UNITIL ENERGY SYSTEMS, INC.

DIRECT TESTIMONY OF RICHARD L. FRANCAZIO

New Hampshire Public Utilities Commission

Docket No. DE 13-___

Table of Contents

I.	Introduction	. 1
II.	Purpose of Testimony	. 3
	Description of Hurricane Sandy	
	Qualifying Major Storms	
	Conclusion	

List of Attachments

Attachment 1 – Hurricane Sandy After Action Report

I. INTRODUCTION

2	Q.	Please state	your name and	business address.
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- 3 A. My name is Richard L. Francazio and my business address is 6 Liberty Lane West,
- 4 Hampton, New Hampshire 03842.

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6 Q. What is your position and what are your responsibilities?

- 7 A. I am the Director of Emergency Management and Compliance for Unitil Service
- 8 Corp. ("USC"), which provides centralized management and administrative
- 9 services to Unitil Corporation's affiliates including Unitil Energy Systems, Inc.
- 10 ("UES" or the "Company"). In this position, I am responsible for organizational
- readiness related to Business Continuity events, including storm conditions, and
- the development of policy and procedures that will certify the Company's
- compliance with all applicable Federal, State and Local Regulation.

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Q. Please describe your business and educational background.

- 16 A. I have over 30 years of experience in the utility industry with expertise in many
- aspects of the distribution and transmission energy delivery business. Prior to
- joining USC in March 2009, I was employed at National Grid for 27 years and
- prior to that, five years at Florida Power & Light. After my stay at FP&L as a
- system protection engineer, I joined New England Electric System (now National
- 21 Grid) in 1984 as a Supervisor in the Substation Operation and Maintenance

1 department and over the years held a variety of senior management positions 2 including Vice President of New England Electric Operations (included Rhode 3 Island, Massachusetts and New Hampshire); Vice President of Construction 4 Services for National Grid US, and Vice President and Director of Emergency 5 Planning for National Grid US. 6 7 I led National Grid's effort to revise their emergency response procedures to 8 reflect the National Incident Management System (NIMS) guidelines and Incident 9 Command System (ICS). From 1995 to 2009 I also served as the System Storm 10 Director responsible for implementing and coordinating restoration activities 11 across National Grid. I retired from National Grid in 2009 and joined USC in 12 April of that year. I have a Bachelor of Science degree in Electrical Engineering 13 from Roger Williams College and a Masters of Business Administration from 14 Boston University. 15 16 Q. Have you previously testified before the New Hampshire Public Utilities 17 **Commission ("Commission")?** 18 A. Yes. I testified before the Commission regarding UES's deployment of resources 19 following the 2008 ice storm in Docket DE 10-001. In addition, I have testified 20 before the Massachusetts Department of Public Utilities ("MDPU") in a number of 21 emergency response dockets.

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II. PURPOSE OF TESTIMONY

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2	Q.	What is the purpose of your testimony?
3	A.	The purpose of my testimony is to support the Company's proposal to increase the
4		Storm Recovery Adjustment Factor ("SRAF") by incorporating the cost recovery
5		for Hurricane Sandy ("Sandy"). My testimony will describe the impact of Sandy
6		on the distribution infrastructure of UES, the Company's pre-planning, restoration
7		and recovery efforts, the resulting costs of those efforts, and why Sandy qualifies
8		for major storm treatment as defined by the Commission.
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10	Q.	How is your testimony organized?
11	A.	The remainder of my testimony consists of two segments. First, I will describe the
12		impact of Sandy and the Company's response. Second, I will explain why Sandy
13		qualifies as a major storm under the Commission's definition of a major storm
14		event.
15	III.	DESCRIPTION OF HURRICANE SANDY
16	Q.	When did Sandy strike New England and the UES service territory?
17	A.	On Monday, October 29 th , the Mid-Atlantic and New England regions were
18		impacted by Hurricane Sandy as it weakened to a Tropical Storm.
19		Hurricane Sandy, the 10 th hurricane of the 2012 Atlantic Hurricane Season,
20		devastated portions of the Caribbean and Mid-Atlantic before impacting the
21		Northeastern United States. It became the second-costliest Atlantic Hurricane,

only surpassed by Hurricane Katrina. Developing near Jamaica on October 22nd, Sandy tracked northeast along the eastern coast of the U.S. before turning west and making landfall near Atlantic City, New Jersey, with winds of approximately 90 mph. With winds spanning over 1,000 miles in diameter, effects from Hurricane Sandy were felt throughout the morning and afternoon hours on Monday, October 29th. As the storm's outer bands moved through New England, heavy rain and high wind gusts up to 55 mph were experienced in the New Hampshire, especially along the seacoast, resulting in limb, tree and wire damage. Company crews responded to outages throughout the day as safe conditions allowed, responding to over 100 reported wires down and 513 trouble locations, including 19 feeders and 9 sub-transmission lines locked-out across the UES service territory.

