## Nixon, Elizabeth

**From:** Gwjtstengr@aol.com

Sent: Saturday, February 02, 2013 2:41 PM

**To:** Nixon, Elizabeth

**Subject:** Re: MA Electric Standards for Interconnect

Hi Elizabeth,

I have appended a excerpt from MA Electric Standards for Interconnect found on the National Grid web site. The text was copied from section 8.0 of the document, which addressed Metering, Monitoring, and Communication. In Massachusetts, the requirements for metering and reporting depends upon the size of the system. The section I have highlighted provides an example of how to reference the ANSI standards for meters and current transformers.

I would suggest including these requirements in your definition of "revenue quality meter". The ANSI standards should apply whether the meters are part of an electric or thermal generating facility. The meters used to measure electrical power consumed by thermal system should be held to this standard. An accuracy class should be specified as part of the reference to the standard.

I hope this information is helpful.

Regards,

Greg Jackson Net Zero Meter

Massachusetts Electric Company Nantucket Electric Company M.D.P.U. No. 1176 Canceling M.D.T.E. No. 1116-A Sheet 40

## STANDARDS FOR INTERCONNECTING DISTRIBUTED GENERATION

The type of metering equipment to be installed at a Facility is dependent on the size of the Facility and how and if the Facility plans to export power or net meter. For those that will export power or net meter, the available equipment options and associated requirements are:

For Facilities 60 kW or less, unless the Interconnecting Customer elects another form of metering, the Facilities will be equipped with net metering in which metering equivalent to or replicating that of a standard distribution class meter is installed and is enabled to run in a normal direction during periods of net consumption and to run backwards during periods of net generator output. All metering equipment included in this type of installation, including self-contained meters and instrument transformers and meters, shall meet ANSI C12.1 Metering Accuracy Standards and ANSI C57.13 accuracy requirements for instrument transformers.

In a message dated 1/31/2013 11:05:39 A.M. Eastern Standard Time, Elizabeth.Nixon@puc.nh.gov writes:

Greg,

We are especially looking for standards related to thermal metering and measurement, but all input is helpful. I have looked at some of Massachusetts' work but if you know of specific information that would be useful, please forward it.
Thank you for your help.
Elizabeth R. Nixon
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NH Public Utilities Commission
Sustainable Energy Division
21 S. Fruit St., Suite 10
Concord, NH 03301-2429
Voice: 603-271-6018
E-mail: Elizabeth.Nixon@puc.nh.gov
From: Gwjtstengr@aol.com [mailto:Gwjtstengr@aol.com] Sent: Thursday, January 31, 2013 10:56 AM To: Nixon, Elizabeth Subject: Re: Reminder: Stakeholder meeting tomorrow on proposed Puc 2500, 9:30 am
Hi Elizabeth,
The allower for the many and the Disease let me have underthe account and leading a few algorithms.

Thank you for your reply. Please let me know whether you are looking for electric metering standards, standards for thermal measurement systems, or both.

I would also be interested in knowing whether the Committee has referred to standards established by the Mass CEC and/or National Grid for MA renewable's. I do not represent either

organization, but it appears that both have done a lot of good work in this area.

I think the NH PUC is right to try to better define it's own rules rather than to defer to a collection of standards produced by the various utilities. The definition of "revenue quality meter" is a good example. I would suggest referencing the ANSI C12 standard for electric meters (C12.20 Class 0.5), and the IEEE C57.13 standard for current transformers.

To the extent NH is able to propose or adopt existing regional standards, it should improve the success of your program.

Thank You,

Greg W. Jackson

Net Zero Meter

In a message dated 1/30/2013 8:17:54 A.M. Eastern Standard Time, <a href="mailto:Elizabeth.Nixon@puc.nh.gov">Elizabeth.Nixon@puc.nh.gov</a> writes:

Greg,

Yes, we are still accepting feedback. We extended the deadline until February 8. We are especially looking for assistance on the metering standards because in order for us to get the regulations approved we have to list specific metering standards.

We appreciate your feedback.

Elizabeth Nixon Energy Analyst Sustainable Energy Division NH Public Utilities Commission

From: Gwjtstengr@aol.com [mailto:Gwjtstengr@aol.com]

Sent: Mon 1/28/2013 4:49 PM

To: Nixon, Elizabeth

Subject: Re: Reminder: Stakeholder meeting tomorrow on proposed Puc 2500, 9:30 am

Hi Elizabeth,

Thank you for the opportunity for input to the NH RPS rules draft. I just finished reading the document last week. Please let me know if you are still accepting comments, and I will

send you my concerns this week.

Overall, it appears to be a fairly well written document that does a good job summarizing NH's administration of a complicated and diverse range of energy generation issues. I noticed some inconsistencies with use of capitalization and abbreviations. Otherwise, the draft was generally well organized and reasonably concise.

In addition, I have some broader concerns for encouraging smaller residential and commercial projects as well as promoting cleaner renewable's such as solar, thermal, geothermal, and wind energy. Please let me know if you are still accepting feedback.

Thank You,

Greg Jackson Net Zero Meter

In a message dated 1/24/2013 11:30:15 A.M. Eastern Standard Time, <u>Elizabeth.Nixon@puc.nh.gov</u> writes:

Just a reminder that we are holding a stakeholder meeting tomorrow on the proposed changes to Puc 2500, Electric Renewable Portfolio Standard from 9:30 a.m. to 11:30 a.m. at NH Public Utilities Commission, 21 S. Fruit St, Concord, NH, Getz Hearing Room 103.

Please bring your own copy of the rules, if you'd like, because we will not be handing out copies. The rule can be found at the following link:

http://www.puc.nh.gov/Sustainable%20Energy/Class%20I%20Thermal%20Renewable%20Energy.html

A few have asked to call in to listen to the meeting. The call in number is 1-866-951-1151, code is 5518132. We encourage you to attend in person, if possible.

We look forward to hearing your comments tomorrow and receiving your written comments.

Elizabeth R. Nixon

**Energy Analyst** 

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