoring  
19 power to 91% of its customers in 50 hours, the Maryland Public Service Commission  
20 determined that the BGE’s response was not the quickest and safest restoration possible.<sup>127</sup>  
21 Similarly, the New York Public Service Commission has stated that “[t]he objective during  
22 any storm or emergency restoration effort is to make conditions safe, manage repairs

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<sup>125</sup> Code of Maryland Regulations 20.50.12.06D.

<sup>126</sup> *In the Matter of the Performance of Potomac Electric Power Company and Baltimore Gas & Electric Company During the March 2, 2018 Winter Storm Riley*, MD PSC Case No. 9485, Order No. 88813 at 1 (Aug. 31, 2018).

<sup>127</sup> *Id.* at 8.

1 efficiently and safely, and restore customers as quickly as possible.”<sup>128</sup> Other utilities and  
2 public utilities commissions have also adopted a policy of restoring power after major  
3 storms as quickly and safely as possible.<sup>129</sup>

4 CMP has also seen a push toward more expedient restoration times in New  
5 England, with particular emphasis on pre-storm planning and staffing. In 2009, for  
6 example, the Massachusetts Department of Public Utilities (“MDPU”) found numerous  
7 and systematic failures in Unitil’s response to Winter Storm 2008.<sup>130</sup> Among other issues,  
8 the MDPU identified that Unitil’s “pre-storm activities reflected a routine approach that  
9 was in contrast to the forecasted storm” and that the utility lacked sufficient personnel to  
10 perform storm damage assessments, which led to a failure to recognize the extent of the  
11 damage to its system.<sup>131</sup> The MDPU also found that the company’s failure to take  
12 reasonable pre-storm planning actions, such as the acquisition of adequate emergency

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<sup>128</sup> *Proceeding on Motion of the Commission to Consider Utility Emergency Performance Metrics*, NY PSC Case 13-E-0140, Order Approving Scored For Use by the Commission as a Guidance Document to Assess Electric Utility Responses to Significant Outages at 12 (Dec. 23, 2023).

<sup>129</sup> *E.g., In re: Application for Recovery in Rates of Costs Related to Hurricanes Laura, Delta, Zeta and Winter Storm Uri and for Related Relief*, LA PSC Docket No. U-35991, Settlement Testimony of Joshua B. Thomas of Entergy Louisiana LLC at 11 (Mar. 11, 2022) (“When storms strike and interrupt essential electric service to customers, the public interest demands that utilities respond quickly by acquiring whatever contractors and materials are needed to restore electric service as quickly and safely as possible.”); *In re: Petition for limited proceeding for recovery of incremental storm restoration costs*, FL PSC Docket Nos. 20200241-EI/ 20210178-EI/ 20210179-EI, Order No. PSC-2022-0242-PHO-EI at 7 (Jun. 27, 2022) (“[Florida Power & Light Co.’s] proactive approach to storm preparation, mobilization and pre-staging of resources, and execution of storm related activities including but not limited to restoration was not just prudent and reasonable, but was also highly successful in restoring service to its customers safely and as quickly as possible.”); *Order Instituting Rulemaking to Examine Electric Utility De-Energization of Power Lines in Dangerous Conditions*, CPUC RM 18-12-005, Decision Adopting Phase 2 Updated and Additional Guidelines for De-Energization of Electric Facilities to Mitigate Wildfire Risk at 21 (“PG&E indicated it is focused on ensuring customers’ power is restored as quickly and safely as possible, with a goal to restore service to 98 percent of impacted customers within 12 daylight hours of the “weather all-clear” declaration.”); *Entergy Arkansas, Inc. Petition for an Accounting Order Authorizing a Regulatory Asset and Storm Damage Rider*, AR PSC 08-149-U, Order at 19 (Dec. 19, 2008) (“The Commission has previously stated that as a matter of public policy it is in the best interest of [Entergy Arkansas, Inc.], its ratepayers and the public at large that electric power be restored safely and quickly after storm outages.”).

<sup>130</sup> *Fitchburg Gas & Elec. Light Co.*, D.P.U. 09–01–A (2009).

<sup>131</sup> *Id.* at xiii.

