STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter of the application of SEMCO Energy Gas Company for a certificate of public convenience and necessity to construct and operate the Keweenaw Connector Pipeline.
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Case No. U-21780

Volume No. 2

CROSS-EXAMINATION

Proceedings held via Microsoft Teams in the above-entitled matter before James M. Varchetti, J.D., Administrative Law Judge with MOAHR, for the Michigan Public Service Commission, Lansing, Michigan, on Thursday, March 20, 2025, at 9:04 a.m.

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REPORTED BY: Lori Anne Penn, CSR-1315

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Thursday, March 20, 2025

At 9:04 a.m.

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(Hearing resumes following adjournment of Thursday, October 17, 2024.)

JUDGE VARCHETTI: Good morning, everyone. We are now on the record in Case U-21780, captioned In the matter of the application of SEMCO Energy Gas Company for a certificate of public convenience and necessity to construct and operate the Keweenaw Connector Pipeline. Today is Thursday, March 20, and this is the date and the time scheduled for a cross-examination in this case. My name is James Varchetti, I am the Administrative Law Judge presiding over this matter on behalf of the Michigan Public Service Commission. This hearing is being held remotely via Microsoft Teams, and a link to participate was provided to all the attorneys of record.

At this time I'd like to ask the attorneys present to place their appearances on the record, starting with counsel for SEMCO.

MS. WELLMAN: Good morning, your Honor. Sherri A. Wellman on behalf of SEMCO Energy Gas Company.

JUDGE VARCHETTI: Thank you, and good morning, Ms. Wellman. Next, who's appearing for the Commission Staff.

MR. ORRIS: Good morning, your Honor. Assistant Attorney General Michael Orris appearing on behalf of the Commission Staff.

JUDGE VARCHETTI: Good morning, Mr. Orris. And next, who's appearing on behalf of the Attorney General.

MR. MOODY: Good morning, your Honor. Michael Moody on behalf of Attorney General Dana Nessel.

JUDGE VARCHETTI: Thank you, and good morning, Mr. Moody.

Before we begin, I'd like to mention for the sake of the record that there was an individual landowner, Mr. Jordan Murray, that was a party to this case, however, yesterday, through his legal counsel, he filed a notice of withdrawal from this case, and that withdrawal is recognized.

With that being said, it's my understanding that the remaining parties have agreed to waive cross-examination and will simply be binding in their prefiled testimony and exhibits. So with that being said, Ms. Wellman, I'll turn the floor over to you.

MS. WELLMAN: Thank you, your Honor. Good morning. As you said, the parties have agreed to bind in the prefiled testimony and exhibits for SEMCO, that is, the prefiled testimony and exhibits as filed on

August 30 in this case in 2024.

So first of all, I'd like to identify the testimony of Mark VanderHeuvel, it consists of a cover sheet and 13 pages of questions and answers. Mr. VanderHeuvel is also sponsoring Exhibits A-1, which is the Northern Division Summary Map, as well as Exhibit A-2, which is the Keweenaw Area Map.

Next, I'm moving on to the testimony of Dustin A. Youngs, which consists of a cover sheet and 12 pages of questions and answers. Mr. Young sponsored Exhibits A-3, Environmental Assessment Report; A-4, Parcel Data; A-5, which is the KCP General Specifications; and Exhibit A-6, which is the KCP Cost Estimates.

I now have before me the testimony of Michael A. Foster, which consists of a cover sheet and 11 pages of questions and answers. This witness sponsored Exhibits A-7, which is the UP West Pipeline System; Exhibit A-8, which is the Plan Supply Response to Pipeline Interruption; and Exhibit A-9, which is the Design Day Demand Forecast.

I next have before me the testimony of Jennifer L. Dennis, which consists of a cover sheet and seven pages of questions and answers. Ms. Dennis sponsored Exhibit A-10, which is the KCP 5-Year Revenue

Requirement Estimate.

Finally, I have before me the testimony of Timothy L. Lubbers, which consists of a cover sheet and six pages of questions and answers. Mr. Lubbers had no exhibits.

I'd represent to you, your Honor, that no changes were made to these, to the testimony or the exhibits as prefiled on the 30th of this August. I would request that the testimony of these five witnesses be bound into the record, and I request that Exhibits A-1 through A-10 be admitted into evidence.

JUDGE VARCHETTI: Thank you. Does anyone have any objections to the admission of the testimony mentioned by Ms. Wellman or any of the exhibits, A-1 through A-10?

MR. MOODY: No objection, your Honor.

MR. ORRIS: No objection.

JUDGE VARCHETTI: All right. In that case, the testimony of Mark VanderHeuvel, Dustin Youngs, Michael Foster, Jennifer Dennis, and Timothy Lubbers is bound into the record, and Exhibits A-1 through A-10 are admitted.

(Testimony bound in.)

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STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

* * * * *

In the matter of the application of **SEMCO ENERGY GAS COMPANY** for a certificate of public convenience and necessity to construct and operate the Keweenaw Connector Pipeline.	))))))	Case No. U-21780

DIRECT TESTIMONY AND EXHIBITS OF MARK VANDERHEUVEL

ON BEHALF OF

SEMCO ENERGY GAS COMPANY

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Direct Testimony and Exhibits of Mark VanderHeuvel
On Behalf of
SEMCO Energy Gas Company

Q. Please state your full name and business address.

A. My name is Mark VanderHeuvel. My business address is 1411 Third Street, Suite A, Port Huron, Michigan 48060.

Q. By whom are you employed and what is your position?

A. I am the Sr. Director of Engineering for SEMCO Energy Gas Company ("SEMCO Gas" or the "Company"), a division of SEMCO Energy, Inc. SEMCO Gas provides natural gas sales and transportation service to approximately 320,000 customers in Michigan.

Q. Please describe your educational background and business experience.

A. I graduated in May of 1991 from the University of Michigan with a Bachelor of Science Degree in Chemical Engineering. Upon graduation, I accepted a position with Commonwealth Edison, Chicago, Illinois as a chemical engineer with responsibilities for engineering, operation and maintenance activities for combustion, chemical analysis, water treatment and wastewater treatment systems. In 1996, I accepted a similar position with DTE Energy and spent over 20 years in various engineering, operational, managerial, and director roles including Director of Gas Operations – Construction. In that role, I was responsible for all construction and program responsibilities for the Main Renewal Program, Meter Move-out Program, Customer Initiated Projects, and Supplier Performance Management. In 2017, I joined Consumers Energy Company ("Consumers Energy") as Director of Enterprise Project Management and was responsible for Capital Projects for the gas business including compression, storage, transmission, and distribution. In late 2019, I joined SEMCO Gas as Director of Engineering with responsibilities including: 1) the oversight of the design of all transmission and distribution lines and facilities, 2) oversight of all integrity management programs, 3) development and monitoring of the Company's capital budget, 4) construction contract administrator, and 5) oversight of the Company's Geographic Information System ("GIS") department. In 2022, I was promoted to Sr. Directing of Engineering.

Q. What are your responsibilities as Sr. Director of Engineering?

A. As Sr. Director of Engineering, I am responsible for the oversight of the design of all transmission and distribution lines and facilities and subsequent integrity management programs. I manage the Company's storage and environmental activities, and I am responsible for the development and monitoring of the Company's capital budget. I also serve as the pipeline construction contract administrator and oversee the Company's GIS department. Additionally, I have oversight of the Gas Control functions of the Company.

Q. Have you previously testified before the Michigan Public Service Commission ("MPSC" or the "Commission")?

A. Yes, I filed testimony on behalf of SEMCO Gas in Case Nos. U-20551 and U-21624. I also filed rebuttal testimony on behalf of DTE Gas in Case No. U-17999.

Q. What is the purpose of your direct testimony in this case?

A. The purpose of my testimony is to support SEMCO Gas's plan to construct the Keweenaw Connector Pipeline ("KCP" or the "Pipeline) which will loop Northern Natural Gas's ("NNG") existing Lake Linden Lateral Pipeline, which is currently the sole supply of natural gas to the areas in the Keweenaw Peninsula. The construction of the KCP is vital to address the lack of redundancy and ensure SEMCO Gas can supply sufficient capacity to meet the design day needs in the Keweenaw Peninsula area in the Company's U.P. West service area.

Q. Are you sponsoring any exhibits in this proceeding?

A. Yes. I am sponsoring the following exhibits, which were prepared by me or under my direct supervision:

Exhibit A-1 (MV-1), Northern Division Summary Map
Exhibit A-2 (MV-2), Keweenaw Area Map

<u>Supply Infrastructure – Northern Division</u>

Q. Please describe SEMCO Gas's Northern Division.

A. SEMCO Gas's Northern Division is entirely in the Upper Peninsula ("U.P.") of Michigan and serves approximately 42,000 customers. Exhibit A-1 (MV-1) shows the areas that are served by SEMCO Gas in the U.P. and the number of customers in each area. The sum of the areas shows that 36,408 customers receive natural gas primarily from NNG's interstate transmission line and 6,136 customers receive natural gas from Great Lakes Gas Transmission's ("GLGT") interstate pipeline. SEMCO Gas's Marquette Connector Pipeline ("MCP") connects GLGT's interstate pipelines to NNG system in Marquette, Michigan allowing GLGT's system to be a supply along the NNG system in Michigan.

