STATE OF GEORGIA

BEFORE THE

GEORGIA PUBLIC SERVICE COMMISSION

In Re:

Georgia Power Company's	**)**	**Docket No. 44280**
Storm Damage Recovery Application	**)**	

REBUTTAL TESTIMONY OF

DEREK HASBROUCK

APRIL 30, 2026

REBUTTAL TESTIMONY OF

DEREK HASBROUCK

ON BEHALF OF GEORGIA POWER COMPANY

GEORGIA PUBLIC SERVICE COMMISSION DOCKET NO. 44280

I. INTRODUCTION

Q. PLEASE STATE YOUR NAME, TITLE, AND BUSINESS ADDRESS.

A. My name is Derek HasBrouck. I am a Partner in the Energy and Utilities Practice at PA Consulting Group, Inc. ("PA"). My business address is 27 Wormwood St., Boston, MA 02210.

Q. MR. HASBROUCK, PLEASE SUMMARIZE YOUR EDUCATIONAL AND PROFESSIONAL EXPERIENCE.

A. I am a Member of the Management Group at PA, a global consulting firm with an Energy and Utilities Practice that specializes in advising electric, gas, and water utilities and their investors on strategic, economic, and operational issues. My educational qualifications include a B.S. in Electrical Engineering from Rensselaer Polytechnic Institute and a Masters in Management from the J. L. Kellogg School of Management at Northwestern University. I began my 40+ year utility industry career as a practicing engineer designing electric distribution systems at Florida Power & Light Company ("FPL"). Since 1987, I have been a management consultant to the utility industry, providing industry leading performance and reliability benchmarking services, operational improvement services, and commercial management advice to over 100 electric and gas utilities in the United States ("U.S.") and internationally.

I created PA's ReliabilityOne® program, the electric industry's independent electric reliability certification and awards program, identifying and recognizing the most reliable electric utilities across the U.S. annually since 1999. I also created RestorePower.com, the first digitally enabled mutual assistance tool for electric utilities. The Edison Electric Institute has operated this tool in support of the mutual assistance needs of its investor-owned utility members since 2001.

I have also served as the Chief Financial Officer of Vermont Electric Power Company, where I led a comprehensive financial restructuring to enable a $1 billion, decade-long investment program in electric transmission system upgrades. A copy of my curriculum vitae is annexed as Exhibit DH-1.

Q. PLEASE PROVIDE AN OVERVIEW OF PA CONSULTING.

A. PA is a leading advisor of utilities, regulators, investors, and energy end users worldwide as they navigate the challenges of today's dynamic energy environment. We have supported over $400B of energy asset transactions in the U.S. in the last 15 years, serve most of the major U.S. electric and gas utilities as clients, and are deeply engaged with clients on many of the most challenging energy related issues facing our society.

Our energy resiliency and reliability team helps clients understand the drivers of reliability and resiliency, to enable the development and execution of optimized plans to meet the evolving needs of the customers and communities utilities serve. We have deep roots in this space, having benchmarked, analyzed, and evaluated electric reliability and the best practices that enable that performance nationwide for nearly four decades. PA's ReliabilityOne® awards have annually recognized the most reliable electric utilities in the nation for the last 25 years.

Preparing for and responding to major events, ranging from hurricanes and ice storms to wildfires and earthquakes, are a critical aspect of every utility's service reliability and resiliency. Our team brings deep experience as both practitioners

and advisors from over 30 years of involvement in planning for, responding to, and restoring service after major events. Our team includes former utility executives with hands on experience as incident commander and in leading Emergency Preparedness and Response ("EP&R") Departments, as well as consultants with experience with numerous utilities across a wide range of disaster scenarios.

We have tracked and benchmarked major event restoration curves and helped many utilities conduct after action reviews to identify opportunities for improvement in emergency planning and response following numerous events over this time. We also design, execute, and evaluate utility emergency preparedness training exercises, where these best practices can be tested and refined prior to their actual use.

Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE GEORGIA PUBLIC SERVICE COMMISSION?

A. No.

Q. HAVE YOU PREVIOUSLY SUBMITTED TESTIMONY IN PROCEEDINGS BEFORE OTHER REGULATORY BODIES?

A. Yes. I have prepared testimony in regulatory proceedings at the Federal Energy Regulatory Commission as well as in regulatory proceedings in Colorado, Delaware, Illinois, Maryland, New Jersey, Ohio, Texas, Vermont, the District of Columbia, and in the Province of Alberta. I have also filed declarations or expert reports in cases in federal bankruptcy court, federal circuit court, and the State of New Hampshire Superior Court. Please refer to Exhibit DH-1 for a listing of regulatory proceedings for which I have prepared testimony. Most recently, I have provided testimony in Public Utility Commission of Texas Docket No. 57271 and Docket No. 58028 in relation to CenterPoint Houston's application for a determination of system restoration costs for two major storm events in May 2024,

including the Derecho storm, and three major storm events between the summer of 2024 and winter of 2025, including Hurricane Beryl and Winter Storm Enzo.[1]

Q. WAS THIS REBUTTAL TESTIMONY PREPARED BY YOU OR UNDER YOUR DIRECT SUPERVISION AND CONTROL?

A. Yes.

Q. ARE YOU INCLUDING ANY EXHIBITS WITH YOUR TESTIMONY?

A. Yes. Exhibit DH-1 is a copy of my curriculum vitae.

Q. WERE THE EXHIBITS INCLUDED WITH YOUR TESTIMONY PREPARED UNDER YOUR DIRECTION, SUPERVISION AND CONTROL?

A. Yes.

Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?

