



Mutual Aid Agreements and Transmission Contingency Planning Workgroup Phase I Report

In the matter, on the Commission's own motion, to commence a collaborative to consider issues related to mutual aid agreements and transmission contingency planning.

March 31, 2020

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Statewide Energy Assessment and Workgroup Formation

Background

On February 7, 2019, the Commission issued an order in Case No. U-20464 in response to a request from Governor Gretchen Whitmer for the Commission to review the state's energy supply and preparedness for emergency situations, following a series of energy events that happened during Michigan's January 29 through February 1, 2019 cold weather emergency. On September 11, 2019, the Commission issued a third order in Case No. U-20464 (September 11 order) which includes details from the final SEA report and discusses any comments that resulted in a change to the initial SEA report. The September 11 order also sets forth those jurisdictional recommendations indicated in the final SEA report that the Commission finds should be addressed immediately and those that can be addressed later given prioritization of the resulting workload.

In this regard, and stemming from the September 11 order, the Commission opened this docket, Case No. U-20631, to direct the Staff to establish a collaborative group consisting of Staff experts, representatives from Consumers Energy Company, DTE Energy Company, Michigan Electric and Gas Association member utilities, and other natural gas distribution and transmission companies, and other interested stakeholders, to review and discuss the development of mutual aid agreements to have in place for all natural gas distribution utilities, and how best to facilitate the development of gas transmission contingency planning. In the final SEA report, the Commission notes that mutual assistance agreements for natural gas utilities, similar to those in use by electric utilities, could result in improvements to safely restore natural gas service as expeditiously as possible. Due to the differing effects on downstream customers, the Commission finds that these topics should be divided into separate distribution and transmission phases.

This report will reflect the work performed in accordance with the Commission's orders for the distribution mutual aid phase.

Introduction

By Commission order, the focus of the distribution collaborative workgroup shall be to review and study existing gas distribution mutual aid agreements, determine if all natural gas utilities are adequately prepared with existing agreements, discuss the possibility of agreements for Michigan utilities, address issues with employee qualifications, and develop recommendations for the Commission's consideration. The Commission directs the Staff to file a report in this docket of the results of the distribution collaborative no later than March 31, 2020.

Planning Process

In planning the workgroup engagement, Commission Staff created a webpage to share data, agendas, and presentations with the workgroup members and the public as well as ask for interested parties to sign up for the e-mail listserv. Please review the following link for the workgroup webpage: https://www.michigan.gov/mpsc/0,9535,7-395-93307_93312_93320_94834-508469--,00.html. Further, Commission Staff presented a workgroup notification to the webpage sharing with all viewers the planned workgroup meetings, purpose of the workgroup, and how to contact Commission Staff with questions. Additionally, Commission Staff communicated with interested parties regarding topics to be discussed within the workgroup.

In addition to Commission Staff, representatives from the following organizations have joined as active members of the workgroup: Consumers Energy Company (Consumers Energy), DTE Gas Company (DTE Gas), Michigan Gas Utilities Corporation (MGU), SEMCO Energy gas Company (SEMCO Energy), Presque Isle Electric & Gas Cooperative, and Superior Energy Company.

Workgroup Meetings

Staff hosted three workgroup meetings for the members to discuss current mutual aid membership, best practices learned from historic mutual aid events, and recommendations for the commission. The topics of discussion for each of the three workgroup meetings were as follows.

Three meetings were held in which Commission Staff engaged with stakeholders. All meetings were professionally facilitated by Commission Staff members from the Gas Operations Section of the Energy Operations Division. A summary of the meetings follows:

December 6, 2019, introductory meeting

During the December meeting, Commission Staff welcomed participants; explained the origin, purpose, and timing of the workgroup; and facilitated a discussion with the participants. The first topic of discussion was an opportunity for the workgroup members to discuss which, if any, professional association with a mutual aid agreement their respective natural gas utility is signatory to. As determined through the discussion, the primary association which Michigan natural gas utilities are signatory to a mutual aid agreement is the American Gas Association (AGA).