Q. Please describe the current gas supply infrastructure in SEMCO Gas's Northern Division.

A. The Northern Division is broken into two distinct service areas. Approximately 86% of the customers in SEMCO Gas's Northern Division are in the U.P. West service area ("U.P. West") and supplied from NNG's pipeline system. NNG's pipeline transports gas from NNG's field area north into NNG's market area and into the U.P. of Michigan where the lines terminate in Marquette, Michigan. As previously described, with the completion of the MCP in 2019, the U.P. West can also be fed from GLGT's pipeline system.

The remaining 14% of the customers in the Northern Division are in the U.P. East service area ("U.P. East") supplied from GLGT's pipelines. GLGT's pipeline system consists of two 36" pipelines that transverse the entire U.P. GLGT pipelines run between the Dawn Hub and Emerson and can flow in either direction dependent on supply and market demand.

Q. Please describe the NNG system in the U.P of Michigan as shown on Exhibit A-1 (MV-1)

A. Exhibit A-1 (MV-1) shows the NNG transmission system that supplies natural gas to SEMCO Gas in the western portion of SEMCO Gas's Northern Division. The NNG gas system enters Michigan from Wisconsin. The last receipt point into NNG's system is the Wakefield interconnect with GLGT that is located about 13 miles east of the Michigan-Wisconsin border. From this receipt point, a single NNG line extends in an easterly direction for approximately 125 miles until the line ends

in the largest city in the U.P., Marquette, Michigan. The diameter of the pipeline in Michigan varies from 16" diameter down to 4" diameter. In 2019, SEMCO constructed the MCP providing a secondary supply of natural gas to SEMCO Gas's U.P. West areas. While providing redundancy and reliability to most of the UP West area, the MCP does not address a single feed to the areas in the Keweenaw Peninsula.

NNG feeds SEMCO Gas's U.P. West customers via 18 gate stations along NNG's system. Each gate station is owned and operated by NNG and consists of a tap on NNG's pipeline, pressure regulation, metering, and telemetry to monitor the station via the SCADA system. Odorization and related equipment is owned and operated by SEMCO Gas at each station. SEMCO Gas's employees are stationed in each community that the Company serves in the U.P. to ensure timely response to issues. Because of this, NNG has trained SEMCO Gas technicians to operate the NNG gate stations in the event of an emergency.

NNG's Lake Linden Lateral is an 8" diameter pipeline that branches off the main 16" pipeline that runs to Marquette, Michigan. Located between two sectionalizing valves approximately 20 miles apart, the 8" diameter pipeline runs south to north approximately 53 miles with its further north point near Larium, Michigan. The 8" pipeline is the only supply to various communities in the Keweenaw Peninsula including Baraga, L'Anse, Houghton, Hancock, Lake Linden and Larium. Of the 18 gate stations for SEMCO Gas off the NNG system, eight are located along the Lake Linden lateral in the Keweenaw Peninsula.

Q. Are there issues associated with the current gas supply infrastructure in SEMCO Gas's U.P. West service area?

A. Yes, the current NNG Lake Linden Lateral cannot supply enough gas to meet design day needs for all customers served off the lateral. Also, due to the lack of redundancy on the NNG pipeline serving the Keweenaw Peninsula, any failure that occurs approximately 3.17 miles east of the Lake Linden lateral and 16.8 miles west of the Lake Linden Lateral (total of 19.97 Miles between sectionalizing valves) on the 16" lateral or any location along the 8" Lake Linden Lateral south of

L'Anse/Baraga (17.9 miles) will result in approximately 14,000 customers losing gas supply including the Mihm RICE Units. A failure north of L'Anse/Baraga would result in approximate 12,000 customer outage. This lack of redundancy creates a significant reliability issue for SEMCO Gas and its customers. There is no other place on the Company's system where a single failure can result in the loss of so many customers.

Q. Are there any significant infrastructure, facilities, large employers located in the Keweenaw Peninsula that are served gas by the single feed Lake Linden Lateral?

A. Yes. The are several including the Mihm RICE Units near Baraga, Michigan, Michigan Technological University in Houghton, Michigan, as well as various schools, hospitals, medical centers, nursing homes as identified on Exhibit A-2 (MV-2).

Q. Are there any other issues that need to be addressed in the U.P. West service area?

Yes. Five of the NNG gate stations in the Keweenaw Peninsula are single feed gate stations to large number of customers. Each of these are additional single point of failures that can result in a significant customer outage.

Q. How do pipeline ruptures disrupt gas supply?

A. When a pipeline rupture occurs, the rupture must be isolated, and the remaining pipeline fed from other sources. The location of the failure and the market demand on the line dictate the amount of time available to isolate the system and divert supply. Large market load on a pipeline system reduces the amount of time the pipeline can vent gas before pressure in the end of the system will be reduced to the point where the line must be isolated. At the point when the pressure in the pipeline approaches zero, customers cannot be safely supplied with gas and the line must be shut-in to preserve public safety. When pressure is reintroduced in the pipeline, the customers connected to that line must be reestablished by isolation, purging, and subsequent relighting of every facility connected to the pipeline.

Q. Have there been any ruptures on the NNG system near the Company's U.P. West service area?

A. Yes. On June 23, 2009, a pipeline rupture occurred on NNG's system just west of Wakefield. NNG was able to isolate the pipeline on both sides of the rupture and supply the east side of the rupture and SEMCO Gas's customers with GLGT supply at the Wakefield interconnect while the line was being repaired. On June 27, 2009, the line was returned to service by NNG, but it was only allowed to operate at 739 PSIG, a 31.6% reduction in operating pressure. NNG returned the line back to normal service on January 5, 2011, with the exception of a portion of 16" pipeline between Iron River and Wakefield that was only permitted to be operated at 967 PSIG instead of the pre-rupture pressure of 1080 PSIG.

Q. Did any customers lose gas supply as a result of NNG's June 2009 line failure?

A. When the failure occurred on the NNG pipeline, NNG technicians were relatively close to the valve isolation sites and the summer market load on the system allowed additional time to establish flow from the GLGT interconnect in Wakefield. These two factors mitigated the loss of any SEMCO Gas customers but approximately 350 gas customers of Xcel Energy did lose service due to the failure.

If the failure that occurred on NNG's system on June 23, 2009, had occurred five months earlier on January 23, 2009, then a partial, if not a total gas supply outage would have been expected for SEMCO Gas's customers supplied from NNG.

Q. What would have occurred if the NNG rupture had occurred between the isolation valves on the 16" NNG pipeline where the Lake Linden 8" lateral ties in or on Lake Linden Lateral?

A. A rupture on the 16" pipeline between the two isolation valve locations or on the 8" Lake Linden Lateral would have required isolation of the ruptured area. Because there is currently no redundancy in the Keweenaw Peninsula, the rupture would have depleted any residual gas, and 14,000 customers would have been left

without natural gas supply. Several tasks would then need to be completed to reestablish gas service. First, the failed pipeline would need to be repaired, during which time SEMCO Gas would concurrently dispatch service personnel to each building with gas service and secure the service valve in the closed position. After NNG completes the repair and testing of the failed pipeline segment, NNG would then need to purge and re-pressurize their transmission pipelines and subsequently SEMCO Gas would do the same to its distribution pipelines. At this point, SEMCO Gas would begin the process of relighting every facility that experienced a gas outage. The relighting process would require a technician to turn on the service line valve, gain entry to each facility, conduct a leak check of the customer's fuel piping, purge the customer fuel line, and relight the customer's appliances. Based on actual experience with the New Mexico Gas Company's 28,700 customer gas outage in February 2011, the total process in this scenario would take at least two to four weeks to re-establish gas service to all facilities affected by this outage.

Unfortunately, if this failure scenario were to occur in the winter, it would place an enormous burden on the general public to find warmth. Schools, hospitals, elder care facilities, and other public buildings would struggle to keep buildings and residents warm. Warming centers would be limited to buildings heated by another source of energy such as electric, wood, oil, or propane. The outage could cause incidents of unsafe utilization of alternative sources of energy as the general public is forced to heat their home with electric, propane, oil or kerosene space heaters or fireplaces utilizing wood or coal. The outage also would certainly put a strain on the U.P. electric infrastructure as the Mihm RICE Units would not have gas supply.

Q. Has there been other instances where NNG pipelines in the U.P. has caused impact to delivery of gas to SEMCO's U.P West service area?

A. Yes, in September 2023 an emergent repair on NNG's 16" pipeline was urgently required after an in-line inspection was performed that identified a pipeline anomaly. The NNG pipeline was required to have the pressure reduced and required flow through SEMCO Gas MCP pipeline to support flow to U.P West service area.

Q. How do pipeline integrity inspections on aging infrastructure potentially disrupt gas supply?

A. Pipeline integrity inspections are required and important tasks to ensure safety of transmission pipelines. Typical inspections are performed on a routine basis using in-service in-line inspection devices that travel the pipeline indicating non-conformances such as dents, deformations in the pipeline, wall loss due to internal or external corrosion. Once the in-line inspection devices complete travel within the pipeline, review of the data is performed and utilized to inform actions including exposing the pipeline for additional testing to confirm results and performing repairs. When repairs are required, pressure limitations may be required and result in reduction of capacity of the pipeline while repairs are made.

Q. Are in-line inspections expected on the NNG 16" pipeline and the NNG 8" Lake Linden Lateral for the foreseeable future with potential for reductions in pressure and limitations to supply?