Hurricane Sandy caused more than \$53 billion dollars in damage and at least 209 deaths in seven countries, including 131 in the United States. Emergency declarations were issued for 14 states, including New Hampshire, and 24 states were affected, with over 8.5 million people losing electric service.

A.

Q. Please describe Unitil's preparations for Sandy.

Unitil began monitoring the storm's development on Monday, October 22nd, utilizing various media and weather outlets as the storm progressed. Once it became likely that the storm's path would impact the New England region, Unitil's Emergency Management and Compliance Director held an internal storm

conference call on Thursday, October 25th, which initiated the Company's preparatory checklist activities and Incident Command System (ICS). One of the primary activities was having the Logistics Section Chief begin to acquire resources and supporting meals and lodging. The table below depicts the number and type of crews assigned to UES in response to Sandy, which included contractors from as far as Michigan and Canada.

Hurricane Sandy UES Crew Assignment

Crew Type	# Crews	# FTEs (personnel)
Internal Line	11	22
External Line	52	110
Tree	27	56
Damage Assessor	28	28
Wires Down	50	50
Support	≈80	≈80

The System EOC in Hampton and UES's Regional EOCs in Concord and Kensington were activated and fully staffed on Monday, October 29th in advance of the storm. A final Pre-Event report was submitted to Regulatory and Municipal officials regarding the EOC's opening times and confirming final preparations. Once storm-related outages began to occur at 10:00 AM, Restoration Status Reports, which provided outage and crew information, were issued every four (4) hours to regulators, municipal emergency response personnel and others until the conclusion of the event.

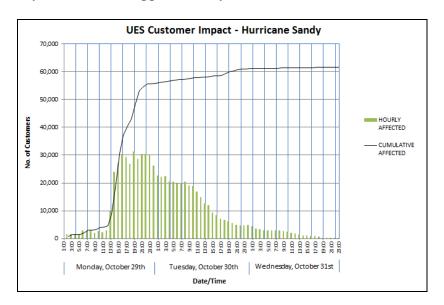
Additionally, as the storm rapidly approached New England, the Company implemented its multi-layered, communications protocols detailed within its Electric Emergency Response Plan (ERP). This implementation focused on informing customers (including Life Support Customers), updating the web outage map, social networking, coordinating with local and state emergency response officials, providing frequent updates to regulators and elected officials, partnering with the news and print media to distribute public service announcements (PSAs), briefing emergency response agencies like the American Red Cross (ARC) on our preparations, and consistently updating employees and contractors on the Company's restoration progress. And, prior to impact, UES Regional EOC's held their first municipal call to ensure that local municipal emergency response officials understood the communication protocols when the inevitable public safety concerns arose.

Q. How many UES customers were impacted by Sandy?

The first storm-related outage for Unitil occurred at approximately 10:00 AM on Monday, October 29th, with peak interruptions reaching 31,000 in the New Hampshire service area (42% of UES's New Hampshire electric customers) with cumulative customers affected reaching over 61,000 throughout the event.

Q. When did the Company restore service to all customers?

A. Unitil NH electric operations were able to restore power to 95% of the affected customers by 10:00 PM on Tuesday, October 30th less than 36 hours later. 2 3 Complete restoration of all customers was accomplished by 11:00 PM the next day, October 31st, approximately 48 hours after the first customer outage.



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Q. When did the Company release the contracted resources it had acquired in advance of Sandy?

After restoring power to all its New Hampshire customers, UES was able to A. provide significant resources to other New England utilities. Demobilization efforts began throughout the day on Wednesday, October 31st. Working closely with the Northeast Mutual Assistance Group (NEMAG), resources were released to other New England utilities as needed, including 15 line and tree crews sent to other New Hampshire utilities. In addition to providing other utilities with contractor crews, Unitil also provided five (5) of its own crews for mutual 1 assistance in New England. By the morning of Wednesday, October 31st, the 2 Company had released 85 contractor line and tree crews to three (3) utilities in 3 three (3) states, including New Hampshire utilities.

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5 Q. Did the Company complete an After Action Report for UES following Sandy?

