

Additional Question 12. What steps have been taken and still need to be taken to ensure grid reliability in all regions of MI?

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### Executive summary

1. **Transmission: Electric transmission reliability throughout the region and in Michigan is more than adequate.** With the passage of the Energy Policy Act (EPA) by Congress in 2005, the Federal Energy Regulatory Commission (FERC) was directed to establish an Electric Reliability Organization (ERO). FERC approved the North American Electric Reliability Corporation (NERC) in the role of ERO in 2006. In 2007, NERC reliability standards became mandatory within the industry. Standards are modified by NERC as needed to maintain electric grid reliability.

In addition to meeting the mandatory reliability standards established by NERC, transmission owners in Michigan establish their own planning criteria that exceed the requirements of NERC. Since 2006, the Midwest Independent Transmission System Operator (MISO) has approved more than \$1.4 billion in new transmission investment within Michigan, where both the ITC Transmission Company (ITCT) and Michigan Electric Transmission Company (METC) systems are ranked in the top decile<sup>1</sup> in the industry for reliability.

2. **Distribution: Electric distribution reliability in Michigan is also adequate, although aging.** The MPSC first proposed Service Quality and Reliability Standards in 2001, and officially adopted rules in 2004. In 2009, the MPSC provided the Legislature with a report entitled "Report on Status of Power Quality in Michigan" which resulted in Consumers Energy and DTE Energy reporting System Average Interruption Duration Index (SAIDI), System Average Interruption Frequency Index (SAIFI), and Customer Average Interruption Duration Index (CAIDI) reliability indices (with and without major events) on a rolling five year average for three years. The MPSC is to file a report to apprise the Governor and the Legislature of any future developments that may warrant action later in 2013.
3. **Generation:** A regulatory framework is necessary that enables adequate generation facilities to be build that will sustain customer demands.

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**1. Electric transmission reliability throughout the region and in Michigan is more than adequate. With the passage of the Energy Policy Act (EPA) by Congress in 2005, the Federal Energy Regulatory Commission (FERC) was directed to establish an Electric Reliability Organization (ERO). FERC approved the North**

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<sup>1</sup> ITC Holdings Corp, Form 425 filed 2/28/2013. <http://www.secinfo.com/d11MXs.xFKm.htm#1stPage>

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**American Electric Reliability Corporation (NERC) in the role of ERO in 2006. In 2007, NERC reliability standards became mandatory within the industry. Standards are modified by NERC as needed to maintain electric grid reliability.**

**In addition to meeting the mandatory reliability standards established by NERC, transmission owners in Michigan establish their own planning criteria that exceed the requirements of NERC. Since 2006, the Midwest Independent Transmission System Operator (MISO) has approved more than \$1.4 billion in new transmission investment within Michigan, where both the ITC Transmission Company (ITCT) and Michigan Electric Transmission Company (METC) systems are ranked in the top decile in the industry for reliability.**

NERC reliability standards apply to the reliability planning and reliable operation of the bulk power systems of North America. A link is provided here to the process for development of consensus for approval, revision, reaffirmation, and withdrawal of such standards.

[http://www.nerc.com/files/RSDP\\_V6\\_1\\_12Mar07.pdf](http://www.nerc.com/files/RSDP_V6_1_12Mar07.pdf)

A link is provided here to the standard established in 2007.

<http://www.nerc.com/page.php?cid=2%7C20>

**2. Distribution: Electric distribution reliability in Michigan is also adequate, although aging. The MPSC first proposed Service Quality and Reliability Standards in 2001. In 2004 the MPSC officially adopted rules establishing eleven Service Quality and Reliability Standards which included annual reporting requirements. Four of the standards are directly related to reliability (repetitive outages and outage response targets) and two are related to public safety (wire down response). These standards apply to most local electric distribution companies in the state of Michigan including Consumers Energy. Also, in accordance with Section 10p of 2008 PA 286, MCL 460.10p (Act 286), in 2009 the MPSC provided the Legislature with a report entitled “Report on Status of Power Quality in Michigan”. One of the outcomes of that report resulted in a determination in Case No. U-16066, that Consumers Energy and DTE Energy should report System Average Interruption Duration Index (SAIDI), System Average Interruption Frequency Index (SAIFI), and Customer Average Interruption Duration Index (CAIDI) reliability indices (with and without major events) on a rolling five year average for three years. The MPSC was then to evaluate the need**

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**for further follow-up action and apprise the Governor and the Legislature of any future developments that may warrant action. That follow up report is due later in 2013.**

In an effort to ensure safe and reliable service to its customers, meet the Service Quality and Reliability Standards and make improvements in the three major reliability indices SAIDI, SAIFI and CAIDI, Consumers Energy invests heavily in its Electric Distribution infrastructure. For example, during the 5 year period from 2008 through 2012, the Company spent over \$224 million in programmed reliability related operating and maintenance expenses, including amounts spent on line clearing (Forestry) activities and over \$667 million in programmed reliability and system capacity capital related expenditures on its distribution system infrastructure. The Company plans to continue an aggressive investment strategy that not only continues to focus on its base infrastructure but includes new investments in “Smart Grid” technologies such as automated metering and distribution automation all of which provide benefits to our customers.

Note that, for many areas of Michigan, portions of the distribution system are aging and investment will be needed to maintain them – likely at higher costs in the future than in the past. Additionally, nationally there are efforts to modernize the system to drive long-term reliability using smart grid technology which will also involve investment.

**3. Generation: A regulatory framework is necessary that enables adequate generation facilities to be build that will sustain customer demands.**

In a number of cases, deregulated states have struggled to ensure adequate reserve capacity to maintain reliable service. The lack of a diversified portfolio could also result in challenges to providing adequate reserve capacity.