A. Yes. NNG has and will continue to perform prudent inspections and associated repairs on the pipelines.

Q. During in-line pipeline inspections can pipeline ruptures occur?

A. Yes, as evidenced by a recent March 2022 rupture on a transmission pipeline in Livingston County, Michigan causing shutdown of US Highway 23. The rupture occurred during the in-line inspection of the pipeline. However, fortunately, the pipeline inspected was a redundant supply so gas supply interruption did not occur. Redundant or looped pipeline systems provide the ability to perform inspections and resultant repairs without risk of natural gas supply interruption to a large number of customers.

Pipeline Solution

Q. Describe the solution that SEMCO Gas is proposing to minimize the issues facing the U.P. West service area of the Keweenaw Peninsula.

A. To create system redundancy, improve reliability, increase deliverability, and provide additional supply diversity, SEMCO Gas is proposing to construct the KCP, 29.7 miles of pipeline from NNG's interstate pipeline near Three Lakes, Michigan to SEMCO Gas's distribution system and NNG's pipeline near Baraga, Michigan. SEMCO Gas's witness Dustin Youngs describes the proposed route in detail, and Exhibit A-3 (DAY-1) shows the route of the segments and interconnections. The KCP will loop the existing NNG Lake Linden Pipeline and will allow the for redundancy to serve various areas of the U.P. near Three Lakes north to Lake Linden in the Keweenaw Peninsula.

Q. Please describe how the KCP would create redundancy and increase reliability in the U.P. West Keweenaw Peninsula area.

A. The proposed KCP will create a loop of the NNG system that will allow gas to flow north from NNG's 16" pipeline even if a rupture occurred anywhere on the 16" pipeline or the 8" pipeline up to Baraga. This redundancy allows for the pipeline to be fed from each end so a rupture can be isolated for repair without any significant outages. Upon repair of the failed line, that section of line would be returned to service and normal operations would resume. Overall, the KCP will make the system in the U.P. West Keweenaw Peninsula Area much more reliable.

Q. Will the KCP mitigate all remaining potential outages in the U.P. West service area?

No. The KCP will not mitigate a loss of gas supply if a failure occurred on NNG's Lake Linden Lateral north of Baraga nor the Ontonagon Lateral. To address risk of outages associated with the Lake Linden Lateral north of Baraga, SEMCO Gas plans for future distribution pipeline and station projects to mitigate outages north of Baraga. The Ontonagon Lateral currently serves approximately 1,200 customers which is a small fraction of the customers served by the Lake Linden Lateral. The existing 14 miles of Ontonagon pipeline would continue to be a one-way feed and reliability risk and require future consideration for a looped system.

Q. What size pipeline is SEMCO Gas proposing to construct between Three Lakes and Baraga?

A. SEMCO Gas is proposing to build a 12-inch pipeline. SEMCO Gas sized the line based on two different operating scenarios.

The first scenario is flow from NNG 16" pipeline flow from west to east where the 650 PSIG inlet pressure is expected and an outlet pressure at Baraga would be approximately 565 PSIG with a target flow rate of 1,684 MCF/h. The target flow of 1,684 MCF/h is the design day flow for all customers currently served via the Lake Linden Lateral on a peak day. A 12" diameter pipeline achieves the target flow and delivers sufficient pressure to support the system in the Keweenaw Peninsula. A 10" diameter pipeline will not support the target flow and interruption of customers in the Keweenaw would occur if the existing Lake Linden Lateral had a failure.

The second scenario is flow thru MCP onto NNG 16" pipeline with flow moving east to west. In the second scenario the KCP pipeline inlet pressure would be lower due to pressure constraints (575 PSIG MAOP) on the NNG 16" pipeline near Marquette. In the second scenario a target flow rate of 840 MCF/h is the minimum design basis. The 820 MCF/h is the -average winter day flow in the Keweenaw Peninsula without the demand of the Mihm RICE Units. A 12" diameter pipeline achieves the target flow and delivers sufficient pressure to support the system in the Keweenaw Peninsula in the second scenario. A 10" diameter pipeline will not support the target flow (820 MCF/h) and interruption of customers in the Keweenaw would occur if the existing Lake Linden Lateral had a failure, While a 12" pipeline will not support the flow demand of the Mihm RICE Units on an average winter day in the event of a failure of the existing Lake Linden Lateral, the 12" pipeline would supply natural gas to all the customers in the Keweenaw Peninsula including the Mihm RICE Units during non-winter average day periods. day periods.

Q. Please describe the expected operating pressure of the KCP.

A. The tap site is expected to be located near Three Lakes NNG 16" pipeline. Based on discussions with NNG, SEMCO Gas used 650 PSIG as the normal inlet pressure to the pipeline for purposes of modeling the pressure drop and flow rate in the KCP on a peak day. The outlet pressure for the KCP was designed to not exceed the MAOP of the existing SEMCO Gas transmission pipeline and deliver a

minimum of 564 PSIG. The minimum pressure of 564 PSIG allows the KCP to deliver enough pressure to flow into the NNG pipeline and feed the NNG system in the Keweenaw Peninsula as required for system supply to NNG or to stabilize the NNG system during high-demand or maintenance periods.

Q. The Mihm RICE Units recently performed hydrogen blending testing where hydrogen was trucked onto the generation site for blend testing. Will the construction of KCP support future hydrogen blended natural gas in the Keweenaw Peninsula?

A. Yes. Hydrogen blending in natural gas can be accomplished in systems where out of service welding can be performed (i.e. looped or redundant systems). Blending hydrogen into single feed pipelines constructed in the mid 1900's such as the Lake Linden Lateral is not feasible. As stated earlier in my testimony, the NNG pipeline will require ongoing inspection and in-service repairs. In service welding with natural gas blended with hydrogen would create additional risk to the single feed pipeline due to hydrogen embrittlement. Hydrogen embrittlement occurs in steel infrastructure systems when hydrogen is present and high temperatures (welding) are applied. After KCP is completed, then welding can be performed on out of service maintenance (depressurized and purged) on either the existing Lake Linden lateral or the KCP, thereby allowing for hydrogen blended natural gas.

Natural Gas Market in the UP

Q. How did the Company determine the appropriate size and operating characteristics of the KCP?

A. The size and operating characteristics of the KCP were designed to meet the market requirements of the U.P. West service area along the Lake Linden Lateral.

Q. Does the KCP allow for increased deliverability of natural gas in SEMCO Gas's U.P. West service area along the existing Linden Lateral?

A. Yes. In addition to the primary objective of creating redundancy and increasing reliability, the KCP will also increase deliverability with normal operating conditions

for flow from west to east along NNG 16" pipeline as well as under a scenario where the NNG 16" system is backfed from MCP. With the recent construction of MCP as an additional supply point into NNG's system, construction of the KCP pipeline will allow for additional delivery beyond what can be delivered in the existing NNG 8" Lake Linden Lateral into the Keweenaw Peninsula areas. Under normal operating conditions the KCP will support additional peak demand of natural gas for backup natural gas generation at residential, commercial, utility, or large energy users (mining for example).

Alternative Options

Q. What alternative solutions has SEMCO Gas considered to create redundancy and increase reliability in the U.P. West Keweenaw Peninsula?

A. Initially, consideration was also given to building a 12" pipeline from recently completed MCP pipeline to the Baraga area as well as constructing a new interconnect with GLGTC near Crystal Falls, Michigan. Both alternate pipeline routes would also effectively loop the existing NNG system around the Keweenaw Peninsula and provide redundancy. However, the alternatives would be significantly longer loops/redundant pipeline and thereby significantly more expensive. Constructing only a 29.7-mile pipeline is a much more cost effective and feasible initiative to loop the NNG Lake Linden Lateral pipeline system.

Additional consideration was also given to gas storage options in or near the Keweenaw Peninsula area. Unfortunately, the UP does not contain the correct geology for traditional underground gas storage and above ground storage such as LNG has significant limitations to deliver the flow rates served in the Keweenaw. In addition, LNG produced gas has significantly higher delivered cost than pipeline delivered gas. SEMCO Gas also investigated interstate pipeline options to provide redundancy, however the cost estimates exceeded the costs proposed for KCP.

Another option to reduce impact of customers in the Keweenaw Peninsula would be to install additional isolation valving where the 16" NNG pipeline and the 8" NNG and the Lake Linden Lateral connect. While cost effective in mitigating the risk of pipeline failure on the 16" NNG pipeline between the existing isolation valves, this

option does not address the risk of failure on the 8" Lake Linden lateral nor does additional valving address design day demand needs.

Cost Recovery

Q. What is the estimated cost of the KCP?

A. Company Witness Youngs addresses KCP costs.

Q. How does the Company plan to recover the costs of the KCP?

A. Company Witness Dennis addresses cost recovery.

Q. Does the Company believe that this is the most cost-effective solution for creating redundancy and meeting design day flow requirements in the Keweenaw Peninsula thereby reducing significant reliability risk in the U.P. West service area?

A. Absolutely. While the KCP is a significant investment for the Company, it is the most cost-effective method of creating redundancy, meeting design day requirements, and increasing reliability in the U.P. West service area for the benefit of its customers. By constructing the KCP, the Company is essentially looping the NNG system in the Keweenaw Peninsula by installing 29.7 miles of pipe. Alternate routes for redundancy such as a new interconnect with GLGT pipeline further south or connecting to the MCP pipeline to the east, are much further routes and will be significantly more expensive. Alternate options, such as installing storage in the Keweenaw Peninsula or installing additional isolation valving on 16" NNG pipeline, are either not feasible or do not adequately address the risk on the Lake Linden Lateral.