A. My rebuttal testimony responds to testimony of the Georgia Public Service Commission Public Interest Advocacy Staff ("PIA Staff"). I respond to arguments presented in the direct testimonies of Mr. Tom Newsome, Mr. Lane Kollen, and Mr. Randy A. Futral on behalf of the PIA Staff. I specifically address the claim that Georgia Power Company ("Georgia Power" or the "Company") failed to adopt or implement industry best practices in its response to the major storms at issue in this docket.

[1] *Application of CenterPoint Energy Houston Electric, LLC for Determination of System Restoration Costs,* Public Utility Commission of Texas, Docket No. 57271.

Q. PLEASE DESCRIBE THE SCOPE OF YOUR WORK AND THE DATA YOU HAVE RELIED ON.

A. As an electric Transmission and Distribution industry participant with deep expertise and experience in emergency preparedness and emergency response, I have been asked to consider Georgia Power's use of industry best practices in its emergency response plan. I have used Hurricane Helene as an appropriate lens for this review, given the specifics of this proceeding.

I have focused my inquiries around the following data:

1) Georgia Power's Emergency Response Plan ("ERP");

2) The Association of Edison Illuminating Companies ("AEIC") best practices paper;[2]

3) The weather forecasts available to the Company for Hurricane Helene;

4) The Company's communications to customers in advance of Hurricane Helene (press releases and social media posts, for example);

5) Line crew resources on the Georgia Power system for Helene (excluding Georgia Power personnel);

6) Vegetation management resources on the Georgia Power system for Helene;

7) The distribution feeder breaker restoration curve for Helene; and

8) The customer restoration curve for Helene.

While I have not conducted an After-Action Review for the Hurricane Helene restoration, the available data for Helene clearly demonstrates that Georgia Power

[2] This whitepaper was provided to PIA Staff in the Company's response to STF-SCR-2-8 in this docket.

has a strong ERP and executed its preparation for, response to, and restoration from Helene in accordance with that plan.

Q. PLEASE SUMMARIZE YOUR REBUTTAL TESTIMONY.

A. I respond to the PIA Staff panel's assertion that Georgia Power's planning for and management of the major storms at issue in this case failed to employ industry best practices, and I discuss my concerns with the disallowance rationale that was presented.

I address the PIA Staff panel's theoretical or academic approach to storm management, and in particular external resource acquisition, and offer alternative perspectives based on 40+ years of participation in and review of electric utility preparations for and responses to storm events nationwide.

I rebut the PIA Staff panel's implied conclusion that if Georgia Power did not use a technologically enabled decision matrix or probability distribution to inform the Company's restoration resource acquisition and management activities, then the Company's storm preparation, response, and restoration were therefore inefficient.

I rebut the PIA Staff panel's conclusion that Georgia Power did not conduct an impactful lessons-learned review in the wake of Hurricane Helene and conclude that the type of reflection, learning, and improvement performed by Georgia Power is exactly the sort of commitment to continuous improvement that the very best utilities exhibit.

Finally, I rebut the PIA Staff panel's arbitrary disallowance and recovery redesign recommendations that appear to be designed simply to result in a rate reduction rather than the prudent rate adjustment requested by the Company to recover costs it expended to restore service to customers across the State in the aftermath of Hurricane Helene.

Q. PLEASE SUMMARIZE YOUR CONCLUSIONS.

A. As discussed in subsequent sections of this testimony, I conclude that Georgia Power does use industry best practices in its storm planning and management and continually improves its plan, based on learnings from storms on its system and industry storm responses elsewhere that Georgia Power resources, or Southern Company resources more generally, have supported.

Further, I conclude that Georgia Power should recover in full the storm restoration costs incurred to return customers to service statewide. Further, these costs should be recovered over a reasonable period, such as the 48 months proposed by the Company.

Q. HOW IS THE REMAINDER OF YOUR TESTIMONY STRUCTURED?

A. My testimony is organized as follows:

- Section II (pages 8 to 11) discusses storm management best practices;
- Section III (pages 11 to 16) discusses Georgia Power's emergency response planning and restoration playbook;
- Section IV (pages 16 to 20) discusses weather tracking and storm planning alerts;
- Section V (pages 20 to 25) discusses the external resource acquisition process;
- Section VI (pages 26 to 28) discusses disallowances recommended by the PIA Staff panel; and
- Section VII (page 28) provides a summary of my conclusions.

II. STORM MANAGEMENT BEST PRACTICES

Q. IN GENERAL, WHAT DOES THE TERM "BEST PRACTICES" REFER TO?

A. "Best Practices," or "Best Demonstrated Practices," refer to the application of policies, procedures, work processes, and technology solutions that participants in an industry have successfully applied to achieve improved performance.

Q. FOR THE MOST RELIABLE AND RESILIENT ELECTRIC UTILITIES, WHAT ARE THE PRACTICES THAT DRIVE TRANSMISSION AND DISTRIBUTION RELIABILITY AND STORM RESILIENCY?

A. Utilities nationwide have demonstrated that investments in grid hardening, grid automation, selective undergrounding, and proactive vegetation management are leading practices that deliver reliability benefits to customers every day and resiliency benefits to customers during inclement weather. In addition to these grid management practices, the development of ERPs, training on the use of those plans, and the disciplined execution of those plans in the time, if any, leading up to an emergency event, during the event, and through the restoration activities following the event is a critical industry best practice.

Within each of these best practices, there are many more detailed supporting practices and technologies. Often, there are multiple ways to execute one or more of these supporting practices. It is frequently the case that a specific supporting practice or technology may be more attractive to a particular company for a specific reason, even though it may deliver little difference in overall performance for customers.