The AGA has a Master Operations Assistance Agreement (AGA Agreement); please see Appendix XX for a blank copy of this agreement. This AGA Agreement provides the foundation for mutual aid relief to all signatories. Through discussions with the workgroup members, the following Michigan natural gas utilities are signatory to the AGA Agreement:

- Consumers Energy Company;
- DTE Energy;
- DTE Gas Company; and
- SEMCO Energy Gas Company

Additionally, Michigan Gas Utilities Corporation's parent organization, WEC Energy Group, is also signatory to the AGA Agreement. For a full list of AGA members please see Appendix XX.

In addition to the AGA Agreement, the Northeast Gas Association and the Southern Gas Association also have their own version of a Mutual Assistance Agreement; please see Appendix XX for a blank copy of this agreement. This Mutual Assistance Agreement provides for a similar foundation to its signatories, with the following differences:

- Responding Company providing assistance on a not-for-profit basis (section 1.3);
- The Requesting Company will provide the necessary training and orientation for the Responding Company's employees (section 2.3);
- The "Emergency Assistance Period" includes any request from the Responding Company to prepare its employees and/or equipment for travel to the Requesting Company's location and to await further instructions before departing (section 3.1);
- The length of the stay/response by the Responding Company personnel should not exceed fourteen (14) consecutive days, including travel time to the work area and return to the point of origin. When the assignments go beyond this timeframe, members agree that Responding Company personnel will usually be changed out (rotated) rather than take extended result periods (days off) (section 3.2);
- Employee travel and living expenses (meals, lodging and reasonable incidentals – beer, wine or other alcoholic beverages are not considered reasonable incidentals and will not be covered) (section 4.3.b);
- "Host Companies" companies who may provide staging areas or other resources to a Responding Company. Requesting Company will reimburse Host Company for expenses incurred in the provision and management of interim staging areas (i.e. labor and miscellaneous expenses provided by the host company to operate the staging area, but not including any Responding Company crew costs. In emergencies involving more than one Requesting Company, staging costs will be shared by Requesting Companies on a prorated basis based on the resources committed to each Requesting Company entering (logged into) the staging site (section 4.6; and
- Unless otherwise agreed, Responding Company should submit an invoice ("Preliminary Invoice") to Requesting Company within sixty (60) calendar days from the date released by the Requesting Company. Responding Company will provide supporting documentation at the

time the Preliminary Invoice is mailed. Requesting Company should receive a final invoice within ninety (90) calendar days from invoice date of Preliminary Invoice (section 5.6).

Currently, as discussed during the workgroup meeting, the following Michigan natural gas utilities are not signatory to a mutual aid agreement:

- Presque Isle Electric and Gas Cooperative; and
- Superior Energy Company

It is also important to note that although WEC Energy Group is signatory to the AGA Agreement, MGU is not signatory to a mutual aid agreement and may not be fully covered by its parent organization's membership.

- Discussion of workgroup members who participated in either Michigan and/or national events; and
- Discussion of the recommendations from workgroup members to be included in the workgroup report.

January 10, 2020, discussion of recommendations

During the January meeting,

- Review and discuss the draft workgroup report due by March 31, 2020;
- Discuss the workgroup members who participated in either Michigan and/or national events;
- Discuss the sharing of documentation, materials, and presentations from past mutual aid events; and
- Further discuss the recommendations from workgroup members to be included in the workgroup report.

March 3, 2020, review of draft report

During the March meeting,

- Review and discuss the draft workgroup report due by March 31, 2020; and
- Further discuss the recommendations from workgroup members to be included in the workgroup report.

Historic Mutual Aid Events and Lessons Learned

Examples of Historic Michigan Mutual Aid Events

A recent example of informal mutual aid provided by one Michigan natural gas utility to another occurred in 2019. On June 7, 2019, the Commission issued an order which directed Consumers Energy to show cause why it should not be found in violation of the MISS DIGG Underground Facility Damage Prevention and Safety Act, Public Act 174 of 2013. Consumers Energy received approximately 15,000 more staking requests in April 2019, and approximately 9,000 more in May 2019, than it did in the same months in 2018. As Consumers Energy's forecasting models used to

plan for addressing future staking requests are based on historic staking data, the models were unable to accurately predict the increase in resources required for April and May of 2019. As a result, Consumers Energy had failed to respond to over 20,000 dig notice requests, and only partially responded to many others, during April and May of 2019. For further information, please refer to MPSC Case No. U-20569.