Q. Does that complete your direct testimony at this time?

A. Yes.

STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

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In the matter of the application of **SEMCO ENERGY GAS COMPANY** for a certificate of public convenience and necessity to construct and operate the Keweenaw Connector Pipeline.	)))))	Case No. U-21780

DIRECT TESTIMONY AND EXHIBITS

OF DUSTIN A. YOUNGS

ON BEHALF OF SEMCO ENERGY GAS COMPANY

Q. Please state your full name and business address.

A. Dustin A. Youngs, 1411 Third Street, Suite A, Port Huron, Michigan 48060.

Q. By whom are you employed and what is your position?

A. I am the Manager of Engineering for SEMCO Energy Gas Company ("SEMCO Gas" or the "Company"), a division of SEMCO Energy, Inc.

Q. Please state your educational background and business experience.

A. I graduated from Kettering University in September 2009 with a Bachelor of Science Degree in Mechanical Engineering. Upon graduation, I worked in the Automotive Engineering field. Prior to joining SEMCO Gas, I worked as the Director of Engineering for a manufacturing company. As the Director of Engineering, I was responsible for Project Management, Product Engineering, Manufacturing Engineering, and Sales. My responsibilities in Project Management included Failure Modes Effects Analysis, cost estimating, project budgets, and timing. I have been the Manager of Engineering at SEMCO Gas since August of 2021. As the manager of engineering at SEMCO Gas I am responsible for the design of facilities and pipeline systems, property acquisition, and effective execution of our annual capital programs.

Q. Have you previously filed direct testimony before the Michigan Public Service Commission ("MPSC" or the "Commission")?

A. Yes, I have submitted direct testimony and exhibits on behalf of SEMCO Gas in Case Nos. U-21277, U-21445, and U-21624.

Q. What is the purpose of your direct testimony in this proceeding?

A. The purpose of my testimony is to describe the proposed route, and identify the engineering and construction specifications, environmental impacts, and costs of constructing the Keweenaw Connector Pipeline ("KCP" or the "Pipeline") from the Northern Natural Gas Company ("NNG") tap site to a point of interconnection with SEMCO Gas pipeline facilities.

Q. Are you sponsoring any exhibits in this proceeding?

A. Yes. I am sponsoring the following exhibits:

Exhibit A-3 (DAY-1), Environmental Assessment Report

Exhibit A-4 (DAY-2), Parcel Data

Exhibit A-5 (DAY-3), KCP General Specifications

Exhibit A-6 (DAY-4), KCP Cost Estimate

Q, Were these exhibits prepared by you and/or at your direction and supervision?

A. Yes.

Q. Please describe the KCP Project.

A. The KCP consists of a 29.7 mile long, 12-inch diameter gas transmission pipeline that will be located in Baraga County and will extend in a northwesterly direction from the NNG tap site in Section 28, Spurr Township in Baraga County (SE1/4 of NW1/4 of SW1/4 of Section 28, T48N, R31W) to a point of interconnection with SEMCO Gas interconnection site in Section 27, Baraga Township in Baraga County (SW1/4 of SW1/4 of NE1/4, T51N, R34W).

Q. Please describe Exhibit A-3 (DAY-1), Environmental Assessment Report.

A. Exhibit A-3 (DAY-1) is an Environmental Assessment Report that provides a detailed description of the proposed project, alternative project options, the environmental setting, and the potential impacts of construction on geology, mineral resources, soils, water resources, vegetation, wildlife, fisheries, special status species, land use, visual resources, cultural resources, air quality, and noise. It also includes potential environmental mitigation measures. The Environmental Assessment Report also contains a summary of the route alternatives that were considered during the route selection process.

Q. Would you please describe the general character of the property to be traversed by the KCP?

A. The land use along the KCP proposed route is largely rural and low density residential with diverse topography, including some flat sections and undulating landscape. Approximately 87% of the proposed 12-inch pipeline follows the existing American Transmission Company ("ATC") power transmission right-of-way or pipeline corridors minimizing any environmental impact which may arise from the construction of the KCP. Exhibit A-3 (DAY-1), Figure 3-1 summarizes the property to be traversed by the Pipeline.

Q. Were there any alternate routes considered for the KCP?

A. A total of six routes were considered. The locations of these routes are detailed in Exhibit A-3 (DAY-1), Section 2. SEMCO Gas concluded that the alternative routes were not viable in comparison with the proposed route due to the following factors:

- Inability to utilize existing power transmission corridors and road right-of-ways.
- Significant increase in land and forest clearing required.
- Increase in wetland disturbance and resulting mitigation.

These factors would add to the overall cost, schedule, environmental impact, and complexity of the KCP.

Q. Will the proposed Pipeline route cross any streams or rivers?

A. Yes, the route consists of approximately 18 stream crossings as referenced in Table 3-1 of Exhibit A-3 (DAY-1), Environmental Assessment Report.

Q. Will the proposed Pipeline route cross any other waterbodies?

A. Yes, the waterbody crossings are referenced in Table 3-2 of Exhibit A-3 (DAY-1), Environmental Assessment Report.

Q. What construction methods will be used to lessen the environmental impact of crossing these waterbodies?

A. The Company will follow the leading industry practices for this project. Major stream and river crossings will be crossed using horizontal directional drilling methods whenever feasible. Other crossing methods as referenced in Exhibit A-3 (DAY-1), Environmental Assessment Report include the flume crossing method that is suitable for crossing relatively narrow streams that have straight channels and are relatively free of large rocks and bedrock, and the dam and pump crossing method suitable for low flow streams with meandering channels.

Q. Will the proposed KCP route encounter wetlands?

A. Yes, Exhibit A-3 (DAY-1), Environmental Assessment Report, EAR Appendix A, Table 1 summarizes the delineated wetlands along the route. The Company has and will continue to

consult with state and federal agencies to ensure impacts on these resources are minimized to the greatest extent practical and land is restored to preconstruction conditions. The Company will incorporate industry-approved and agency-accepted construction procedures into the construction design. The Company will comply with all applicable laws and regulations.

Q. Did the Company investigate the existence of threatened or endangered species near the KCP proposed route?

A. Yes, Exhibit A-3 (DAY-1), Environmental Assessment Report, section 3.8 outlines previously documented endangered, threatened, or species of special concern via the MNFI database that have been known to exist within or near the KCP.

Q. Did the Company identify any threatened or endangered species?

A. No threatened or endangered species have been identified during site visits and evaluations. The Company will continue to observe and identify any threatened or endangered species throughout the planning and implementation phases of this project. Any recognized environmental concern, including the observation of a threatened or endangered species will be addressed promptly and appropriately.

Q. Were any contaminated sites identified along the proposed KCP route?

A. No. Exhibit A-3 (DAY-1), Environmental Assessment Report, section 3.1.1 indicated that no contaminated sites are within 1,000 ft of the KCP corridor.

Q. Please provide the number and location of any crossovers of existing pipeline as a result of construction of the proposed pipeline.

A. There will be one crossing of an existing pipeline. The proposed KCP route will cross Northern Natural Gas's Lake Linden Lateral in Section 21 Baraga Township (SE1/4 of SE1/4 of SW1/4, T50N, R34W).

Q. Will the proposed KCP route go through any national or state parks?

A. No.

Q. Will the proposed KCP route go through any known historical properties or national historic landmarks?

A. No. Exhibit A-3 (DAY-1), Environmental Assessment Report, Section 3.10 states that there are no national historic landmarks within one mile of the proposed Pipeline route. There are also no known historical properties in this area, with the exception of the Canyon Falls Bridge, which is located approximately 0.85 miles from the chosen route. The construction of the pipeline will not impact this bridge. Additionally, the pipeline will not intersect any Indian Reservations, but it will pass through historical hunting areas of several Native American Tribes. The specific Tribes are outlined in Exhibit A-3 (DAY-1), EAR Appendix D. The Company will engage with the appropriate Tribe(s) and will adhere to the Unanticipated Discovery Plan as outlined in Exhibit A-3 (DAY-1), EAR Appendix E if necessary. Findings from the utilization of the Unanticipated Discovery Plan will be reported confidentially.

Q. Was a Cultural Resources Records review conducted?

A. Yes. GEI Consultants, Inc. assisted the Company with this investigation. Their findings are outlined in Exhibit A-3 (DAY-1), EAR Appendix D.

Q. What is the primary land use along the proposed project route?

A. The primary land use along the proposed project route is outlined in Exhibit A-3 (DAY-1), section 3.1.

Q. Will the proposed project route cross any railroads or MDOT maintained roads?

A. Yes, these details are outlined in Exhibit A-3 (DAY-1), section 3.9.1. The proposed project route will cross the Escanaba and Lake Superior Railroad, which is currently out of service and only used for railcar storage. Additionally, the project route will intersect US Highway 41 twice and M-38 once. It crosses US Highway 41 approximately 4.7 miles west of Nestoria and again about 0.40 miles north of Alberta near the intersection of US Highway 41 and Baraga Plains Rd. The proposed project route crosses M-38 near the intersection of M-38 and Grist Mill Rd.