The moral of this best practice story, and the thing that leading performers consistently do, is to keep their eye on the forest, and not get distracted by looking at every tree. An example of the "don't lose the forest with your eye on a tree" principle in emergency preparedness is in emergency response organization design.

The critical best practice is to have unified command for the totality of emergency response, with a single person clearly in command. Georgia Power's ERP lays out a clear, unified command structure and this is the organization that executed the planning for and recovery from Hurricane Helene. Anyone raising a concern about the fact that Georgia Power's unified command structure is not completely parallel to the Incident Command organization favored by the Federal Government is missing the best practice forest and attempting to focus the best practice discussion on a single tree.

Q. WHAT ARE CREDIBLE SOURCES FOR THE IDENTIFICATION OF BEST PRACTICES FOR EMERGENCY PLANNING AND RESPONSE FOR ELECTRIC UTILITIES?

A. Individual utility post storm reviews that seek to identify what worked well in one or more areas served by the utility so that it can be considered for use company-wide in future storms is a great start. The old mantra is that every storm is different, and it impacts different areas within the service territory differently, so there are always things to learn from groups across the company. And, for major storms, this effort often includes representatives from third-party resources that participated in the restoration, providing yet another valuable perspective.

Another great source are utilities that have been repeatedly subjected to emergencies and demonstrate success in handling those emergencies, whether hurricanes, tornados, winter storms, wildfires, floods, or other natural disasters.

A third excellent source are industry collaboration groups, such as the AEIC. In fact, in 2025, AEIC's Storm Team published a Storm Preparation and Response best practices guide, and the guide specifically thanks Georgia Power for its contribution to the guide for its experiences and lessons learned from Helene.

Q. HAS GEORGIA POWER HAD THE OPPORTUNITY TO BENEFIT FROM ANY OF THESE METHODS OF BEST PRACTICE IDENTIFICATION FOR EMERGENCY PLANNING AND RESPONSE?

A. Yes. As the PIA Staff panel noted, Georgia Power did conduct a lessons learned assessment following Helene and identified eight general areas for potential improvement. Identifying areas where improvements can be made is both a way to learn from across the Company and provide an effective trigger to search for new approaches from elsewhere. So, rather than trivialize the impact this effort will have on future storm responses, as the PIA Staff panel seems to do, I have seen this type of effort yield significant benefits for customers.

Georgia Power also has the regular benefit of learning from other utilities when Georgia Power crews deploy to help with storm restoration elsewhere. Whenever Georgia Power is able to provide mutual assistance to other utilities' storm restoration efforts, Company personnel have the opportunity to experience new challenges and see how others approach these challenges. To the extent those approaches differ from the Company's baseline plan, that experience provides real world insight into which of these approaches might be good additions to the Georgia Power playbook.

And going one step further, Southern Company staff participated with storm experts from AEIC and other AEIC members, such as Duke Energy, to update, document, and disseminate across the AEIC membership a compendium of 18 storm management best practices, starting with scalability of storm plans and including decentralized operations and transfer of electric system control. My team's review of the customer restoration curve and the distribution feeder restoration curve clearly shows the impacts of the Company's decisions to

decentralize operations and transfer control of distribution circuit switching, two of the best practices highlighted in the AEIC best practices guide.

III. GEORGIA POWER'S EMERGENCY RESPONSE PLANNING AND RESTORATION PLAYBOOK

Q. DOES GEORGIA POWER HAVE AN ERP?

A. Yes.

Q. WHY IS AN ERP IMPORTANT TO PERFORMING AN EFFECTIVE STORM RESPONSE?

A. An ERP is an important tool for a utility to ensure it has appropriate planning, processes, and resources in places to effectively and quickly respond to an emergency or storm as needed. ERPs typically include a command structure, an overview of tools for planning and preparing for storms, logistics planning and related decision points, onboarding external resources, and processes for dispatching resources.

Q. WHAT DOES GEORGIA POWER'S EMERGENCY RESPONSE PLAN INCLUDE?

A. Georgia Power's ERP is a comprehensive 60+ page document that covers several planning areas, as outlined below:

Table DH-1: Overview of Georgia Power ERP Contents[3]

Topic	Summary Overview:
Overview	Provides an overview of the intended use of the ERP document, including outlining storm center activation and the Company's approach to prioritizing safety while pursuing efficient power restoration.
Storm Center Engagement Strategy	Overview of the Storm Center engagement strategy, including leveraging data, engaging customers, and following processes to ensure adequate people and resource deployment. This engagement strategy includes engagement practices based upon a named storm being 5, 3, or 1-day away from anticipated occurrence.
Organization Chart	Outlines the different named roles within Georgia Power's storm center command structure. Georgia Power's unified storm command includes 18 named roles.
Role Descriptions	Provides a definition for each of the named roles in the unified command structure.
In Service Territory Storm Response	Process flow charts, which show the steps between the storm center, logistics teams, and local areas to identify and deploy resource needs to areas impacted by storm.
Logistics Process	Process flow diagram demonstrating personnel and their collective high-level process for identifying needs and securing logistics (e.g. hotels, meals, staging areas, etc.).
Dispatching Forces to Regions Needing Assistance	Overview of process to identify need and dispatch crews to regions impacted by unanticipated storms.

Q. DOES GEORGIA POWER'S ERP REFLECT INDUSTRY BEST PRACTICES?

A. Yes.

[3] Georgia Power's ERP was provided in an attachment in response to STF-PIA-29-1 in this docket.