1 response resources, contributed to the failure to restore service to its customers in a  
2 reasonable period of time.<sup>132</sup> In part prompted by this decision, the Massachusetts  
3 Legislature enacted an *Act Relative to Public Utility Companies*, which established  
4 standards of acceptable performance for emergency preparation and restoration of service  
5 for electric and gas distribution companies doing business in the Commonwealth.<sup>133</sup> In  
6 Connecticut, the Public Utilities Regulatory Authority (“PURA”) has been clear that  
7 inadequate preparations and staffing of sufficient personnel, both external and internal,  
8 which causes storm response deficiencies are intolerable.<sup>134</sup>

9 Based on this precedent, CMP understands that best utility practice requires the  
10 Company to respond to storm outages as quickly and as safely as possible. This includes  
11 (i) adequately forecasting and preparing for each storm, (ii) procuring sufficient internal  
12 and external resources to staff the storm response appropriately under the circumstances,  
13 and (iii) exercising appropriate professional judgment, consistent with the flexibility  
14 provided in its Emergency Restoration Plan, to complete the restoration activities as safely  
15 and efficiently as possible to minimize outage durations. The Company did each of these  
16 things in responding to the 2022 storms at issue in this proceeding.

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<sup>132</sup> *Id.* at ix-xiii.

<sup>133</sup> St. 2009, c. 133, § 4; M.G.L. c. 164, § 1J (directing the MDPU to “promulgate rules and regulations to establish standards of acceptable performance for emergency preparation and restoration of service for electric ... companies doing business in the commonwealth,” and provided that the department “shall levy a penalty” against any company found to have violated those standards.”).

<sup>134</sup> *Investigation into EDCs Preparation and Response to Tropical Storm Isaias*, CT. PURA Docket 20-08-03, Decision at 2, 24, and 48 (Apr. 28, 2021).

1 **Q. Do the characteristics of CMP's service territory impose special challenges for**  
2 **restoring electric service after a storm as quickly and safely as possible?**

3 A. Yes. CMP's service territory is vast, with customers spread throughout 11,000 square  
4 miles in central, western and southern Maine. CMP's territory includes 852 miles of  
5 coastline, and two thirds of the Company's customer base lives within 20 miles of the  
6 coast. Maine is also the most heavily forested state in the United States. Tree-related  
7 outages are the number one cause of outages for CMP and, while the Company has a very  
8 comprehensive maintenance program, there are still constraints to where and how far back  
9 the Company can trim.

10 These characteristics make the Company's system vulnerable to outages resulting  
11 from storms, and as the number and intensity of storms in Maine have increased in recent  
12 years due to climate change, restoration along CMP's coastline territory is becoming  
13 increasingly challenging, with increasing winds and precipitation. CMP's service territory  
14 also includes most of the populated mountainous areas in Maine, including Sugarloaf and  
15 Sunday River ski resorts. These areas often experience heavy wet snow, ice and hazardous  
16 winds. This makes it challenging for crews to restore service due to road closures, winding  
17 roads and heavily forested areas.

18 Because of the vastness and diversity of CMP's service territory, one weather event  
19 can have several different components depending on where customers are located. There  
20 can be freezing rain and wind along the coast, freezing rain/snow/sleet in central Maine,  
21 and heavy wet snow accompanied by hazard winds in the mountains.

1 **Q. Does the Company have evidence of customer expectations with respect to storm**  
2 **restoration?**

3 A. Yes. Over the last several years, CMP has received considerable feedback that customers  
4 expect electrical service to be restored as quickly as possible after a storm. “Flip a switch  
5 and we are there” has been the Company tag line for years, and customers take it quite  
6 literally. With more people working and going to school from home, more school systems  
7 relying on electronic devices for learning, and more senior citizens, in the oldest state in  
8 the country, relying on electricity to power their medical devices and means for  
9 socialization, customers depend on the electricity flowing to their outlets today more than  
10 at any other time in CMP’s history.

11 One source of this customer feedback is the survey data CMP receives through the  
12 Net Promoter Score (“NPS”) responses for customers using an online channel to report an  
13 outage or check on the status of an outage. NPS is a commonly used survey instrument  
14 that asks how likely the responder would be to recommend the Company to their friends or  
15 relatives on a scale of one to ten, where ten is the most likely to recommend and therefore  
16 the most satisfied customer and one is the least likely to recommend and therefore the least  
17 satisfied. The Company’s NPS scores range the full scale from one to ten, but one  
18 message is clear and consistent between satisfied and dis-satisfied customers – customers  
19 want fewer outages and speedy restoration times. Surprisingly, some customers give a  
20 high score even during or after an outage experience, often commenting that they  
21 appreciate the quick restoration.