Q. What permits will be required for the construction of the KCP?

A. Table 1-1 in Exhibit A-3 (DAY-1), Environmental Assessment Report outlines the permits required for the construction of the proposed pipeline. The Company will comply with all applicable laws and regulations.

Q. When does the Company anticipate initiating the permit request process with the various permitting agencies necessary for the project?

A. Permit development and submissions will begin in Q1 2025.

Q. Have right-of-way agreements been secured for the construction of the proposed KCP?

A. No. However, SEMCO Gas has compiled a list of property owners along the proposed route as shown in Exhibit A-4 (DAY-2), to whom notice will be given. Upon certification, the Company will pursue the necessary rights-of-way.

Q. Has SEMCO Gas been in contact with any of the property owners along the proposed route?

A. Yes, the Company has been in contact with many of the property owners along the KCP route. There are 41 separate entities that own 106 parcels along the proposed route. Letter's seeking permission to survey were sent to most parcel owners, with the exception of public land and areas where surveys could be completed from right of way.

Q. What landowner engagement activities does the Company plan to pursue during the Act 9 proceeding?

A. The Company plans to commence additional engagement with landowners, including securing easements where agreeable, as early as Q1 2025.

Q. What is the Company's process for obtaining new land rights if the landowner is uncooperative or an easement offer cannot be agreed upon between the company and the landowner?

A. The Company's process for obtaining new land rights involves initiating negotiations with the landowner to try to reach a mutually beneficial agreement. If direct negotiations prove to be unsuccessful, the Company will explore other options such as alternative routes of adjacent

properties/property owners, or routes within road right of way that can meet the Company's needs. As a last resort, the Company may also consider the possibility of condemnation.

Q. Please describe Exhibit A-5 (DAY-3).

A. Exhibit A-5 (DAY-3) is a set of specifications describing the materials and construction methods proposed for use in constructing the KCP and related facilities. Materials and methods utilized will meet or exceed the requirements of the Michigan Gas Safety Standards, 26th edition.

Q. What is the class location breakdown of the proposed KCP?

A. The breakdown of the class location of the 29.7 mile pipeline is as follows:

Class 1: 100%

Class 2: 0%

Class 3: 0%

Class 4: 0%

There is a potential that approximately 3.4% of the line could be considered as Class 2. This will be verified during the as-builting processes and will not impact Company design or construction plans.

Q. Are there any high consequence areas (HCA) along the proposed route for the KCP?

A. There are no high consequence areas along the proposed KCP route.

Q. Will the proposed Pipeline be constructed with the capacity for in-line inspection tool assessment?

A. Yes. The Pipeline will be designed and constructed to allow for in-line inspection assessment.

Q. Does the Company plan to odorize the KCP?

A. Yes. The KCP will be connected to the Upper Michigan Energy Resources Corporation Baraga transmission main, which is already odorized. Consequently, the Company's connecting facilities will also be odorized, with odorization equipment being installed at the NNG interconnection facility near Three Lakes.

Q. How does odorizing the KCP impact the Company's plan to back feed into the NNG system near Baraga?

A. NNG has agreed, in principle, to odorize their system immediately south of their L'Anse lateral. This odorizer will be maintained and operated by the Company and allow for the future retirement of SEMCO Gas's local odorizers at nine different interconnection locations. The interconnection locations are the L'Anse interconnection, Baraga interconnection, Baraga #2 interconnection, Chassel interconnection, Houghton interconnection, Hancock #1 interconnection, Hancock #2 interconnection, Lake Linden interconnection and the Calumet interconnection.

Q. Please describe Exhibit A-6 (DAY-4)?

A. Exhibit A-6 (DAY-4) contains the cost estimate for the KCP project. The total project cost is approximately $120,428,000, which includes the Tap Site with NNG, SEMCO Pipeline interconnect, modification to an existing Gate Station, 29.7 miles of 12-inch pipeline, and three 12" Valve Stations. The costs are broken into four cost categories for all facilities: (1) Materials (Line Pipe, Fittings, Valves and Misc. Materials), (2) Labor (Contractor and internal labor), (3)

Permits/Land/ROW (Acquisition, Land Rights, Survey and Permits), (4) Engineering and Design. The overall contingency for this project set by the Company currently represents 20% of the total projected cost, which is not included in the estimated cost of $120,428,000. The intent of the contingency is to account for unforeseen events such as abnormal weather, contractor issues, increased rock excavation, wetland encounters, or right of way issues.

Q. What is your current total estimate of the cost of constructing the proposed KCP?

A. As shown in Exhibit A-6, the estimated total cost for designing and building the KCP is approximately $120,428,000. This amount does not cover the interconnection facilities, which will be built and owned by NNG. Also, this cost assumes 20% rock; however, the actual quantity of rock is unknown, so a contingency amount of 20%, may be realized and is not included in the cost above. With the contingency considered, the total cost could reach approximately $144,514,000. Witness Dennis addresses rate recovery of KCP's costs.

Q. What is the expected Operation and Maintenance cost associated with the Pipeline?

A. The expected first year operation and maintenance cost would be $131,200. This covers necessary operation and maintenance activities related to the Pipeline and includes leak survey, line clearing, cathodic protection maintenance, integrity activities, and pipeline patrolling.

Q. What is the timing of the Pipeline installation?

A. Preliminary engineering work, route selection and the Environmental Assessment Report are complete. Upon certification, the right-of-way acquisition, material procurement, permits, engineering, and contract awards will take 9-12 months. Construction will then commence and

take approximately 12 months. The Company is seeking to have the KCP in-service as of Q4 2026.

Q. Does that complete your direct testimony at this time?

A. Yes

STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

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In the matter of application of **SEMCO ENERGY GAS COMPANY** for a certificate of public convenience and necessity to construct and operate the Keweenaw Connector Pipeline.	))))))	Case No. U-21780

DIRECT TESTIMONY AND EXHIBITS OF MICHAEL A. FOSTER

ON BEHALF OF

SEMCO ENERGY GAS COMPANY

DIRECT TESTIMONY AND EXHIBITS
OF MICHAEL A. FOSTER
ON BEHALF OF SEMCO ENERGY GAS COMPANY

Q. Please state your name and business address.

A. My name is Michael A. Foster. My business address is 1411 Third Street, Suite A, Port Huron, MI, 48060.

Q. By whom are you employed and in what capacity?

A. I am the Manager of Gas Supply for SEMCO Energy Gas Company ("SEMCO Gas" or the "Company"), a division of SEMCO Energy, Inc.

Q. Please describe your educational background and utility experience.

A. I graduated from the University of Detroit Mercy in August 2011 with a Bachelor of Civil Engineering degree. My natural gas industry experience began with DTE Energy ("DTE") as an Associate Engineer between 2011 and 2013. From 2013 to 2017, I assumed the role of Energy Analyst in the Gas Supply and Planning Department where I assisted DTE Gas's Gas Supply witness in the preparation of the five-year operating forecast including required gas purchases and development of testimony and exhibits for the annual Gas Cost Recovery ("GCR") Plan case and annual reconciliation of GCR gas costs. Within this time, I also accepted a temporary assignment for a customer billing system replacement project where I designed and implemented new reporting for administration of the Gas Customer Choice ("GCC") program at DTE Energy. In 2017, I accepted the role of Senior Gas Supply & Planning Analyst in the Gas Supply department. In this role, I prepared and defended DTE Gas's annual gas supply and storage plans for GCR customers. In 2018, I accepted a role as Supervisor of Gas Measurement at DTE Energy, responsible for a team of analysts that validated daily and hourly gas measurement for end-user, interconnecting pipeline, and company use meters on DTE's system. I was also responsible for the investigation and mitigation of transmission Lost and Unaccounted For gas. In January 2022, I was promoted to Supervisor of Gas Measurement and Controls, where I assumed responsibility for the SCADA (Supervisory Control and Data Acquisition) team and ensured ongoing technical support of the gas control system. In May 2023, I accepted my current role as Manager of Gas Supply with SEMCO Gas.

Q. What are your responsibilities as Manager of Gas Supply?

A. Under the direction of the Director of Energy Acquisition, I am responsible for the implementation of the Company's GCR Plan, including the management of the monthly and annual storage plan, the purchase of the Company's gas supply requirements, the contracting of leased pipeline and storage capacity, and the implementation of the fixed price purchase program. In addition, I have the responsibility of managing the activities of the Company's GCC program and providing testimony as necessary in filings with the Michigan Public Service Commission ("MPSC" or the "Commission").

Q. Have you previously testified before the Commission?

A. Yes. I have filed testimony on behalf of DTE's GCR Plans and GCR Reconciliation in Case Nos. U-18152, U-17941-R, and U-18412. I have also adopted or filed direct testimony for each of SEMCO Gas's GCR Plans and GCR Reconciliations beginning with the 2022-2023 GCR reconciliation, Case No. U-21071.

Q. What is the purpose of your testimony in this proceeding?

A. The purpose of my testimony is to discuss the current reliability, redundancy, and design day requirement concerns associated with the Company's sole interstate pipeline transportation provider, Northern Natural Gas ("NNG"), for its customers in the Keweenaw Peninsula. I will also discuss the current and planned sources of gas supply for the Company's Keweenaw Peninsula area relative to the Company's proposed construction of the Keweenaw Connector Pipeline ("KCP" or the "Pipeline"). Finally, I will provide an overview of matters associated with the Federal Energy Regulatory Commission ("FERC") and how they relate to the proposed KCP.

