

**STATE OF NEW HAMPSHIRE  
PUBLIC UTILITIES COMMISSION**

**DE 07-036**

**GRANITE STATE ELECTRIC COMPANY D/B/A NATIONAL GRID**

**Petition for Waiver of Meter Testing Rules**

**Order Granting Petition**

**ORDER NO. 24,794**

**October 17, 2007**

**I. BACKGROUND**

On March 16, 2007, Granite State Electric Company d/b/a National Grid (National Grid), filed a Petition for Waiver of N. H. Code Admin Rules Puc 305.03, Test Schedules for Watt-Hour Meters and Demand Devices, and Puc 308.03 and Puc 308.04, the related meter testing reporting requirements. In connection with this request, National Grid asked the Commission to approve an alternative meter testing and meter testing reporting plan.

The petition was filed pursuant to Puc 201.05, which authorizes the Commission to waive any of its rules when the waiver serves the public interest and does not disrupt the orderly resolution of matters before the Commission. In determining the public interest the Commission must consider whether compliance would be onerous given the circumstances of the affected party and whether the purpose of the rule is satisfied by an alternative method proposed. National Grid proposes to use an alternative meter testing methodology and reporting, which it asserts are in compliance with the general requirements of Commission rules.

## II. POSITIONS OF THE PARTIES

### A. National Grid

In its petition, National Grid notes that the Commission previously granted the company a waiver of the requirements of the then-existing rules on meter testing and reporting. *Granite State Electric Company*, 89 NH PUC 102 (2004) (Order No. 24,278). In Order No. 24,278, the Commission approved National Grid's alternative meter testing methodology and waived periodic reporting requirements provided that National Grid filed the same information with the Commission in a single consolidated report.

Subsequently, in 2005, the Commission readopted with amendment Chapter Puc 300 of the agency's rules concerning electric service, which had the effect of making certain changes to the meter testing requirements. On November 29, 2005, National Grid filed a petition in Docket No. DE 05-194, requesting that the Commission grant a waiver of revised Puc 305.03, Puc 308.03 and Puc 308.04 to allow the company to continue using its alternative meter testing methodology and reporting. Following discussions with Staff, National Grid withdrew the petition. In the instant filing, National Grid has modified its meter testing methodology. Specifically, National Grid proposes to conform its alternative meter testing methodology to the acceptable percent registration requirements of Puc 305.03(d), as recommended by Staff.

National Grid described the main points of the meter testing plan in attachment A to its petition. According to the plan, the meter population would be divided into groups by meter manufacturer and type. The minimum required sample for each meter group would be strictly a function of the group's size. National Grid plans to over-sample each meter group by a suitable percentage to ensure that sufficient meter tests are performed for each group and that hard-to-access meters do not affect the plan.

The company would analyze test results for each group using the weighted average to determine the mean and standard deviation of the weighted average for each group. These statistical values would be used for each meter group to calculate a numerical estimate of the failing percentage of meters in each group, a value called “percent nonconformance.” National Grid would then compare the percent nonconformance for each group to the allowed percentage nonconformance for each group’s sample size to determine the pass/fail status for each group as a whole.

As filed, National Grid’s plan is based on the provisions of ANSI/ASQ Z1.9-2003, entitled “Sampling Procedures and Tables for Inspection by Variables for Percent Nonconforming.” The company noted that this standard is an updated version of the standard proposed in the previous filing, ANSI/ASQC Z1.9-1993. According to National Grid, this update to the meter testing program means that the company would use the allowed percent nonconformance standard in ANSI/ASQ Z1.9-2003 to determine the pass/fail status for each meter group. The company proposed to use this standard as an alternative to the requirements of Puc 305.03.

Once the pass/fail status has been determined, the failing groups would be evaluated using a root cause analysis to determine if a specific portion of the meter group population was responsible for the group’s failure. If National Grid is able to identify the noncompliant portion of the failing meter group, it would implement a remediation program for that portion of the group. If the Company cannot identify a specific portion that is responsible for the group’s failure, it would implement a remediation program for the entire group.

Meter groups or portions of meter groups placed on a remediation program would not be part of the testing plan for the next year. Additionally, test results for the current year would

have no effect on the required sample size for the following year. Sample size would be strictly a function of each meter group's population.