22 A few examples of recent satisfied customer comments include:

- 23 • Fast outage repairs with appropriate urgency
- 24 • A major outage was restored in just 30 minutes. Bravo!

- 1 • I dunno when there's a snowstorm them guys work real frigging hard to keep us in
- 2 power.
- 3 • Fix power outage fairly quick and staff are very friendly and helpful for explaining
- 4 the situation.
- 5 • Your storm responses and storm crews have been awesome this year.
- 6 • We have always had our power restored as quickly as possible. We appreciate that!
- 7 • Power restored as fast as humanly possible.
- 8 • Quickly restores power – thankful!

9 In contrast, dis-satisfied customer comments include:

- 10 • Outages take too long to restore.
- 11 • Very poor service. Lose power for much longer than necessary.
- 12 • Too many outages for too long a time.
- 13 • Outages and they take forever to fix.
- 14 • Restore power already. Merry Christmas.
- 15 • 2 hours to restore power sucks. Especially for the cost of electricity.
- 16 • Because I've been without power for four hours.
- 17 • It's after the time for restoration and I have medical issues.
- 18 • Power outages and too long to restore.

19 Both satisfied and dis-satisfied customer comments support the same conclusion:  
20 customers expect fewer outages and quick restoration times. In fact, some customers were  
21 dis-satisfied with relatively brief outages of only two or four hours.

22 The Company also collects survey data from customers who call the Contact  
23 Center to report an outage or inquire about the status of an outage. Comments from these  
24 customers are similar to the NPS responses, customers want fewer outages and quick  
25 restoration times. For example, one customer recently complained about a 16-hour outage  
26 and a 13½ hour outage, far shorter than the longest outages some customers experienced  
27 from Winter Storms Diaz and Elliott. Another customer offered a process improvement  
28 would be for the Company to get to the customer's power restored quickly and improve its  
29 preventative maintenance so that outages happen less often. Once again, customers clearly

1 indicate their preference for fewer and shorter outages. And there certainly is no indication  
2 that any of the customers providing feedback would be willing to tolerate longer outages.

3 **Q. Did CMP receive feedback from customers on the Company's efforts to restore**  
4 **power after the December 2022 storm events?**

5 A. Yes. It is not unusual for customers to call or email the Company to say thank you for  
6 restoration efforts, especially after a big storm or extended outage. While many of the  
7 comments are a simple "thank you," others take the time to offer details about their needs  
8 or experience. Like survey comments about outages, most customers express concern  
9 about how long an outage will last, gratitude for quick restoration, complaints about the  
10 frequency of outages, or specific complaints about their particular difficulties. After  
11 Winter Storm Elliott, hundreds of customers simply said thanks. Many other customers  
12 commented on the sacrifice of CMP employees and contractor crews who were missing  
13 their Christmas so that customers could have their holiday. They appreciated having their  
14 power restored in time to celebrate the holiday or conversely, complained that they could  
15 not celebrate the holiday because they did not have power. As expected, virtually every  
16 customer wanted their power restored as quickly as possible. While customers appreciated  
17 crews working on Christmas, not one suggested line workers should go home to have their  
18 own holiday or work fewer hours because customers would be all right through the  
19 holiday, in the cold, without power.

20 Below is a sampling of customer comments to CMP contact center representatives  
21 or via email regarding the December 2022 storms.

- 22 • Wow! I always loose power and am often out for days. Yesterday I lost power, it  
23 was restored in a few hours and despite a few serious flickers, stayed on. My best  
24 guess is this was due to prep before the storm. I saw lots of trucks out working  
25 along nearby roads. Whatever the reason, I thank you!



- 1           • Please thank your lineman for their dedication and hard work getting our power  
2 restored on Christmas eve. We realize that the unusually high winds may have  
3 delayed the restoration work, but all the same, we really appreciate all they do to  
4 keep the electricity flowing.
  
- 5           • I want to thank all the CMP workers for the hard work they did to help restore  
6 power. I know they had to give up their family time through the Christmas Holiday.
  