Q. Are you sponsoring any exhibits in this proceeding?

A. Yes, I am sponsoring the following exhibits:

Exhibit A-7 (MAF-1), UP West Pipeline System

Exhibit A-8 (MAF-2), Planned Supply Response for Pipeline Interruption

Exhibit A-9 (MAF-3), Design Day Demand Forecast

Q. Were these exhibits prepared by you or under your direction and supervision?

A. Yes.

Overview

Q. Please describe the purpose of the proposed KCP.

A. The purpose of the KCP is to address reliability concerns and create system redundancy for the Company's Upper Peninsula ("U.P.") West service area, specifically for customers located on the distribution systems in Houghton, Hancock, Baraga, Calumet, and others that are only served via NNG in the Keweenaw Peninsula of Michigan's Upper Peninsula.

Q. Please describe how natural gas is currently supplied to the Company's U.P. West distribution systems.

A. As shown in Exhibit A-7 (MAF-1), the Company's U.P. distribution systems are currently served by two upstream interstate gas pipeline transportation providers, NNG and Great Lakes Gas Transmission ("GLGT"). NNG's pipeline system consists of a single interstate transmission pipeline entering Michigan's U.P. at the Wisconsin border in Gogebic County. Within the U.P., NNG's pipeline splits into three lateral interstate transmission pipelines which provide supply to all of the Company's U.P. West service area distribution systems. NNG's U.P. lateral pipelines are commonly known as the Ontonagon Lateral, Lake Linden Lateral, and Marquette Lateral. Each of these lateral pipelines is located at the end of NNG's 14,800 mile pipeline network originating in the state of Texas. As of 2019, GLGT, by way of the Company's Marquette Connector Pipeline ("MCP"), also provides regular flowing supply to the U.P. West service area; specifically serving those customers in the greater Marquette area. GLGT's main interstate gas transmission system consists of twin 36" diameter pipelines beginning in Emerson, Manitoba, Canada (supplied by TransCanada's Canadian mainline system) and terminating in St. Clair, Michigan near Union Gas's Dawn Storage Hub. The GLGT pipeline system is capable of operating bi-directionally and has 14 Michigan gas supply receipt points with major receipt points located at Emerson, Manitoba (TransCanada Pipeline); Farwell, Michigan (ANR Pipeline Co.); and St. Clair, Michigan (DTE and Union Gas/TransCanada).

Q. How is natural gas currently supplied to the Company's distribution systems in the Keweenaw Peninsula?

A. Natural gas is supplied to the Company's customers in the Keweenaw Peninsula solely via NNG's lateral, commonly referred to as the Lake Linden Lateral. The Lake Linden Lateral originates at NNG's mainline tap near Watton, MI, supplying the 8" northbound transmission line with natural gas to approximately 14,000 SEMCO Gas GCR, GCC, and LVT customers in the L'Anse, Baraga, Chassel, Houghton, Hancock, Lake Linden and Calumet communities.

Q. Does NNG's Lake Linden Lateral currently consist of a secondary or parallel loop pipe in order to provide a level of redundancy to the Company's customers in this area?

A. No.

Q. NNG has a supply receipt point into its U.P. pipeline system at Wakefield, MI. Does NNG's Wakefield receipt point mitigate the Company's supply reliability concern?

A. No. NNG's Wakefield receipt point does not mitigate the Company's supply reliability concern because it is not a primary-firm receipt point into NNG's U.P. pipeline system and the Wakefield receipt point is located in the far western portion of the U.P. Specifically, NNG's Wakefield receipt point is located upstream of all of the Company's U.P. West service areas and is approximately 130 miles to the west of Marquette, the Company's largest U.P. West service area. Prior to 2019, an interruption of NNG's UP pipeline system east of Wakefield would put nearly all of the Company's 35,000 U.P. West customers, including those on the Lake Linden Lateral, at risk of a sudden loss of supply and a mass outage.

Q. Does NNG's U.P. pipeline system have any primary-firm supply receipt points in Michigan?

A. Yes. As of 2019, the Company's interconnect with NNG, MCP, supplies gas from GLGT into NNG's system. NNG's interconnect with SEMCO Gas at the MCP serves as a primary-firm supply receipt point for NNG in Michigan.

Q. Does the MCP provide a level of supply reliability in the event of a supply disruption on NNG's Lake Linden lateral?

A. In the event of a disruption, the MCP can immediately provide a redundant level of supply reliability for the greater Marquette area. Given the nature of NNG's mainline in the UP, specifically regulation limitations further upstream to the west on NNG's system, the MCP would not be able to backfeed sufficient levels of supply to the Lake Linden Lateral before some customer outages were to occur. However, given the MCP's capacity of approximately 6,000 Mcf/hr (or 144,000 Mcf/day), the MCP is sized to accommodate the full design day load of the Lake Linden Lateral and the Marquette Lateral (calculated at approximately 113,000 Dth/day), including power generation load.

Q. Does the Company depend solely on NNG to provide reliable and uninterrupted interstate transportation of supply to the Company's customers in the Keweenaw Peninsula?

A. Yes. Without a redundant means to deliver natural gas to the Company's customers in the Keweenaw Peninsula, a severe outage impacting thousands of customers, including hospitals, educational facilities, power generation, and low-income communities remains of immense concern for SEMCO Gas.

Q. Please explain why NNG's Lake Linden Lateral presents a supply reliability concern to the Company.

A. Since NNG's Lake Linden Lateral is not looped, this pipeline does not feature a level of reliability necessary for the dependable delivery of supply. Such a lack of dependability presents a supply reliability concern for the Company and its customers due to the risk of a sudden loss of gas supply from NNG. Specifically, in the event of an interruption on NNG's Lake Linden Lateral at any location south of the Company's L'Anse takeoff in the Keweenaw Peninsula, to the west of the Lake Linden Lateral offtake on the NNG mainline, or on a small part to the east of the Lake Linden Lateral offtake, all of the Company's 14,000 customers in this area would be at risk of a sudden loss of supply resulting in a mass outage. If such an interruption occurred during the winter period, such a mass outage would likely be a catastrophic event leaving the Company and its customers without any supply options for space heating, hot water, cooking, manufacturing, or power generation. As further described in the direct testimony of Witness Mark VanderHeuvel, since one of the highest risks of pipeline failure is due to third party damage, such a risk presents a serious supply reliability concern to the Company since NNG's lateral

pipeline serving the Keweenaw Peninsula is not looped and the Company and its customers would be at the mercy of NNG's repairs to its single pipeline.

Q. Given the natural gas fired power generating capacity operated by Upper Michigan Energy Resources ("UMERC") and fed via the Company's transmission system in the Keweenaw Peninsula, does this natural gas fired facility elevate the Company's supply reliability concerns for its U.P. West service area in the Keweenaw Peninsula?

A. Yes. UMERC's A.J. Mihm Generating Station in Baraga Township is fed via SEMCO Gas's Baraga Pipeline, which itself is solely fed from NNG's 8" Lake Linden Lateral mainline. This gas fired power generation facility elevates the Company's supply reliability concerns to an even more crucial level. An interruption to the only source of gas supply to the Keweenaw Peninsula would not only cause an outage to the Company's 14,000 customers but it could also result in the loss of gas supply to this natural gas fired power generation supplied by NNG.

Q. Please explain how the KCP will create supply redundancy.

A. The KCP will interconnect with NNG's U.P. pipeline system near Three Lakes, Michigan. Should any pipeline supply interruption occur directly on NNG's Lake Linden lateral, the KCP will offer a secondary route for gas supply to continue feeding the Company's customers in the Keweenaw Peninsula. Additionally, if an interruption were to occur on NNG's mainline west of the Lake Linden Lateral take-off, the KCP could provide an alternate route for gas supply originating from the MCP to continue serving the Keweenaw Peninsula customer base. In both scenarios, at the tie-in of KCP with the Company's Baraga Pipeline, SEMCO Gas could then backfeed NNG's pipeline at the Baraga gate to ensure supply is maintained further north into the Company's peninsular distribution systems.

KCP Gas Supply

Q. Please describe how the Company plans to source gas into the KCP.

A. As is the case with NNG's existing Lake Linden Lateral, the Company plans to source gas into the KCP from NNG. To facilitate the sourcing of gas from NNG into the KCP, the Company plans to

construct a new interconnection facility between the KCP and NNG's interstate gas transmission system near Three Lakes, Michigan.

Q. What will be the purpose of the KCP?

A. The KCP is expected to be used for emergency situations such as supply disruptions or third-party damage on NNG's U.P. mainline or NNG's Lake Linden Lateral line and to address design day deficiencies as described in greater detail below.

Q. Please describe the Company's current level of capacity on NNG to serve the Lake Linden lateral.

A. Currently, NNG's Lake Linden Lateral has a capacity of 30,389 Dth/day, with 3,174 Dth/day of available, uncontracted capacity. Of this capacity, the Company is allocated 18,150 Dth/day of contracted firm capacity for GCR/GCC which can serve its distribution systems located off of NNG's Lake Linden Lateral.

Q. What is the Company's current design day forecast for the U.P. West service territories, including customers in the Marquette and the Lake Linden Lateral areas?

A. As shown in Exhibit A-9 (MAF-3), the Company's design day forecast for the entirety of the U.P. West service territory is approximately 79,000 Dth/day, with an approximate 29,000 Dth/day calculated for the customers served via the Lake Linden Lateral alone, including GCR, GCC, and LVT customers.