In an effort to help its neighboring natural gas utility, DTE Gas informally mobilized to provide aid to Consumers Energy in an effort to reduce the dig notice backlog. In the summer of 2019, DTE Gas worked with Consumers Energy and their situation Incident Command System (ICS) to develop an approach to the aid. Although in the end Consumers Energy decided that it was too difficult to work through the logistics of providing DTE Gas the MISS DIG tickets for completion and the maps to identify their natural gas pipeline facilities, this exemplifies the willingness of Michigan natural gas utilities to respond with aid when needed.

Informal materials and equipment sharing and relight or worker aid between utilities is the most common form of mutual aid for Michigan's natural gas utilities. It is not uncommon, during an outage event, for a utility to reach out to its neighboring utilities for resource assistance by providing either materials or equipment in order for the impacted utility to restore service to its customers. Materials and equipment sharing are made possible by the fact that many of Michigan's natural gas utilities stock similar materials within their respective equipment storage fields, and typically have stock readily at hand to share with utilities in need. Further, if the outage impact is significant enough, utilities may request aid in relight efforts. Once the cause of the outage has been mitigated, the utility needs to send its employees door-to-door in order to relight its customers' appliance pilot lights. Typically, a larger utility can handle approximately 5,000 outage relights before it needs to seek assistance from neighboring utilities. This number is significantly decreased for Michigan's smaller natural gas utilities.

As an example, **XX**.

- DTE's 2011 incident in South Grand Rapids which impacted 5,500 customers required only internal aid, reaching the bounds of their resources
- Comparatively, SEMCO's 2016 L'Anse incident which impacted 1,200 customers required only internal aid, but mobilized 30 employees from across the state (reaching the bounds of their resources)
 - <https://lansesentinel.net/tremendous-response-to-natural-gas-outage-quick-action-from-semco-crews-community-restores-service/>
 - <https://www.uppermichiganssource.com/content/news/SEMCO-Baraga-County-Sheriff-feel-LAnse-natural-gas-restoration-couldnt-have-gone-smoother-409383785.html>
 - <https://www.michiganradio.org/post/1200-without-heat-after-car-crash-ruptures-gas-line-lanse-michigan>

Examples of Historic National Mutual Aid Events

In addition to intrastate events requiring mutual aid, Michigan's natural gas utilities have responded to historic mutual aid events on a national level. These national events provide additional opportunities for Michigan's utilities to not only implement and practice their mutual aid response, but also gather valuable information regarding best practices and lessons learned.

The most recent demonstration of national mutual aid by Michigan natural gas utilities was on September 13th, 2018 during the Merrimack Valley incident. Three communities were significantly impacted when a low-pressure system experienced an overpressure event. As a result of the overpressure event, over 8,500 gas meters and 10,000 natural gas customers were impacted. During this event, Consumers Energy and DTE Gas were among many natural gas utilities which responded to provide aid. Additionally, SEMCO Energy was requested to provide aid, but was unfortunately not able to offer assistance at the time. The restoration efforts included the replacement of 45 miles of cast iron main pipeline and over 6,000 service lines, the testing or replacement of fuel lines, and the replacement of customers' natural gas appliances (heaters, water heaters, stoves, etc.). For presentations provided by SoCalGas and Southwest Gas Corporation, additional responders to the Merrimack Valley incident, which contain additional incident details and lessons learned please see Appendix XX.

Mutual Aid Workshops and Lessons Learned

Background information from materials sent by DTE (Appendix XX)

- AGA Mutual Aid Leading Practices and Incident Response Workshops
- FEMA Response to Stabilize Community Lifelines

Lessons Learned

Information from materials sent by DTE and from the workgroup

Recommendations to the Commission from the Workgroup

The workgroup has extensively discussed the current mutual aid plans in place for Michigan's natural gas utilities. In its discussions, the workgroup has identified various gaps in current mutual aid membership and potential improvements to mutual aid response plans. As such, the workgroup recommends the following to the Commission:

AGA Signatory

The workgroup recommends that all Michigan natural gas utilities, currently not signatory to the AGA Mutual Aid Agreement, become signatory to the agreement. This recommendation extends not only to parent utilities, but also to child utilities operating within the state of Michigan. Furthermore, the workgroup recommends that the AGA Mutual Aid Agreement serve as the guidelines for catastrophic events which are larger than the Michigan natural gas utilities can handle on their own.