Q. HOW DOES GEORGIA POWER'S ERP REFLECT INDUSTRY BEST PRACTICES?

A. Georgia Power's ERP is designed with the "forest" of an emergency in mind. It provides a clearly defined unified command for the emergency and clearly assigns numerous responsibilities at both the command level and regional operating level. Sticking with the forest theme, it provides clear guidance and timelines for critical issues including customer and stakeholder communications, solicitation of external resources, and the establishment of staging areas.

The AEIC published a whitepaper that discusses utility best practices for storm preparation and response efforts.[4] In this whitepaper, the AEIC Storm Team outlines multiple best practices that Georgia Power includes in its ERP and acted upon in its storm response efforts. Several of these best practices that Georgia Power utilizes are described below.

Conducting an initial damage assessment is imperative to understanding the extent of the damage to the system and thereby the level of restoration following a storm event. The AEIC lists conducting a damage assessment as a key best practice in storm response and restoration efforts. The AEIC defines a damage assessment best practice as one in which the damage assessment is completed initially to determine the level of severity, utilizes technology where possible, and is completed as more resources are en route as to make most effective use of external resources once they arrive to a utility's system. Georgia Power's ERP outlines its Damage Assessment Teams ("DAT") roles, responsibilities, and process actions. Specifically, the ERP outlines that the DAT is notified when adverse weather is tracked, and DATs are deployed once areas impacted by the storm are safe and that the intent is for DATs to assess the overall outage event and document findings,

[4] The AEIC whitepaper titled *Best Practices for Storm Preparation and Response* was provided through the attachment in response to STF-SCR-2-8 of this docket.

including the observed device status, damage (*e.g.*, broken poles, wires down, and damaged transformers), environmental conditions, and accessibility.

In addition to conducting a damage assessment, it is critically important that a utility receiving external crews to support restoration identify, set-up, and deploy staging sites throughout its service territory. Doing so will help ensure crews and materials are located near the outages so as to enable the Company to respond to the outages and restore service to its customers as quickly and efficiently as possible. The AEIC whitepaper outlines the need to identify multiple staging sites and have a plan for all logistics needs. Georgia Power's ERP defines a process for coordinating with local areas that may have been impacted by a storm and identifying the logistics needs that each local area has as a result of the storm. The ERP also defines the logistics responsibilities amongst multiple named roles. Further, after the need is identified by local area, the ERP specifies the logistics team's responsibilities, including the procurement of hotels and meals, while securing the staging areas, identifying fueling areas, and securing necessary permitting. In response to Hurricane Helene, Georgia Power stood up 34 staging sites and secured 21,000+ beds across its impacted service territory. By comparison, in response to Hurricane Beryl, CenterPoint Houston Electric stood up 21 staging sites across its impacted service territory. Georgia Power's ability to activate and operate 34 staging sites in response to Hurricane Helene is a demonstration of the Company's effective planning and activation of its emergency response plans.

Effective communication planning and active outreach to customers and internal and external stakeholders is another best practice that is demonstrated through Georgia Power's ERP and its communications in advance of and following Hurricane Helene. The AEIC whitepaper highlights that communication planning best practices include a defined protocol for formal status updates, has a communication plan that encompasses all levels of the organization, and utilizes multiple communication channels.

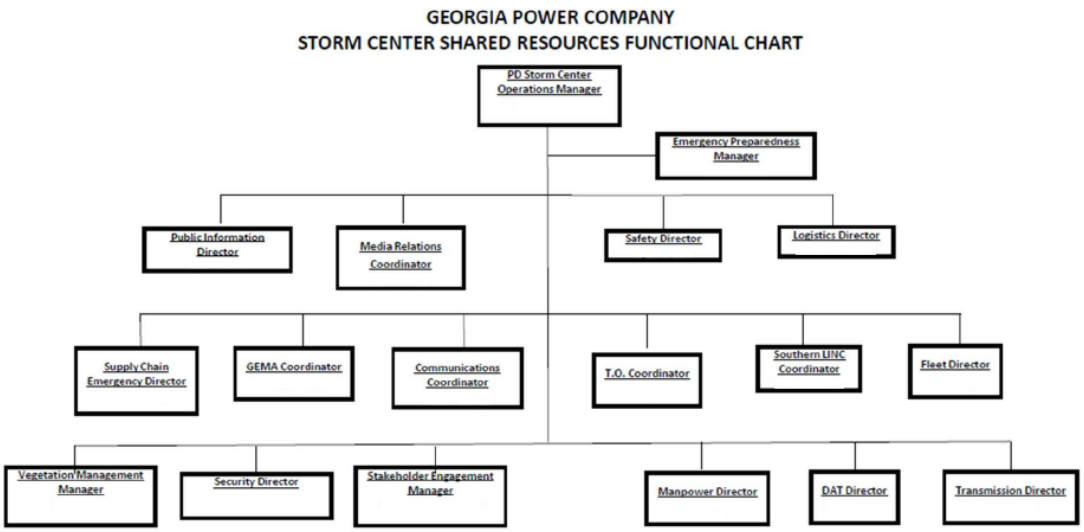
Georgia Power's ERP outlines a communication plan based upon a named storm being five days, three days, or one day ahead of anticipated impact. This communication plan includes providing updates via email during the five-, three-, or one-day cadence and identifies internal resources across the Company to be notified. Further, these plans highlight the need to include weather and safety updates, as well as to provide detailed notes on preparation, anticipated manpower, and additional resources that are being procured. The plan highlights that external engagement should occur three days and one day prior to the storm. Georgia Power followed the communications approach, including with external stakeholders, for Hurricane Helene as summarized in Table DH-2 below.