National Grid contends that, with the exception of its adoption of the new ANSI standard, the meter testing plan is the same plan used by the Company to test meters since the Commission issued Order No. 24,278. National Grid notes that it has filed consolidated reports in March of 2005 and 2006 as required by the Commission. The company requests a waiver of the requirements of Puc 305.02, Puc 308.03 and Puc 308.04 on the ground that its alternative meter testing methodology is consistent with the purpose of the revised rules. National Grid attests that it currently operates a meter testing program throughout New York and New England that mirrors the plan approved by the Commission in Order No. 24,278. National Grid states that any further changes to its current meter testing methodology would be time-consuming, resource-intensive and logistically difficult because it would require the company to change its meter testing program solely for its New Hampshire service territory.

#### **B. Commission Staff**

Staff engaged the services of The Liberty Consulting Group (Liberty) to conduct an engineering review of National Grid's proposed meter testing plan. Staff filed Liberty's report with the Commission on September 25, 2007. Liberty commented on three aspects of National Grid's Proposal: (1) the Acceptance Quality Limit (AQL), (2) National Grid's meter remediation program and (3) the need to review the program to determine whether it met the general requirements of Puc 305.03. Liberty took no position on National Grid's proposal to file a consolidated meter testing report instead of the reports required by Puc 308.03 and Puc 308.04.

According to its filing, National Grid proposed that 2.5 percent of the meters tested could be out of the tolerance range before action would be required to improve accuracy requirements.

This percentage value is referred as an AQL of 2.5. In its review of the National Grid proposal, Liberty observed that, pursuant to Puc 305.03, if the percentage of meters outside of the tolerance range is greater than 0.5 percent, additional meters must be tested according to the equation required by Puc 305.03(d)(2). Liberty stated that an AQL of 2.5 is less stringent than the current rules and initially recommended that the company use an AQL of 0.65 percent. On August 24, 2007, National Grid filed a letter amending its original filing in response to comments from Staff. The company agreed that the AQL used for determining the percent nonconformance of tested meter populations should be 1.0 rather than 2.5 as originally filed. National Grid noted that at a meeting with Staff held on August 14, 2007, Staff and Liberty agreed that an AQL of 1.0 was reasonable.

In its petition, National Grid stated that it will continue on a best efforts basis to remove small meter populations for testing. Liberty recommended that National Grid revise its filing so that access issues or installation issues do not interfere with its proposal to replace older meters as necessary. The company agreed that, for meter populations that fail to meet the AQL, it will not allow access issues or installation issues to interfere with its proposed remediation program, and it will continue to issue retirement orders to remove these meter populations from service.

Finally, Liberty recommended that National Grid agree to a Staff review of the alternative meter testing program to be conducted no sooner than 2009, so that a full five years of data is available for review. Liberty stated that the purpose of such a review would determine whether the alternative meter testing program is performing in a manner consistent with PUC rules. The company agreed to such a review in its August 24, 2007 letter.

### III. COMMISSION ANALYSIS

Pursuant to Puc 201.05(a) and (b), a review of National Grid's submissions, and those of Staff, demonstrates that the requested waiver serves the public interest because the proposed alternative method of compliance satisfies the purpose of the applicable rules. It is also our determination that the requested waiver will not disrupt the orderly and efficient resolution of matters before the Commission.

National Grid has agreed to Staff's recommendations. We note that neither Staff nor Liberty objected to National Grid's proposal to continue filing consolidated reports in lieu of the reports required by Puc 308.03 and Puc 308.04.

National Grid's use of the alternate methodology for testing meters satisfies the requirements of Puc 305.03. We further note that the company has agreed to a review of its methodology no sooner than 2009 and that the company will continue to file consolidated reports with the Commission. As in Order No. 24,278, we grant the waiver of the reporting requirements provided that National Grid includes in its consolidated report all the information required by Puc 308.03 and Puc 308.04.

**Based upon the foregoing, it is hereby**

**ORDERED**, that the petition of Granite State Electric Company d/b/a National Grid to waive the meter testing requirements of Puc 305.03 and to use an alternate meter testing methodology as set forth in its petition and modified by the company's letter of August 24, 2007 is hereby GRANTED; and it is

**FURTHER ORDERED**, that National Grid's request to waive the specific requirements of Puc 308.03 and Puc 308.04 is granted, provided that National Grid shall provide in its single

consolidated report all of the information required by Puc 308.03 and Puc 308.04, such consolidated report to be filed annually on or about March 15.

By order of the Public Utilities Commission of New Hampshire this seventeenth day of October, 2007.

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Thomas B. Getz  
Chairman

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Graham J. Morrison  
Commissioner

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Clifton C. Below  
Commissioner

Attested by:

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Debra A. Howland  
Executive Director & Secretary