AGA Addendum for Michigan Utilities

The workgroup recommends that an addendum to the AGA Mutual Aid Agreement be developed for Michigan's natural gas utilities. The purpose of the addendum shall be to serve as the framework for responding to, and providing mutual aid for, largescale incidents which are able to be addressed by Michigan's intrastate natural gas utilities without the need for interstate assistance. The addendum should, additionally, address issues specific to Michigan's natural gas utilities and natural gas pipeline facilities. Furthermore, the workgroup recommends that the addendum include provisions lacking in the AGA agreement, but which are included in the Northeast Gas Association and Southern Gas Association Mutual Aid Agreement, and further provisions agreed upon by Michigan's natural gas utilities.

Midwest Energy Association

The workgroup recommends that the Midwest Energy Association (MEA) be contacted to see if there is an interest in developing a MEA mutual aid agreement. Such an agreement could be tailored specifically to the Midwest energy utilities, including Michigan. If interest by MEA is shown, an invitation to join additional Mutual Aid Workgroup meetings should be extended for their participation.

Incident Command System

The workgroup recommends that all Michigan natural gas utilities should appoint representatives within their respective organizations to take ICS training in preparation for future incidents. ICS is **XX**.

Joint Tabletop Exercises

The workgroup recommends that Michigan's natural gas utilities participate in recurring joint tabletop exercises. The purpose of such exercises will be to practice mutual response to a natural gas incident. The joint tabletops will allow for the review of various operational procedures between Michigan's natural gas utilities and determine the similarities and difference between the utilities. The workgroup additionally recommends that law enforcement be invited to participate in the joint tabletop exercises as their participation in a real natural gas incident will be crucial to maintain safety during a potentially unsafe event.

Utility Outage Event Best Practices

The workgroup recommends that the utilities which experience the largest numbers of outages share their best practices and lessons learned. This knowledge sharing will enable the smaller utilities, which may not have the same outage volume as the larger utilities, to take advantage of information gained by larger utilities which can be implemented to help prevent and mitigate future outage incidents.

Electric Utility Template

The workgroup recommends that a review of electric utility mutual aid procedures be conducted. The purpose of this review shall be to determine to what extent the preexisting electric procedures set by Michigan's dual-utility providers, who supply both electricity and natural gas, can be directly utilized as a template by Michigan's natural gas utilities.

Interoperability Between Michigan Utilities

The workgroup recommends that a separate workgroup be formed to review and discuss the interoperability between the Michigan natural gas utilities. The focus of this new workgroup should be to: review Operator Qualifications (OQ) to develop an OQ compatibility list, which is to be a living document with recurring updates, between the utilities; review general and standardized equipment and materials stock; and review the portability of various procedures (welding, fusion, etc.) between the Michigan natural gas utilities.

Utility Communication

The workgroup recommends that utilities responding to, or requesting, aid remain in contact with other parties involved in the incident event. The purpose of such communications is to ensure that all parties are aware of response procedures, resource deployment, and to maintain an effective chain of command.

Recurring Workgroup Meetings

The workgroup recommends that annual meetings be held for this workgroup. The purpose of the recurring annual meetings is to discuss emergent mutual aid topics and to continually update standardized procedures between Michigan's natural gas utilities. In addition to mutual aid discussion during the annual meetings, the workgroup recommends that a tabletop exercise be incorporated into the annual meetings in order to implement and practice mutual aid response and recovery. Furthermore, the workgroup recommends that a review be conducted to determine the necessity of including other parties into this workgroup and the recommended annual meetings. Such other parties would include the Michigan Contractors Association as there are synergies with contractors between Michigan's natural gas utilities, county emergency managers for tabletop exercise participation, and the Midwest Energy Association for future mutual aid coordination.

Conclusion

The workgroup concludes that **XX**.

Appendices

Appendix A

Appendix B

Appendix C

Appendix D

Appendix E