Table DH-2: Overview of Georgia Power's External Communications Ahead of Hurricane Helene

Date	Communications Summary
September 24, 2024	Press release indicating Helene was a Tropical Storm and directed customers to its social media channels. Further, information provided to customers on how to prepare and offering safety tips.
September 25, 2024	As Helene was upgraded to Hurricane, Georgia Power sent safety reminders and messaging regarding the anticipated restoration process.
September 26, 2024	Georgia Power provides a message from the CEO in the Storm Center and urges customers to prepare for Hurricane Helene.
September 27, 2024	Helene enters Georgia as a Category 1 Hurricane.

Finally, Georgia Power's ERP included its command structure, as shown below in Figure DH-1. The Company's command structure includes named roles in place for each of the key capabilities and best practices outlined herein, including for the DAT, manpower, logistics, safety, public information, media relations, communications, and stakeholder engagement.

Figure DH-1: Georgia Power's Storm Response Command Structure



Q. DID GEORGIA POWER'S EMERGENCY RESPONSE PLAN HELP FACILITATE AN APPROPRIATE STORM RESPONSE EFFORT?

A. Yes. Georgia Power restored service to all of the nearly 1.6 million customers who lost service due to Helene throughout the state, thanks to the approximately 20,000 internal, mutual assistance, and contract resources Georgia Power was able to deploy. And, as this rapidly assembled field workforce made the necessary transmission line repairs, replaced over 12,000 distribution poles, and repaired or replaced 20,000 spans of wire to restore service across the state, they did so safely, incurring no major injuries to the workforce or to the public at large.

IV. WEATHER TRACKING AND STORM PLANNING ALERTS

Q. WAS HURRICANE HELENE AN ANTICIPATED STORM?

A. Yes.

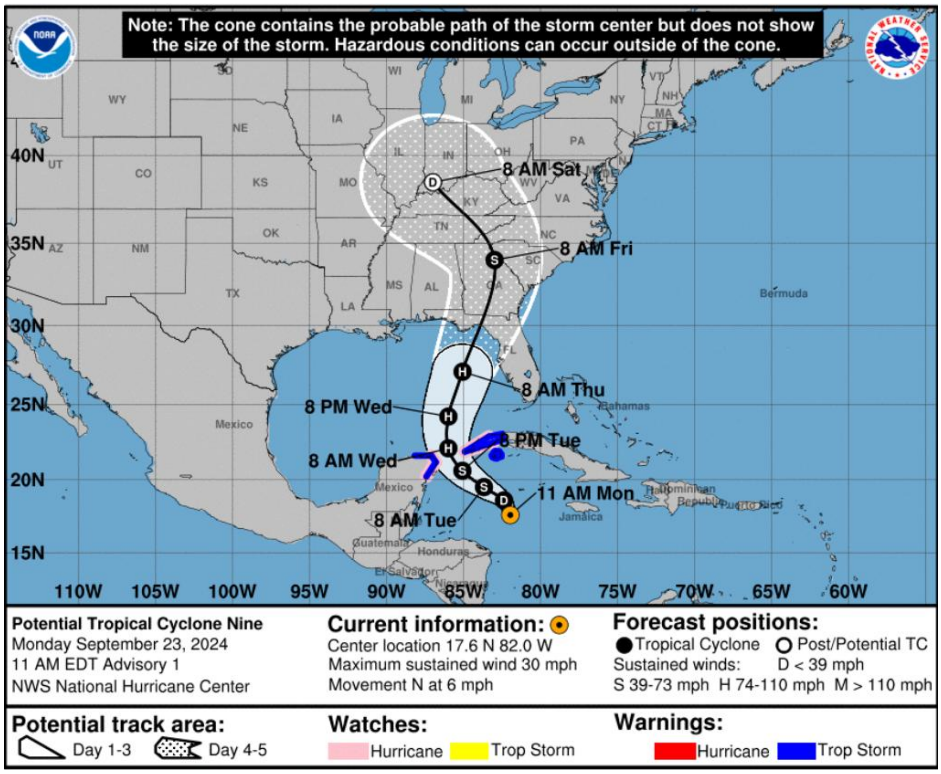
Q. HOW DOES GEORGIA POWER IDENTIFY AND TRACK POTENTIAL STORMS?

A. Georgia Power utilizes StormGeo, a weather forecasting service, for proactive weather intelligence, alerts, and analysis. Per Georgia Power's ERP, weather forecasts, analysis, and proactive internal communications help keep the organization and customers informed about potential impacts, and on the lookout for additional communications should further restoration preparation actions need to occur.

Q. WHAT WAS THE TIMELINE OF HURRICANE HELENE FROM WHEN IT WAS FIRST FORECASTED TO IMPACT GEORGIA THROUGH TO LANDFALL?

A. The National Oceanic and Atmospheric Administration ("NOAA") started tracking Potential Tropical Storm 9, which ultimately became Hurricane Helene, in late September 2024. On September 23, 2024, NOAA released the first advisory related to this storm system, as shown in Figure DH-2 below. This advisory showed the entire state of Georgia, with impact occurring sometime between Thursday September 26, and Friday September 27. What this projected cone of impact also shows is parts of the Florida peninsula (with utilities FPL, Tampa Electric, and Duke Florida), the Florida panhandle (FPL and Duke Florida), and the majority of South Carolina (Duke Carolinas) within the impact cone as well.

Figure DH-2: NOAA Tropical Cyclone 9 Advisory 1[5]



An overview of a timeline of events from NOAA's Advisory 1 from this storm through the dissipation of the storm is outlined below in Table DH-3.