- 7           • I want to thank all of those who worked on power restoration during this recent  
8 weather event. When I was walking outside during the storm, I was thinking of  
9 their dedication in the most trying of circumstances, especially during the  
10 Christmas holiday! A very special 'Thank-You' to the entire team at CMP for all of  
11 your hard work and efforts to restore power to so many of us during this recent  
12 storm just before Christmas! We appreciate how hard everyone worked and the  
13 sacrifice to their holiday plans to allow many of us to enjoy some of the Christmas  
14 weekend. It was a difficult time with all the damage the storm caused and being  
15 without power particularly with the frigid cold weather that followed. Despite this,  
16 the well-coordinated recovery efforts by the CMP Team and their contractors was  
17 evident and definitely allowed power to be restored as quickly as possible to many  
18 of us. Again, many thanks and Happy New Year!
  
- 19          • Hey-Just wanted to say Thank You for getting our power restored so quickly on  
20 such a challenging day. I thought it would likely be a day before the power was  
21 back on-less than two hours! Much appreciated!
  
- 22          • Just want to thank CMP workers for all of their hard work!!! We were w/o power  
23 for 18.5 hours and did a happy dance when it came back on this morning!! Thank  
24 you again folks!!! Merry Christmas!
  
- 25          • Thank you CMP for working so hard under dangerous conditions to restore power,  
26 and thank those who came in to assist you. Happy Holidays!
  
- 27          • Thank you for restoring my power!!!! I am very grateful.

28           Additionally, customers frequently comment on CMP's Facebook page during  
29 outages. Consistent with customer survey responses, people sometimes thank the  
30 Company for restoration efforts, sometimes comment on or complain about the outage or  
31 the length of time they have been without power, and often explain their particular  
32 circumstances that make the outage challenging for them, including talking about children,  
33 the cold, the inability to cook, having or not having a generator, and how to care for the

1 elderly during outages. A sampling of Facebook comments from December 2022 are  
2 provided in Exhibit CMP-24. Once again, virtually every customer that submitted a  
3 comment wanted or appreciated having the power restored as quickly as possible.

4 **Q. Does the Company have evidence of community expectations with respect to storm**  
5 **restoration?**

6 A. Yes. After most storms, CMP hears from public officials in its communities, sometimes to  
7 send praise and accolades, and other times to let us know when the Company mis-stepped  
8 in some way. Case in point the October 2017 windstorm. During that event, Mainers  
9 experienced a major windstorm that caused the highest number of outages in CMP's  
10 history. The event impacted over 400,000 customers over a ten-day period. Months after  
11 the storm, the Commission opened an investigation (Docket No. 2017-00324) into CMP's  
12 storm response as public officials and customers asserted that the Company had failed to  
13 appropriately restore power during this event. One resident from Harpswell wrote to the  
14 Commission's Consumer Division:

15 It is an outrage that we experienced a 9-day power outage here in  
16 Harpswell. There are no valid excuses for CMP. They totally failed and  
17 they want us, the customers, to pay for their incompetence! Not unless  
18 they will reimburse customers for lost food, damaged pipes, etc. ...<sup>135</sup>

19 This sentiment echoed for months as communities and customers alike voiced frustrations  
20 over the impacts and consequences of not having power for extended periods due to this  
21 storm. The Town of Litchfield for example wrote the following in a 2017 letter to the  
22 Commission:

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<sup>135</sup> Tux Turkle, *In windstorm's wake*, Portland Press Herald, (Dec. 3, 2017)  
<https://www.pressherald.com/2017/12/03/in-windstorms-wake-cmp-feels-blows-of-critics/?auth0Authentication=true>

1 Like many communities in Maine, the Town of Litchfield experienced  
2 many fallen trees blocking roadways and felling power lines as a result of  
3 the wind and rain storm of October 29-30, 2017. While power restoration  
4 was a goal, the forced closure of roads preventing emergency services to  
5 major portions of the Town created the most pressing and immediate  
6 danger.<sup>136</sup>

7 Throughout the duration of the investigation community feedback was consistent; public  
8 officials and customers wanted timely updates, open communication, and faster  
9 restoration. CMP took this feedback seriously and implemented a storm restoration  
10 improvement plan. One immediate action that has shown significant community impact  
11 improvement has been opening the better lines of communication between the Company  
12 and local EMAs during storms. For each county served, CMP has an assigned Public  
13 Liaison Officer that works directly with the county EMA office and local line departments  
14 on clearing roads. The benefit of this improvement was clear in the Company's response  
15 to Winter Storm Elliott. During that storm, the Company cleared over 1,000 EMA calls  
16 and received praise from various EMAs. For example, in a December 2022 article, Mike  
17 Smith, director of the Somerset County Emergency Management Agency stated:

18 CMP responded diligently to power outages, and when officials in  
19 Somerset County identified critical situations, the utility was quick to  
20 respond. Northern Light Sebecook Valley Hospital in Pittsfield, for  
21 example, lost power Friday evening and was relying on backup generators.  
22 He said he alerted CMP, which had power restored to the hospital in about  
23 30 minutes.<sup>137</sup>

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<sup>136</sup> Letter from Mark Russell, Rayna Leibowitz & Gary Parker, Town of Litchfield Selectpersons, to Maine Public Utilities Commission, at 1 (Nov. 27, 2017) (copy on file with CMP).

