

**STATE OF NEW YORK
PUBLIC SERVICE COMMISSION**

**IN THE MATTER OF COMPETITIVE
OPPORTUNITIES REGARDING ELECTRIC
SERVICE**

CASE No. 94-E-0952

IN THE MATTER OF COMPETITIVE METERING

CASE No. 00-E-0165

**PROCEEDING ON MOTION OF THE
COMMISSION TO INVESTIGATE COMPETITIVE
METERING FOR GAS SERVICE**

CASE No. 02-M-0514

**INITIAL COMMENTS OF ELSTER INTEGRATED SOLUTIONS
REGARDING ADVANCED METERING AND AMI
FUNCTIONALITY IN RESPONSE TO
THE PUBLIC NOTICE OF REQUEST FOR COMMENTS**

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DATED: DECEMBER 7, 2007

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AND NOW COMES **Scott H. DeBroff, Esquire** of Smigel, Anderson & Sacks, LLP, on behalf of his client, **Elster Integrated Solutions** ("Elster" or "EIS") for the purpose of filing comments in the above-captioned proceeding, and they aver the following:

1. **Elster Integrated Solutions**, with its headquarters in Raleigh, North Carolina and operations in 22 countries, serving customers in over 70 countries, is a leading provider of advanced metering infrastructure (AMI) solutions that help utility companies improve revenue cycle services, customer service, delivery reliability, and workforce utilization. With more than 100 years of electricity metering experience (formerly as Westinghouse

Electric Corporation and ABB Electricity Metering), Elster understands the unique requirements of utility customers worldwide.

2. Elster continues to be a party in the above-captioned dockets and has contributed extensively to this proceeding since the Commission issued its Order in August of 2006. As a meter technology provider, we have participated extensively in rulemaking proceedings all over the country regarding the implementation of the Energy Policy Act of 2005, and specifically the Smart Metering and Demand Response provisions beginning at Section 1252 of the Electricity Title of the Act. Today we continue to participate in implementation proceedings and rulemakings to address the issues of standards, functionality and cost benefit issues.
3. All correspondence and pleadings in this docket for Elster should continue to be directed to:

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INITIAL COMMENTS ON ADVANCED METERING

4. On August 1, 2006, the Commission issued an order in these proceedings directing electric utilities to file comprehensive plans for development and deployment, to the extent feasible and cost effective, of advanced metering infrastructure (AMI) systems for the benefit of all customers.
5. In its August 1, 2006 Order, the Commission adopted a broad definition of “advanced metering”, and by doing so, intended to refrain from including requirements that might favor one manufacturer’s product over another, or that might limit innovation in the field.
6. We agree with the Commission that it is also important for the Commission to consider the AMI filings using a consistent standard, one that has a set of minimum functionality as its base.
7. In regard to the Commission’s question as to whether the list is sufficiently comprehensive or whether additional features or functions should be specified, we think that this list is a good start. In terms of the promotion of a “clear and comprehensive standard for functions they are intended to achieve”, this minimum functionality list is fairly complete. This list matches up reasonably well with a similar proceeding in Maryland, found in Case No. 9111, where in an “Investigation Of Advanced Metering Technical Standards, ...and Recovery of Costs of Advanced Meters and Demand Side Management Programs”, the Maryland Public Service Commission, in September 2007, promulgated Order 81637 that established, among other things, its standards for AMI programs.

8. In regard to the Commission's question as to whether the New York list included items that should not become part of a Commission standard, Elster does have a few concerns and we will address them individually.
9. In regard to the Commission's question as to whether items on the list are accurately and /or sufficiently defined, and if not, how to improve on the definition, Elster does have a few concerns and we will address them individually.
10. In regard to the Commission's question as to whether there are other matters related to such an AMI standard not addressed by the questions, we will also address at the conclusion.

COMMENTS ON THE LIST OF AMI STANDARDS

11. **ANSI compliant (must meet all ANSI standards)** – There is practically no electricity meter that is put into service unless it meets the ANSI standards. We agree with this standard, but think that the piece in parentheses is unnecessary and duplicative. Perhaps the best way to write the language may to simply say that “Advanced Meters must be compliant with all relevant ANSI standards.”
12. **Bi-directional registration (supports net metering)** – We support this standard.
13. **Visual read capability for cumulative usage** – We support this standard in terms of its idea about having a visual read capability, however the language only refers to cumulative usage, and that seems to exclude the other information that could be available

through the meter. If the language was slightly broader and removed the “cumulative usage” wording, that would appear to be a good result.