[5] HELENE Graphics Archive:
 5-day Forecast Track and Watch/Warning Graphic (https://www.nhc.noaa.gov/archive/2024/HELENE_graphics.php?product=5day_cone_with_line, last accessed April 30, 2026).

Table DH-3: Overview of Hurricane Helene Forecasts and Impacts

Date	Forecast
11AM Mon 9/23	Georgia first "Coned." Hurricane Helene is forecast to track across the state as a weakening tropical storm or Category 1 Hurricane.
5PM Mon 9/23	Hurricane Helene is forecast to reach Major Hurricane status before landfall on the Florida Panhandle. At this point, hurricane impacts to Georgia are forecast.
5AM Tue 9/24	Hurricane watches up for the Florida panhandle.
5PM Tue 9/24	Hurricane watches upgraded to warnings.
5AM Wed 9/25	First advisory to predict a hurricane-strength storm tracking over Georgia proper.
11AM Wed 9/25	Hurricane Helene reaches Hurricane status.
5PM Thur 9/26	Hurricane Helene reaches Major Hurricane status.
11PM Thur 9/26	Helene makes landfall on the Florida Panhandle as a Category 4 Hurricane (140 mph).
2AM Fri 9/27	Helene enters Georgia as a Category 1 Hurricane (90 mph).
5AM Fri 9/27	Helene weakens to a tropical storm (70 mph) over East-Central Georgia. However, strong winds and heavy rain remain serious threats.
2PM Fri 9/27	Helene dissipates.

Q. WHAT ACTIONS DID GEORGIA POWER TAKE TO PREPARE FOR HURRICANE HELENE?

A. Georgia Power was proactive in monitoring the weather system and requesting resources to help it prepare. On September 23, 2024, Georgia Power received forecasts and projected tracks from StormGeo and started to monitor the weather. As expected, individuals with storm command responsibilities started exchanging emails and texts to prepare. Topics of discussion included potential impacts and

resources needed to restore.

V. EXTERNAL RESOURCE ACQUISITION PROCESS

Q. HOW DO LEADING UTILITIES PREPARE FOR A MAJOR EVENT SUCH AS A HURRICANE?

A. To prepare for major events, leading utilities take a couple of different paths. As a part of the routine preparations, leading utilities will periodically review and update their ERPs, carry out exercises and drills to ensure the ERP is updated with prior lessons learned, and ensure there is familiarity with the latest ERP. Georgia Power does all of these things. Georgia Power holds annual storm restoration exercises aimed at familiarization with storm restoration strategy as well as providing meaningful challenges for participants to test how they will react.

As the storm system forms, utilities start to track the storm to see if their service territory will be impacted. If there is a chance of impact, utilities will start to develop a picture of the anticipated damage and resources required to recover from the anticipated damage. This is followed by outreach to various organizations (contractors, mutual assistance organizations, etc.) to coordinate resource requests with other utilities that are also anticipating damage from the same weather system. All of these tasks and activities are part of Georgia Power's ERP and were executed during the lead up to Hurricane Helene.

Q. HOW DO UTILITIES DETERMINE HOW MANY RESOURCES ARE NEEDED?

A. The question of how many resources are needed to recover is one of the more impactful decisions the utilities need to make in the days before a storm's impact. At the heart of the restoration challenge is twofold – 1) identify the anticipated

damage from the expected storm track, and 2) determine the resources required to restore from the anticipated damage in a timely fashion.

Rarely does anticipated damage prior to storm impact match exactly with the amount of damage observed after the storm ends. In addition, local field conditions, such as the amount of tree damage, are highly variable and differ from storm to storm, leading to a degree of uncertainty around the total amount of work required to recover. As recognized in the AEIC best practices paper, one of the ways to determine how many resources are needed is based on historical information—such as track of storm, amount of damage, or how much time and effort were previously needed to address the particulars of the utility's electrical system—and must account for local work practices. There is no industry standard for translating a set of standard inputs in terms of storm forecasts into accurate counts and mixes of resources. The best source of how many resources are needed still comes from historical data obtained from dealing with local conditions and storms. There are certainly additional considerations beyond the local damage that would drive the overall restoration resources and timing, but historical information remains the best source.

More resources can lead to faster restorations, but at a higher cost. Utilizing fewer resources will lead to lower restoration costs, but at the expense of worsening customer experiences. The balance between number of resources and overall expected restoration times is a judgment call of the responding utility and can be the most challenging aspect of any storm planning effort.

Once the estimated damage (often in ranges) and required resources are determined, utilities can determine the number of available internal resources (crews and contractors), then derive the resource requests for the number of outside resources that will be needed to support the restoration effort.

Q. ARE UTILITIES ALWAYS SUCCESSFUL IN OBTAINING THE REQUESTED OUTSIDE RESOURCES TO SUPPORT RESTORATION EFFORTS?

A. No. Storm tracks are rarely fixed in place. As can be expected, large storms such as Hurricane Helene will likely impact multiple utilities. All of the utilities that are anticipating damage from the storm will be making independent, concurrent determinations as to how many resources they will need to recover from the storm. This leads to a pool of demand for resources from multiple utilities prior to the storm impacting.

This demand is often greater than available resources, so there is often an allocation process run by the regional mutual assistance organization to determine how the available mutual assistance resources should be shared amongst all the utilities expecting to be impacted by a storm.

Q. DID GEORGIA POWER MAKE RESOURCE REQUESTS FOR HELENE?

A. Yes. The storm command team started to hold regular meetings to monitor and discuss actions from late on September 23rd to early in the day September 24th.