<sup>137</sup> Keith Edwards, *Power restored to most customers in central Maine in wake of storm*, CentralMaine.com (Dec. 24, 2022) <https://www.centralmaine.com/2022/12/24/power-restored-to-most-customers-in-central-maine-in-wake-of-storm>.

1 Likewise, other county EMA representatives expressed their gratitude for the Company's  
2 response to the storm as follows:

3 From what I've heard and seen you folk are doing a phenomenal job out  
4 there, give everyone a big thank you. Outages like we expected but the  
5 crews are on it pretty quickly. Some minor flooding...surprise.

6 Art True  
7 Director  
8 Kennebec County Emergency Management Agency

9 You and your team are ROCKSTARS!!! You did so much work I can't  
10 even get my mind around it.

11 If possible if you all have a CMP outage after an action meeting can we  
12 get an invite? When we have ours I'll let you all know as well. 👍😊

13 Thank you again for everything you and your team did. This is BY FAR  
14 the smoothest storm outage ever. I sincerely pray you and your whole  
15 team are able to decompress and get home to enjoy Christmas as soon  
16 as possible.

17 Merry Christmas!!!

18 Sincerely,  
19 **Chris Wheeler**  
20 CCEMA LEPC Liaison

21 **Q. Has the Company made any other changes to its storm restoration approach because**  
22 **of feedback from customers, EMA leaders, and other public officials?**

23 A. Yes. CMP understands that customers, EMA leaders, and other public officials expect the  
24 Company to restore power after a storm as quickly as possible in a safe and efficient  
25 manner. To meet this expectation, the Company has committed to retain sufficient  
26 external crews when needed to respond to outages safely and efficiently. For certain  
27 storms, like Winter Storms Diaz and Elliott, this has resulted in the Company retaining  
28 more crews than reflected in the estimated ranges set forth in the Emergency Response  
29 Plan, on account of the forecasted and actual damage sustained. These additional crews

1 have increased the Company's capacity to restore power rapidly, and in fact they have  
2 permitted the Company to restore power for all customers in a shorter amount of time than  
3 the outage durations contemplated in the Emergency Response Plan. CMP views this as a  
4 tremendous accomplishment that benefits customers and all of Maine. As reflected in a  
5 public comment filed by Joshua Johnson, the Fire Chief for the Pittson Fire Department in  
6 this proceeding, customers and public officials support the Company in doing so:

7 Swift restoration efforts are essential to minimizing these risks and  
8 ensuring that our community remains safe, comfortable, and convenient  
9 for all. I want to express my strong endorsement of Central Maine  
10 Power's commitment to preparedness and their ability to mobilize  
11 additional crews rapidly during outages. The knowledge that more crews  
12 are available for faster restoration, irrespective of incremental costs,  
13 instills a sense of security and peace of mind in our community. While  
14 fiscal responsibility is vital, it's essential to recognize that the added costs  
15 associated with deploying extra crews for rapid restoration are negligible  
16 compared to the tremendous strain that prolonged outages place on our  
17 community. The safety and well-being of our residents should always take  
18 precedence.<sup>138</sup>

19 The Company's efforts and improvements are not going unnoticed; note the contrast in  
20 tone and message from the Harpswell customer quoted above and the below excerpt of the  
21 public comment filed in this docket by the Town of Harpswell:

22 After experiencing multiple extended power outages with blocked roads  
23 and downed trees and wires, the Harpswell Select Board insisted that storm  
24 recovery times be improved. Our businesses and residents deserve to be  
25 safe and have power restored as quickly as possible, particularly those most  
26 vulnerable. In response, CMP has made storm preparation and recovery a  
27 top priority resulting in quicker restoration times.<sup>139</sup>

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<sup>138</sup> Exhibit CMP-17 at 26.