Q. The Company's current design day load of 29,000 Dth/day for its customers located on NNG's Lake Linden Lateral represents a nearly 30% increase from 2016 at the time of the MCP filing. What has contributed to this change?

A. Several factors contributed to this change in design day demand. In 2019, the Company acquired historic NOAA temperature data for all of its service areas dating back to January 1950 as a result of the 2019 Statewide Energy Assessment report. This data was used to identify the coldest winter period temperatures for use in the Company's design day planning. As explained in GCR Plan Case No. U-20551, the Company moved away from its legacy methodology of using the coldest day in the previous 15 years towards using the coldest recorded temperature since

1950 for forecasting GCR/GCC design day load. This changed the U.P. West winter design day conditions from an average daily temperature of -11°F to -20°F, which contributed to a large increase in the U.P. West design day demand as compared to the calculated demand at the time of the MCP filing. In addition, the Keweenaw Peninsula communities have observed overall customer count growth of approximately 9% since 2016, with LVT load also growing by approximately 23%.

Q. Does this change in design day forecast present a deficiency in available capacity on the Lake Linden Lateral?

A. Yes. Even if the Company were to contract for the remaining available capacity on the existing NNG Lake Linden Lateral, the resulting capacity on this pipeline would still present an overall deficiency on a design day, and prevention of any natural growth of the Company's existing GCR, GCC, and LVT customers.

Q. How does KCP help to alleviate this deficiency in design day needs for the Lake Linden area?

A. KCP can also provide incremental capacity to the end of the existing Lake Linden Lateral, thereby increasing the firm capacity options for the Company's GCR/GCC customers in this area. If the Company (or any NNG shipper who normally delivers gas into NNG's pipeline system upstream of Wakefield) is able to redirect deliveries through the NNG-SEMCO Gas interconnect from MCP, through displacement, the available capacity to the upstream NNG Lake Linden lateral take-off can increase and KCP further supports this. In addition, this new capacity could afford the Company's LVT customers the opportunity for acquiring firm capacity rights on NNG's system, as a majority of these customers currently must rely upon secondary or interruptible capacity on NNG, or greater growth in this customer segment.

Q. If there is a supply disruption directly on NNG's Lake Linden Lateral, how will the Company route supply to KCP?

A. Given the KCP is sized for full redundancy of the Keweenaw Peninsula load, should a supply disruption occur directly on NNG's Lake Linden Lateral north of its offtake from NNG's mainline, and south of the L'Anse offtake, the Company will coordinate with NNG to ensure that the Baraga 2 station, where SEMCO Gas's distribution system ties in with NNG near Baraga

Township, is configured to accept a backfeed from SEMCO Gas's KCP at that time. At that point, normal flowing supply that the Company receives from NNG receipt points such as Demarc, Ventura, Ogden, or Carlton would continue north via KCP towards the Company's service areas in the Keweenaw Peninsula. Once the gas is delivered to the Company's Baraga 2 station interconnect between SEMCO Gas and NNG, gas could then be redelivered to NNG and continue north to the Calumet, Hancock, and Houghton systems.

Q. If there is a supply disruption on NNG's mainline upstream of NNG's Lake Linden Lateral offtake, how will the Company route gas to KCP instead?

A. In order to facilitate supply to customers in the Keweenaw Peninsula, the Company would rely upon scheduling increased deliveries into NNG's mainline system at the M-35 interconnect, via the MCP and GLGT, to ensure that customers in the Keweenaw Peninsula and the Marquette area can continue to be reliably served. To ensure that adequate volumes could be received at GLGT to the MCP in reasonable time, SEMCO Gas may utilize a combination of 1) its existing Operational Balancing Agreement ("OBA") with GLGT at the GLGT-MCP interconnect for supply during such an emergency, 2) backhaul volumes from its Lower Peninsula GLGT receipt points such as Belle River, Deward, and at Farwell, MI, and 3) increased deliveries from its GLGT Emerson to Belle River capacity. These volumes would be delivered to MCP via GLGT, flow through MCP to SEMCO Gas's interconnect with NNG, and finally for redelivery to the Company's gates in the Marquette area to the east, and to the Company's gates in the Keweenaw Peninsula to the west via KCP. Please see Exhibit A-8 (MAF-2) for further details on a hypothetical supply fulfillment plan should such a pipeline interruption occur during normal day gas load.

Q. Has the Company entered into an Operational Balancing Agreement ("OBA") with both NNG and GLGT?

A. Yes. With construction of the MCP completed in 2019, SEMCO Gas entered into OBAs with both NNG and GLGT to facilitate streamlined operations at both interconnects. An OBA was executed with NNG at the M-35 delivery point in November 2019, and with GLGT at the Arnold Road receipt point in September 2019.

Q. Does the Company plan to turn-back any interstate pipeline capacity under contract with NNG or GLGT, given the addition of the KCP, when the Company's current contracts expire in 2028 and 2029?

A. No. The Company does not plan to turn-back any pipeline capacity under contract with NNG nor GLGT. The Company's goal is to increase interstate pipeline supply redundancy in the U.P. West service area and improve reliability of supply. The Company will not be able to achieve these goals by reducing its existing capacity under contract with either NNG or GLGT. Replacing capacity that has been turned-back, would likely be impossible, or very expensive.

Q. Because the KCP will act as a physical connection between SEMCO Gas and NNG, will the KCP be subject to the FERC rules and regulations as they pertain to the interstate transportation of natural gas?

A. No. Utility owned intrastate transmission pipelines, such as the KCP, qualify for an exemption from FERC regulations under the Natural Gas Act, known as the "Hinshaw" exemption, if they meet certain requirements. The requirements for the Hinshaw exemption are: (i) the pipeline must be located entirely within one state, (ii) all gas must be received from others in that state, (iii) the pipeline's rates must be regulated by the state commission, and (iv) all gas received must ultimately be consumed in the state. The KCP will satisfy each of these requirements.

Q. Has the Company confirmed with FERC that the KCP will qualify for the Hinshaw exemption?

A. No. However, the Company did meet with the FERC Staff in 2014 to explain the Company's MCP proposal at the time. The Company finds that the conditions necessary to qualify for the Hinshaw exemption for MCP are similarly met regarding the KCP; namely that all gas that the Company would so deliver into NNG via KCP would be used to serve the Company's U.P. West customers in Michigan. Importantly, because gas transported on the KCP and delivered into NNG will not be leaving the State (because such gas will be consumed in Michigan), the Company's proposed operation of the KCP to feed gas into NNG's system would fall within the scope of permissible activities for a Hinshaw pipeline. As such, the Company would not need any form of FERC authorization for such operations.

Q. Because new interconnection facilities will be constructed between the NNG and KCP pipelines, is FERC approval required for the construction of the interconnection?

A. Yes. FERC approval is required for the construction of NNG's portion of the KCP - NNG interconnection facility; however, FERC has authorized NNG to construct such new delivery facilities under FERC's blanket construction certificate process. The blanket certificate process authorizes interstate natural gas pipelines, such as NNG, to engage in minor, routine construction activities without prior application to FERC. FERC's blanket certificate regulations require a pipeline to comply with applicable environmental laws and to engage in landowner notification prior to construction. The pipeline must also report its blanket certificate projects to FERC in the following year.

Q. Is the Company's proposed KCP project reasonable, prudent, and in the public interest for Michigan?

A. Yes, the Company's KCP project is reasonable, prudent, and in the public interest for Michigan. The KCP project will mitigate the Company's supply reliability and supply redundancy concerns and address design day deficiencies associated on NNG's Upper Peninsula pipeline system.

Q. Does this conclude your direct testimony in this case at this time?

A. Yes.

STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

* * * * *

In the matter of the application of **SEMCO ENERGY GAS COMPANY** for a certificate of public convenience and necessity to construct and operate the Keweenaw Connector Pipeline.	)))))	Case No. U-21780

DIRECT TESTIMONY AND EXHIBIT OF JENNIFER L. DENNIS

ON BEHALF OF

SEMCO ENERGY GAS COMPANY

Testimony of Jennifer L. Dennis On Behalf of
SEMCO Energy Gas Company

Q. Please state your name and business address.

A. My name is Jennifer L. Dennis. My business address is 1411 Third Street, Port Huron, Michigan 48060.

Q. By whom are you employed and what is your present position?

A. I am employed by SEMCO Energy Gas Company ("SEMCO Gas" or the "Company"), a division of SEMCO Energy Inc., as Sr. Director, Rates and Regulatory Affairs.

Q. Please describe your educational background and business experience.

A. I graduated from Grand Valley State University in 2002 with a Bachelor of Science degree. In 2010, I graduated from Central Michigan University with a Master of Public Administration degree. Between February 2003 and August 2015, I worked for the St. Clair County Friend of the Court, holding various positions of increasing responsibility. In August 2015, I was hired by SEMCO Gas as the Customer Energy Management Coordinator. In July 2016, I became the Gas Supply Resource Planner and in December 2017, I was promoted to Rates and Regulatory Manager. In November 2019, I was promoted to Director, Rates and Regulatory Affairs and in January 2023 to Sr. Director, Rates and Regulatory.