Q. WHEN DID GEORGIA POWER MAKE RESOURCE REQUESTS FOR HELENE?

A. Georgia Power made timely requests for resources (line and tree clearance) early on in the preparation process. Initial resource requests were made early on in the process, with requests going out to external parties on the 24th and 25th of September, coinciding with Helene officially reaching hurricane status. Over 1,600 tree clearance crews (native Georgia Power contract crews and outside support) were already in Georgia on the 26th of September. Non-Georgia Power affiliated line crews from utilities such as PECO (Philadelphia), First Energy (Western

Pennsylvania), and Texas-New Mexico Power (Dallas & Houston areas) arrived in Georgia on the 27th of September, ready to help Georgia Power restore power.

As Florida and South Carolina were also initially projected to be impacted based on initial storm tracks, utilities such as FPL, Tampa Electric, and Duke (Florida and Carolinas) were also making their own requests for assistance in the early days of the storm. When it became clear that Helene's impacts on those utilities were not as severe as originally forecasted, those utilities began to release crews, some of which were then re-allocated to support Georgia Power's restoration efforts.

Georgia Power did not receive all of the resources it sought for restoration of its system. Thus, in the early days of the following week, Georgia Power, through the Southeastern Electric Exchange ("SEE"),[6] made additional resource requests to utilities located further out West.

Q. WERE THE CREWS THAT ARRIVED PUT TO GOOD USE?

A. Yes. Hurricane Helene caused widespread damage across the state of Georgia and in Georgia Power's service territory. During Helene, all of Georgia Power's operating regions experienced at least one lockout. The majority of circuit lockouts (and damage) were located in the South, Coastal, Central, and East Regions, which covers the southern and eastern portions of the Georgia Power service territory. To recover from a storm that inflicted widespread damage, Georgia Power followed a decentralized restoration process to recover.

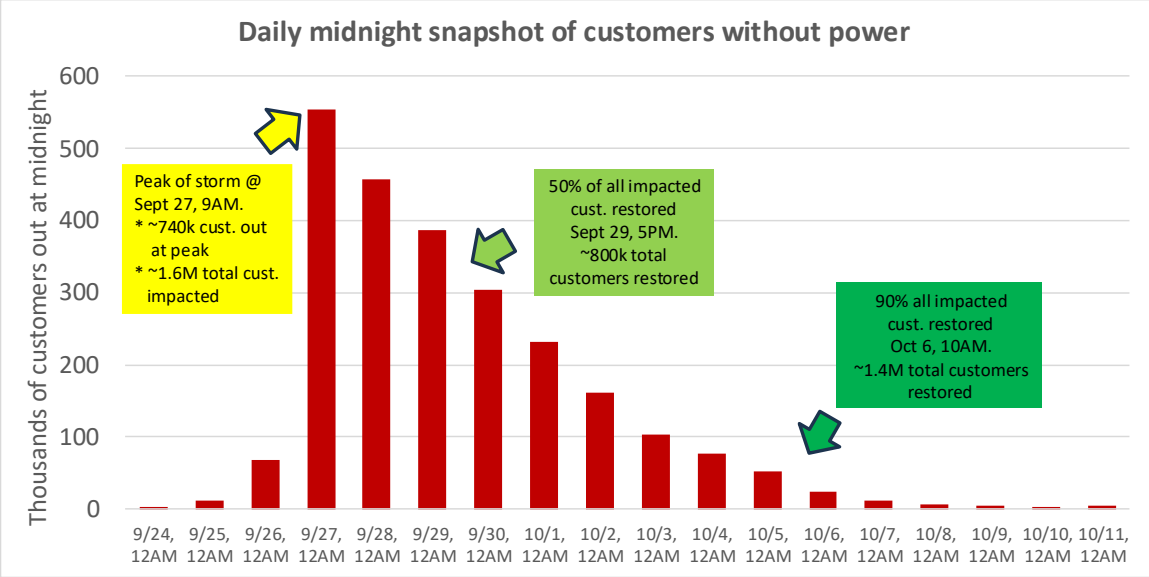
Q. HOW DID THE DECENTRALIZED RESTORATION PROCESS PLAY OUT?

A. The decentralized restoration process allowed Georgia Power to scale up and enable more resources to work on the damaged areas at the same time. As shown in Figure

[6] SEE runs the Regional Mutual Assistance Group for the Southeastern U.S. coordinating resources during large restoration events, and is in charge of allocating crews made available to the various utilities that have made assistance requests.

DH-3 below, Hurricane Helene did the bulk of the damage and outages the morning of September 27th. The peak concurrent customers without power occurred at 9AM of September 27th, when there were close to 740,000 customers without power at the same time. As mentioned before, Georgia Power started to restore power immediately on the 27th as soon as it was safe to do so. In fact, Georgia Power restored over 800,000 customers over the next two days by September 28th. The 800,000 customers restored represent over 50% of the total customers impacted. 90% of the total impacted customers (over 1.4 million customers) were restored by October 6th, and 95% of total impacted customers (over 1.5M customers) were restored by October 7th.

Figure DH-3: Georgia Power Hurricane Helene Restoration Curve



Q. WHAT DO YOU CONCLUDE ABOUT GEORGIA POWER'S REQUEST FOR AND UTILIZATION OF RESOURCES?

A. Georgia Power made timely requests for assistance, and the crews were utilized properly. There are only so many resources available in the immediate vicinity of Helene's impact that were ready and available to support all the utilities that were or projected to be impacted. Georgia Power's aggressive, proactive outreach efforts

in sourcing crews resulted in utilities well outside the Southeastern U.S. placing boots on the ground in Georgia on the 27th of September, ready to assist as soon as it was safe to do so.