6 A. Yes. The UES "After Action Report" for Hurricane Sandy is provided as 7 Attachment 1. This report provides a summary of information regarding Sandy, the 8 resulting damage, customer impacts, as well as the Company's planning, 9 restoration and communication strategy.

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IV. QUALIFYING MAJOR STORMS

12 Q. Why is Hurricane Sandy considered to be a major storm?

13 A. The Commission has established criteria for each utility in New Hampshire, based 14 on the number of "troubles" and the percentage of customers interrupted, under 15 which a severe weather event would be classified as a "major storm." Troubles are 16 defined as interruption events occurring on either primary or secondary lines. Because the criteria incorporate information about the number of trouble locations 18 (the number of individual outages) in addition to the number of customers 19 interrupted, large outages caused by non-storm events cannot exceed the defined 20 thresholds and are thus screened out. These definitions have worked well for over a decade and ensure that only significant storms meet the criteria for a major storm.

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Q. How does the Commission define a qualifying major storm for UES?

A. Consistent with the definition in the Company's Major Storm Cost Reserve, qualifying major storms include severe weather events causing 16 concurrent troubles (interruption events occurring on either primary or secondary lines) and 15 percent of customers interrupted, or 22 concurrent troubles, in either the Capital or Seacoast regions of UES. The Company undertakes planning and preparation activities in advance of severe weather if a qualifying major storm is likely occur. The Company can also recover preparation costs if a major storm is considered likely to occur when an Estimated Impact Index ("EII")¹ from the Company's professional weather forecaster reaches an EII level of 3² or greater with a "high" (greater than 60 percent) level of confidence.

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Q. Did Sandy meet the definition of a qualifying major storm?

17 A. Yes. During Sandy, UES experienced the following impact: approximately 82 concurrent troubles interrupting 48% of customers in the Capital Region; 130

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¹ EII levels are indices developed by Unitil's weather forecast provider – TELEVENT Metrologic's (DTN). An EII level is a qualified indicator of both the possibility and severity of a particular weather event that results in the potential for customer outages.

² A EII level of 3 is defined by weather conditions meeting any combination of the following criteria – strong storms where isolated yet severe pockets are possible with moderate to severe lightning; icing between 3/8 to 3/4 inch accretion; less than 6 inches of heavy wet snow; soil moisture greater than 6 g/kg; sustained winds of 30 to 40 mph with many wind gusts between 40 to 50 mph, and with a few in excess of 50 mph.

concurrent troubles interrupting 44% of customers in the Seacoast Region. The numbers are significantly greater than the thresholds defined under the Commission definition. In addition, the event was forecasted on October 29th to have an EII of 3 with a "High" level of confidence.

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Q. Is the Company seeking recovery of the costs of Sandy through the Major

Storm Cost Reserve?

No. As explained in Testimony of Ms. Asbury, the Storm Reserve was established to deal with the more frequent ("typical") major storms that have a higher probability of occurring on an annual basis. It was not designed to include low frequency storms that are extraordinary in magnitude, such as Sandy. The reserve established in DE 10-055 in the amount of \$400,000 annually was not set at a level that would be sufficient to recover the costs of storms such as Sandy. If this cost (\$2,310,089 of expense) were added to the reserve, the reserve would be in a significant deficit for an extended period of time.

Q. For what activities and costs is the Company seeking recovery?

A. The non-capitalized portion of the costs of restoration activities including contractor crews, incremental compensation of employees, meals, lodging, staging sites, and related expenses are included in the Company's filing. In addition, planning and preparation activities in advance of the storms including pre-staging

of crews, standby arrangements with external contractors, incremental compensation of employees, and other costs to prepare are also included.

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V. CONCLUSION

- 5 Q. Please summarize your testimony.
- 6 A. To summarize, UES had a successful restoration as measured by our customers, 7 the municipals emergency response officials, the media and the Commission. UES 8 was able to restore service to 95% of its customers in approximately 36 hours, and 9 all customers within 48 hours. UES's response over the past several major storms 10 has demonstrated the Company's commitment to providing reliable service to its 11 customers, including efficient and cost effective restoration services. The ability to 12 pre-stage resources and, subsequently, release resources to support surrounding 13 utilities has benefited not only our customers but also the state as whole. This 14 event was significant to the people of New Hampshire and far exceeded the major 15 storm threshold. In light of the Company's performance and the fact that Hurricane 16 Sandy far exceeded the Commission definition of a major storm event, the 17 Company respectfully requests the adjustment to the SRAF, as described in my 18 testimony.

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- 20 Q. Does this conclude your testimony?
- 21 A. Yes, it does.