<sup>139</sup> *Id.* at 30.

1 **Q. In the Panel’s view, would the adoption of the OPA’s recommended approach of**  
2 **limiting the use external crews, if that meant longer outages, be acceptable to CMP’s**  
3 **customers and the state and local officials responsible for responding to emergency**  
4 **events?**

5 A. Absolutely not. Residential, commercial and industrial customers, local and state officials,  
6 first responders, EMA leaders, and we believe the Commission itself, expect CMP to  
7 restore electrical service as quickly and safely as possible after a storm.<sup>140</sup> In responding to  
8 each of the storms in 2022, the Company strived to meet this expectation. Had the  
9 Company responded to the 2022 storms in the way the OPA suggests, customers would  
10 have been without power for hours and days longer, including over the Christmas holiday.  
11 In our view, this would have led to a public outcry and a Commission investigation of the  
12 Company’s failure to restore service quickly enough, like the investigations after the

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<sup>140</sup> See, e.g., Biddeford+Saco Chamber of Commerce Public Comment (Sep. 19, 2023), Exhibit CMP-17 at 1 (“Having seen the outcry and the challenges in the recent past from both commercial and residential customers when storm recovery was deemed insufficiently expedient, we are heartened that CMP has made recovery a number one priority and has been willing to make the investments necessary to get customers back up and running as quickly as possible.”); Portland Regional Chamber of Commerce Public Comment (Sep. 22, 2023), *id.* at 7 (“Our members obviously place a high value on stable and reasonable rates for electricity, but even more important to them when a storm occurs is a swift restoration of service. . . . Our members rely on consistent delivery of power, and when that is disrupted, their primary goal is getting it restored. To suggest that CMP should have taken more time to restore power at an incredibly busy and important time of year for our members [is] unacceptable.”); Sugarloaf Inn Public Comment (Sep. 20, 2023), *id.* at 11 (“Over the years, CMP has prioritized fast restoration in the face of major storms, along with more frequent customer communications and increased assistance to emergency management agencies. CMP understands the needs of its customers - both residential and commercial - and expends significant effort and resources to restore power to customers as quickly and as safely as possible.”); Lincoln County Office of Emergency Management Public Comment (Oct. 2, 2023), *id.* at 17 (“The ability to restore power quickly after a storm hits is paramount.”); Bristol Fire & Rescue Public Comment (Oct. 11, 2023), *id.* at 33 (“Power outages, especially prolonged ones, not only lead to financial losses but also present safety and security challenges for our residents. . . . While fiscal responsibility is vital, it’s essential to recognize that the added costs associated with deploying extra crews for rapid restoration are negligible compared to the tremendous strain that prolonged outages place on our community. The safety and well-being of our residents should always take precedence.”)

1 October 2017 windstorm and other major storms of the past.<sup>141</sup> Moreover, contrary to the  
2 premise underlying the OPA’s recommended approach, using more crews to restore power  
3 more quickly does not increase the total incremental costs CMP incurs for storm recovery.  
4 The same amount of restoration work will need to be completed by the available crews,  
5 just over a longer period. The customers whose service is restored sooner, however, avoid  
6 the significant costs and burdens of an extended outage.

7 **IX CONCLUSION**

8 **Q. What should the Commission find regarding the OPA’s proposed disallowances of**  
9 **CMP’s 2022 storm restoration costs?**

10 A. The Commission should reject the OPA’s proposed disallowances and instead find that  
11 CMP acted prudently in restoring electric service after the 2022 storms at issue in this  
12 proceeding. The Company successfully restored power to customers as quickly and safely  
13 as possible after each 2022 storm, with the total restoration time for most storms below the  
14 estimated duration set forth in the Company’s Emergency Response Plan. In doing so,  
15 CMP’s performance was in accordance with good utility practice and consistent with the  
16 expectations of customers, local and state officials, and first responders from around the  
17 Company’s service territory. Today, when electric service is essential to so many aspects  
18 of everyday life, customers rightfully expect their electric service to be always available,  
19 and they place a high value on reliable service and the rapid restoration of service after an

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<sup>141</sup> Mr. Houck goes so far as to suggest that CMP would have been prudent in responding to Winter Storm Elliott had it only pre-staged 175 external crews, the high end of the range for Level 4 storms in the table on page 51 of the Emergency Response Plan, even if it later was unable to retain any additional crews to address the significant sustained damage due to crew unavailability such that the outage lasted a week or longer. But the Company was imprudent because of the “excessive” number of crews it did retain, notwithstanding its success in restoring service to all customers in approximately 3 ½ days over Christmas. 11/15/2023 Tech. Conf. Tr. at 112:6-113:23. With all due respect, this demonstrates the absurdity of the OPA’s misunderstanding of the Company’s Emergency Response Plan and is contrary to how the Commission and regulators around the country have considered utility storm response efforts.