There was no indication that Georgia Power's restoration effort was hindered or affected by the lack of a model or matrix of probabilities. Georgia Power actively monitored the forecasts, proactively reached out for resources early on in the processes, worked with its neighbors through the SEE mutual assistance resource allocation process, and sought out and secured crews from outside of the immediate area to ensure they were able to restore service from what became a storm that caused widespread damage across its service territory. Georgia Power utilized industry best practices for scaling up via a decentralized restoration approach that allowed outside entities to safely work on the Georgia Power system.

After my review of documents and analysis, I conclude that Georgia Power was proactive in preparing for this storm and proactive in requesting and securing crews from both within the immediate region as well as outside the normal region to make sure there were sufficient resources to restore. Once the crews started to arrive on the day of the storm's landfall in Georgia Power's service territory, Georgia Power followed an acknowledged industry best practice to scale up the workforce to restore power for the 1.6 million customers that were impacted during the storm.

VI. RESPONSE TO DISALLOWANCE AND ADJUSTMENTS RECOMMENDED BY THE PIA STAFF PANEL

Q. DID THE PIA STAFF PANEL RECOMMEND ANY ADJUSTMENTS TO THE COMPANY'S REQUEST FOR RECOVERY OF STORM COSTS?

A. Yes. The PIA Staff panel has proffered a series of recommended adjustments and disallowances that collectively result in an annual revenue decrease for the Company. This stands in sharp contrast to the Company's filed request for timely recovery of incurred storm costs included in the regulatory asset.

The PIA Staff panel's recommendations, based primarily on assumptions rather than hard facts, result in a $269.932 million reduction from the Company's $269.662 million annual cost recovery proposal. It is clear the PIA Staff panel's assumptions and proposed policy changes were selected top down to achieve an overall result. They are not a series of well-founded, bottom-up recommendations that just "happen" to total one tenth of one percent more than the Company's requested cost recovery.

In an attempt to support these recommendations, the PIA Staff panel offers its assertion that Georgia Power did not prepare for, respond to, nor restore from Hurricane Helene using industry best practices. This assertion, from a PIA Staff panel without any notable emergency response and storm management expertise or experience and without having done a prudency or operations review of any of the Georgia Power storm responses, is, at best, an "ivory tower" assertion.

As described above, it is clear that Georgia Power used industry best practices in its response to Hurricane Helene and, as should be expected, has used its learning from Helene to further refine its ERP and supporting tools. Given this, and unlike the PIA Staff panel, I believe the Company has demonstrated adherence to industry best practices and should recover its unadjusted storm costs as requested in this proceeding.

Q. DO YOU HAVE COMMENTS ON SPECIFIC ASSUMPTIONS THE PIA STAFF PANEL USED TO CALCULATE THEIR RECOMMENDED DISALLOWANCES?

A. Yes. I would like to address several specific points.

First, the PIA Staff panel claims a disallowance should be made to exclude from storm costs 20% of all Georgia Power employee overtime labor costs, as they assert these are non-incremental costs. The totality of these costs are typically treated as storm costs across the industry. As many, if not all, employees typically work

sixteen-hour days during major storm responses, this cost dwarfs the "business as normal" overtime level, both in terms of overtime hours per employee and the number of employees working overtime. The standard practice in the industry is to charge all employee overtime during the storm period to storm restoration. I believe it is reasonable and appropriate to treat all employee overtime during a storm period as a storm cost.

Second, the PIA Staff panel claim a disallowance should be made to exclude from storm costs 20% of all external contractors that are under contract for routine work on the Georgia Power system, as they assert these are non-incremental costs. Storm restoration work done by these "native" contractors is 100% incremental to their ongoing baseline work in support of the Company's annual work plan. Their baseline work will still be completed and paid for under the agreed contractual terms, although the completion schedule for that work is obviously impacted by the storm. To suggest that re-assigning a contract crew to storm work for the restoration period is not incremental to that commercial relationship represents a fundamental misunderstanding of how external resources are managed in the industry. I believe it is reasonable to consider all "on property" contract resources that are redirected to storm restoration duty as 100% incremental costs for storm accounting purposes.

Third, the PIA Staff panel's recommendation to stretch out cost recovery of the incurred storm costs to 103 months (over 8 ½ years) is bad policy in my experience. A primary purpose of the storm cost accrual is to align customer benefit from storm restoration with the customer cost for same. The Company's proposal to update the annual expense going forward is made with an eye to better match likely costs incurred with revenues for same. Recovering restoration costs for Hurricane Helene in 2024 from Georgia Power customers through 2034 is, in my opinion, not wise.

Fourth, the PIA Staff panel recommends the Company be ordered to perform post-storm studies and reviews. Because costs associated with these studies and reviews are not in "business as normal" costs, if that were to be ordered, those costs should be accrued to the storm cost regulatory asset.

VII. CONCLUSION

Q. PLEASE SUMMARIZE YOUR FINDINGS AND CONCLUSIONS.

A. Through my rebuttal testimony, I discuss industry storm preparation, planning, and response best practices and give examples of how Georgia Power's ERP, the Company's storm planning as driven by its storm/weather tracking data, and the early acquisition of external crews and resources all exemplify the best practices described by the AEIC and observed elsewhere in industry. Further, I rebut the PIA Staff panel's academic approach to storm management, demonstrate that Georgia Power planned for and acquired crews in line with industry best practices, and demonstrate how Georgia Power's storm planning practices are also based upon lessons learned from other storm restoration efforts. Finally, I support Georgia Power's storm cost recovery request and explain that PIA Staff's adjustments are arbitrary.

Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes.