April 15th, 2012

Michigan Public Service Commission
Executive Secretary
PO Box 30221
Lansing, Michigan 48909

RE: Case Number U-17000
Comments on the information submitted by utilities regarding "smart meters"

Dear MPSC:

Based on the information submitted by the utilities regarding smart meters and smart meter deployment, I would like to offer the following comments as a member of the Michigan House of Representative's Energy and Technology Committee.

I appreciate the work done by both the utilities and the MPSC to date. However, I find the submitted information inadequate in several areas.

(1) In regards to the discussion of "existing" plans, I believe more time is needed to clearly define the varying types and generations of smart meters, in regards to both what an installed meter may do now and in the future. While today's analog meters typically have a life span of over twenty years, it is unclear of the life span of smart meters. This will vary based on the need to fix security breaches, and to what extent such breaches can be fixed without the installation of a new meter. Particularly in discussion of remote programmable meters, such use has both pros and cons in regards to smart meter security, long run program costs, and the ability to modify "existing" plans. As you are aware, "smart meters" can be defined by some to include one way communication, two way communication, and remote programmable meters. They can also be used exclusively for one way monthly billing data, as part of a two way network to allow for time of day variable pricing, and as part of an expanded control network that would allow utilities to gather appliance information or remotely control thermostats or power availability (as was attempted in California). The submitted comments do not provide enough information on "future" plans and capabilities that need to be considered in conjunction with existing plans.
(2) As the recent court case against DTE has shown, the submitted cost data is generally insufficient. This is due in part to the many unanswered questions raised in (1) above, but is important as the source of funding in many instances will rely on money from consumers themselves. Of particular note, I would like more information on the relationship between "smart meters" and further discussions on "decoupling" and energy efficiency program fees within the state. Similarly, it seems that discussions regarding smart meters and time of day pricing have put the cart somewhat before the horse. These should be done more in parallel so the effects of one can be properly seen on the other.

(3) In regards to submitted information regarding consumer privacy and information gathering, the discussion on the security of such information is lacking. I am particularly interested in information regarding future capabilities to turn off service to a home remotely, not just in regards to potential inadvertent mistakes that may be easier to catch when an onsite visit is required, but also in regards to malicious hacking. While threats of terrorism to physical power plants is an everyday important consideration, I would like to see more assurance that "virtual blackouts" cannot be used against the United States by external code that might show a home has sent in a shut-off notice, a year behind on their payments, etc.

I would not seem to be alone in this concern. It is my understanding that a January audit by the US Inspector General contained several critical comments. According to Inspector General Friedman "Without a formal risk assessment and associated mitigation strategy, threats and weaknesses may go unidentified and expose the...systems to an unacceptable level of risk". Additionally, a March report funded in part by the Department of Energy surveyed 104 energy security professionals and asked the question "Do smart meter installations have sufficient security controls to protect against false data injection?" Sixty one percent of the respondents said no. While smart meters can vary widely in capability, I do not believe enough information regarding hacking potential has been submitted. As you are aware, the Federal Bureau of Investigations is looking into allegations that up to 10% of rudimentary smart meters in Puerto Rico have been compromised. With more sophisticated meters, there is potential to both limit hacking but also increase both the sheer number of attack points and to allow for more remote cyber-attacks.

Depending on the type of smart meters being installed, these are important questions of a national security nature and warrant a stoppage of installation until definitive answers can be provided.

(4) The information provided regarding the ability of a consumer to opt out is incomplete, with some utilities saying they will offer an opt-out in the future for an as of yet to be determined price, and others stating that they will not offer an opt-out. I feel strongly that opt-outs need to be offered in all situations, for a very nominal fee except in cases where a customer has requested such a meter and then changed their mind (or for where a person moves into a home where one has been installed). In discussing this issue with taxpayers, people may wish to opt out for different reasons (security concerns, price concerns, privacy concerns, and health concerns). While each of these deserves the merit of more study and discussion, ultimately the electrical market in Michigan operates under a pseudo-monopolistic basis. For that reason, people cannot just change their electrical provider (for example, to one that does not use smart meters) based on their concerns. For a public necessity as important as power, it seems entirely inappropriate to employ behavioral economics directly or indirectly to influence a consumer decision where other options might only include paying exorbitantly high amounts for energy, or to forgo third-party energy use completely (in this vein, I believe more information is needed to see if all customers who do choose to use a smart meter, based on its capabilities and how costs are absorbed, should be allowed to automatically participate in a net-metering program if they so choose). The cost of
not having a smart meter in most other circumstances should be small to none, as it appears that taxpayers have already directly or indirectly funded large portions of smart meter costs through stimulus dollars and other fees. Making such customers pay anything more than a modest fee would essentially be asking them to pay twice, once for the meter itself and then again not to use it. This is a very important unresolved question, based both on the DTE court case and also upon unanswered questions regarding how energy efficiency or decoupling may be assessed or used in the future.

(5) I would also like more information from the MPSC itself in terms of what portions of a smart meter program they feel they should control and what portions would be best left to the legislature and other political subdivisions of Michigan. Several communities have had their city councils attempt to opt-out, efforts to date that seem to have little legal standing or impact. As you are aware, the California utility commission attempted to allow for the remote control of consumer thermostats based on their own rulings, which I found to be wholly inappropriate.

Concluding remarks: Because many of the questions asked in U-1700 have not been adequately answered, and because other questions, particularly those related to energy grid security, time of day pricing, and decoupling were not specifically asked for, I believe a subsequent investigation and comment period into these matters is warranted.

Respectfully in service,

Paul Opsomer

State Representative, 93rd District
Energy and Technology Committee Member