1 outage. Such prompt restoration minimizes the financial and health and safety impacts that  
2 outages have on customers, including the elderly and those with limited means who are  
3 most at risk during outages. In 2022, CMP delivered this level of service and should be  
4 praised for its performance, not financially penalized as the OPA seeks.

5           Neither CMP's Emergency Response Plan nor a proper financial analysis supports  
6 the OPA's proposed disallowances. The premise for the OPA's ERP Guidelines  
7 Adjustment is that the Company's Emergency Response Plan establishes a rigid and  
8 absolute cap on the number of external resources CMP may prudently retain in responding  
9 to a storm. This interpretation of the Emergency Response Plan is contrary to the Plan's  
10 express language and intent. The Plan makes clear that the recommended staffing level  
11 ranges are guidelines to assist CMP's decision-making; they are not absolute requirements.  
12 Actual staffing levels for each storm are to be decided on a case-by-case basis based on the  
13 actual damage sustained because of the storm. Using their experience and professional  
14 judgment, CMP's management team exercised this discretion to secure the external  
15 resources the Company believed necessary to respond to each storm in 2022 in a safe and  
16 efficient manner. The safe, prompt, and efficient restoration of service after the storms  
17 confirms the prudence of the Company's staffing decisions.

18           Moreover, as discussed in detail above, the financial analysis the OPA offers in  
19 support of its proposed disallowance is fundamentally flawed in several respects. While  
20 recognizing that its recommendation that CMP retain fewer external crews to restore  
21 service would result in longer outages, the OPA's analysis supporting the ERP Guidelines  
22 Adjustment fails to reflect both the longer hours (and in turn increased costs) of the fewer  
23 crews that would have had to respond to the storms and the greater "burden" that



1 customers would have experienced from the resulting extended outages. Likewise, the  
 2 OPA’s proposed Affiliate Cost Adjustment is contrary to prior Commission orders, would  
 3 create a financial disincentive for CMP to use lower cost affiliate crews to the detriment of  
 4 customers, and reflects a material double count of affiliate charges. And the OPA’s  
 5 proposed Documentation Adjustment is without merit based on the record.

6 Correcting these errors in the OPA’s financial analysis demonstrates that CMP’s  
 7 storm restoration performance in 2022 did not result in “excessive” costs to customers as  
 8 the OPA claims, but instead benefitted customers with materially fewer outage hours than  
 9 would have resulted under the OPA’s recommended approach. Figure 15 below quantifies  
 10 the financial impact of the OPA’s recommendations after the necessary corrections  
 11 discussed above are made. It shows that customers would have been materially worse off  
 12 had the Company followed the OPA’s recommended approach which would have extended  
 13 outage durations and increased the financial cost of such outages on customers.

14 **Figure 15: Summary of Corrections to OPA’s Financial Analysis**

Line No	Description	Cumulative Disallowance	Incremental Value
1	<b>OPA's Recommended Disallowance - As Filed</b>	<b>\$ 53,576,496</b>	
2	Remove OPA's Documentation Adjustment (Info. Subsequently Filed)	\$ 53,123,756	\$ 452,740
3	Remove OPA's Affiliate Cost Adjustment (Operating Utility Portion)	51,135,215	1,988,541
4	Remove OPA's Affiliate Cost Adjustment (Service Company Portion)	50,787,408	347,807
5	Correct OPA's ERP Guidelines Adjustment (Affiliate Cost Double Count)	49,782,456	1,004,952
6	Correct OPA's ERP Guidelines Adjustment (Tree Crew Issue)	44,367,878	5,414,577
7	Correct OPA's ERP Guidelines Adjustment (Work per Crew Issue)	-	44,367,878
8	Reflect Financial Cost of Extended Outage (Low End Estimate)	(20,109,244)	20,109,244
9	<b>OPA's Recommended Disallowance - As Corrected</b>	<b>(20,109,244)</b>	

1 Q. Does this conclude the Panel's testimony?

2 A. Yes.