14. Ability to provide time-stamped interval data, at hourly or shorter time intervals.-

We support this standard.

15. On-board meter memory capable of storing at least 60 days of readings – This

drafted standard is of substantial concern to us. With the capability that is built into the advanced meter and the system that supports it, there is **no** need for 60 days of meter data to be stored on the meter. The data is stored in the utility's data management system and 60 days is not needed as a requirement. An on-board meter memory requirement closer to the one that has been promoted by the Maryland PSC, in its Order 81637 referred to above, is that all meters shall have a minimum of 14 days of data storage capability on the meter. We believe that the 14 day standard is sufficient.

One additional support for our recommendation is found as a result of the language in the definition for “Advanced Metering” as promoted by the Federal Energy Regulatory Commission. They define Advanced Metering as follows:

“Advanced metering is a metering system that records customer consumption [and possibly other parameters] hourly or more frequently and that provides for daily or more frequent transmittal of measurements over a communication network to a central collection point.” The definition is taken from the 2007 Assessment of Demand Response and Advanced Metering Report submitted by the FERC. As the meters are read at least daily, it's hard to justify the meter having a 60-day data on board storage capability.

16. **Direct, real-time (defined as a time lag of five minutes or less) remote read-only access for customers and/or competitive providers to meter data.** – We are seeing similar requirements in other states and support what we believe to be the intent, however, how this is implemented is critical to the overall cost. The above captioned Maryland Order deals with this issue by recognizing that the metering data management would continue to be primarily a utility function with a requirement for non-discriminatory access to the data by other entities including retail electric suppliers and curtailment service providers.
17. **Capability to remotely read meters on-demand.** – We support this standard provided that the concerns we voice in item 16, above, are incorporated, in other words that the access is via the utility data management system.
18. **Utilizes open standards-based communication protocols and platforms, e.g., broadband, PLC, internet, XML, MV-90, Zigbee, DNP3, etc.** – Elster supports, participates in the development of, and complies with industry consensus standards, however, the distinction between “open” architecture and proprietary technology/services is very important, and needs to be clearly understood by this Commission and other regulatory bodies around the country who are examining these Advanced Metering/AMI issues. Our technology utilizes ANSI standards-based meters, we utilize IP, we utilize standard encryption methods, we utilize XML and SOAP for our IT interfaces. On the electricity side, all meter manufacturers, while employing ANSI standards, utilize manufacturer tables which results in a proprietary way to get the data. Even utilizing what some think is a common standard Zigbee, from the meter to the in-home device, in the end is proprietary since there is no common method for what data should be passed from the meter to the in-home device. Elster has two different Zigbee partners we work

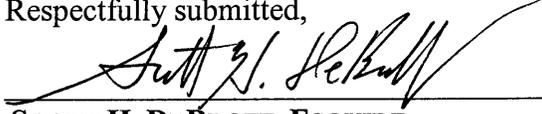
with and their equipment does not interoperate. So while one may employ standards, there is not a single end to end solution in the industry that is not proprietary in some manner. What we have tried to do is to utilize standards where they exist and find ways to collaborate with our competitors and partners. We think that this requirement needs considerable re-working and would be happy to help with the rework.

19. **Two-way communications capability, including ability to remotely upgrade meter firmware-** We support this standard.
20. **Ability to send signals to customer equipment to trigger demand response functions, and/or connect with a home area network (HAN) to provide direct or customer-activated load control** – We support this requirement.
21. **Positive notification of outage/restoration** – We support this requirement.
22. **Self diagnostics, including tamper flagging capability.** – We support this requirement and believe that most meters in the field today, have this capability.
23. **Upgrade capability** – We support the ability to upgrade meter software on a remote basis, but this requirement appears to be a re-wording of Functionality “i” (remote firmware upgrade) and is probably unnecessary.

Elster is pleased to offer these comments to the Commission and hopes that this comment period and reflection on minimum functionality issues will lead to a productive process to consider the changes made by the parties filing comments, and support the development and ultimate deployment of advanced meters in New York State.

If there is a further process to address these functionality criteria and expound on the details given, Elster would be pleased to participate in such.

Respectfully submitted,



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CERTIFICATE OF SERVICE

I hereby certify that I served the foregoing “Initial Comments of Elster Integrated Solutions Regarding Advanced Metering and AMI Functionality” upon the following by email:

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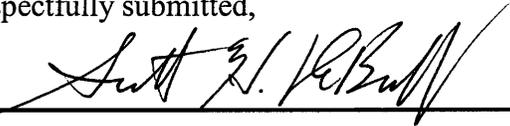
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