Q. What are your responsibilities as Sr. Director, Rates and Regulatory Affairs?

A. I am responsible for all regulatory matters involving the Michigan Public Service Commission ("MPSC" or the "Commission") and the Federal Energy Regulatory Commission ("FERC"). In addition, I oversee the Company's legislative activities and the implementation of the Company's Energy Waste Reduction ("EWR") program.

Q. Have you previously filed testimony with the MPSC?

A. Yes. I caused testimony and exhibits to be filed in the following cases:

U-18016 – 2015 EWR Reconciliation

U-18340 – 2016 EWR Reconciliation

U-20037 – 2017 EWR Reconciliation

U-18179 – 2017 EWR Amended Plan

U-18270 – 2018/2019 EWR Biennial Plan

U-21169 – Tariff Revision, Facility Improvement Demand Surcharge

U-18157 – 2017/2018 Gas Cost Recovery ("GCR") Plan

U-18417 – 2018/2019 GCR Plan

U-20551 – 2020/2021 GCR Plan

U-21277 – 2023/2024 GCR Plan

U-20552 – 2020/2021 GCR Reconciliation

U-20823 – 2021/2022 GCR Reconciliation

U-20479 – 2020 General Rate Case

U-21624 – 2024 MRP/IRIP Surcharge Extension

Q. Are you sponsoring any exhibits with your direct testimony?

A. Yes. I am sponsoring the following exhibit:

Exhibit A-10 (JLD-1) KCP 5-Year Revenue Requirement Estimate

Q. Was this exhibit prepared by you or under your direction?

A. Yes.

Q. What is the purpose of your direct testimony?

A. The purpose of my direct testimony is to provide an estimate range for the anticipated revenue requirement associated with the Keweenaw Connector Pipeline ("KCP" or "the Pipeline"). Additionally, I will address the cost recovery for interconnection facilities not owned by the Company.

KCP Revenue Requirement

Q. Please describe Exhibit A-10 (JLD-1).

A. Exhibit A-10 (JLD-1) calculates the estimated revenue requirement range of the KCP by major component for the five-year period beginning 2027. Page one of the exhibit provides the estimated top end to include 20% contingency costs. Page two of the exhibit provides the estimated low end of the range to exclude all contingency costs.

Q. How was the estimated revenue requirement range developed?

A. Based on the total projected KCP cost with and without contingency, supported by Company witness Dustin Youngs, I developed an average annual net rate base for both cost profiles. The average annual net rate base was then multiplied by a pre-tax overall rate of return of 8.01% to calculate the cost of debt, return on equity, and income taxes. I then added in annual depreciation based on the composite rate used in the Company's most recent rate order in Case No. U-20479, as well as property tax, and Operating and Maintenance ("O&M") expenses to develop the total annual revenue requirement for each.

Q. How was the pre-tax rate of return of 8.01% developed?

A. The 8.01% pre-tax rate of return was developed to include federal and state income taxes necessary to achieve an after-tax return equal to the 6.44% rate of return approved in SEMCO Gas's last general rate proceeding, Case No. U-20479.

Q. Is the Company requesting that the Commission approve a specified rate of return in this proceeding?

A. No. The revenue requirement range calculated in Exhibit A-10 (JLD-1) incorporates current factors, including the currently approved rate of return and certain assumptions, and is for illustrative purposes only. Therefore, any change to the rate of return in a future general rate case or other assumptions will result in different revenue requirements.

Q. Is the Company requesting that the Commission approve rates in this proceeding to recover the estimated total annual revenue requirements displayed in Exhibit A-10 (JLD-1)?

A. No. The Company plans to recover KCP-related costs in rates to be approved in a future general rate case proceeding based on the revenue requirement using factors established in that case. However, it is the Company's position that with the issuance of the certificate of public convenience and necessity for the construction and operation of the KCP in this case, the construction and operation of the Pipeline will have been determined to be reasonable and prudent for purposes of rate recovery in the future general rate case.

Interconnection Facility Cost Recovery

Q. Is the cost of the interconnection facilities discussed by Witnesses Youngs and Foster included in the estimated revenue requirement outlined in Exhibit A-10 (JLD-1)?

A. In part, yes. The interconnection facilities connecting KCP to SEMCO Gas's Baraga line will be wholly owned by SEMCO Gas, therefore, the cost of construction for these interconnection facilities are included. The interconnection with Northern Natural Gas's ("NNG") mainline near Three Lakes, Michigan will consist of facilities owned by SEMCO Gas and facilities owned by NNG. The facilities at the Three Lakes interconnection owned by SEMCO Gas are included in the cost of the Pipeline project. All interconnection costs included in the cost of the project are included in the estimated revenue requirement provided in Exhibit A-10 (JLD-1).

Q. What costs are not included in the estimated revenue requirement provided in Exhibit A-10 (JLD-1) for the KCP project?

A. As discussed above, an interconnection is required at NNG's mainline near Three Lakes, Michigan. These interconnection facilities will be owned by NNG. Additionally, for KCP to achieve maximum

redundancy of the Lake Lindon Lateral, the Baraga #2 station, owned by NNG, will require upgrades to allow bidirectional flow. The NNG facility costs are not included in the estimated revenue requirement in Exhibit A-10 (JDL-1) but are part of the overall project costs. NNG provided an estimate for these facilities totaling approximately $6.8 million.

Q. How has SEMCO Gas traditionally recovered costs for interconnection facilities not owned by the Company?

A. SEMCO Gas has needed the construction of interconnections with inter and intrastate pipelines several times in the past. Each interconnection is constructed with facilities owned by SEMCO Gas and facilities owned by the inter or intrastate pipeline company. Costs for facilities owned by SEMCO Gas have always been capitalized and included in rate base, recovered through general rate cases. Costs for facilities not owned by SEMCO Gas, however, have been considered a "cost of gas" and been recovered through the balance and demand portion of the Company's Gas Cost Recovery factor. Each interconnection facility and its associated costs being justified through the GCR planning process or through an Act 9 filing ahead of constructing and recovering the costs.

Q. How were the costs associated with interconnection facilities in connection with the Marquette Connector Pipeline ("MCP") recovered?

A. As part of the MCP project, two interconnection facilities were required. The first, at Arnold Rd, interconnected MCP to Great Lakes Gas Transmission Company's ("GLGTC") pipeline, and the second at M-35, interconnecting MCP to NNG's mainline. The interconnections were included as part of the overall project and approved as serving the public convenience and necessity in Case No. U-18202. The costs for non-SEMCO Gas owned facilities were recovered through the GCR factor first approved in Case No. U-20245. As agreed to through the settlement agreement in that case, the term of recovery for such facilities was to be a minimum of 5 years.

Q. The balance and demand portion of the GCR factor is charged to the Company's system supply and gas customer choice customers but not the Company's transportation customers. How does the Company currently recover costs uncapitalized costs of interconnection facilities from its transportation customers?

A. Inconsistent with the settlement agreement in Case No. U-20245, SEMCO Gas recovers 100% of the non-capitalized interconnection facility costs through the GCR factor, but then files to amend its Facility Improvement Demand ("FID") surcharge to its transportation customers. The FID surcharge allows the Company to recover costs from transportation customers based on the mains average and peaks allocation factor approved in SEMCO Gas's last general rate case. The amount recovered through the FID surcharge is then credited back to the GCR's balance and demand.

Q. How does the Company plan to recover the KCP project costs associated with NNG-owned facilities?

A. The Company plans to take a similar approach of recovering capital costs through base rates and non-capitalized NNG-owned facility costs through a separate surcharge to its customers based on the mains average and peak allocator. Different from MCP, the Company plans to request recovery from all customers through the FID surcharge rather than incorporating the GCR process. Doing so streamlines the process, does not require GCR customers to be reimbursed by transportation customers, and does not disrupt the GCR plan review process.

Q. How will SEMCO Gas attempt to minimize the cost of the NNG-owned facilities for its customers?

A. SEMCO Gas will pursue terms to minimize the risk of unanticipated costs, such as a fixed price contract. If NNG is unwilling to enter into a fixed price agreement, SEMCO Gas will pursue terms to allow for auditing of costs and will review justification of any contingency spend. On projects of $1 million or less, SEMCO Gas will pursue a full pay option to eliminate the impact of interest, while projects exceeding $1 million will be paid for and recovered over a period of 5 to 7 years allowing for

costs to be spread out over a longer period and reducing the immediate cost burden for the customers.

Q. Has the KCP project been approved for construction by the Company's Board of Directors?

A. Yes. Pending the approval of the certificate of convenience and necessity requested by this filing, the KCP has been reviewed and approved for construction by the AltaGas Board of Directors.

Q. Does this complete your prefiled direct testimony at this time?

A. Yes.

STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

* * * * *

In the matter of the application of **SEMCO ENERGY GAS COMPANY** for a certificate of public convenience and necessity to construct and operate the Keweenaw Connector Pipeline.	))))))	Case No. U-21780

DIRECT TESTIMONY OF TIMOTHY J. LUBBERS

ON BEHALF OF

SEMCO ENERGY GAS COMPANY

August 30, 2024

Direct Testimony of Timothy J. Lubbers
On Behalf of
SEMCO ENERGY Gas Company

Q. Please state your name and business address.

A. My name is Timothy J. Lubbers. My business address is 1411 Third Street, Suite A Port Huron, MI 48060.

Q. By whom are you employed and what is your present position?

A. I am employed by SEMCO ENERGY Gas Company ("SEMCO Gas" or the "Company"), a division of SEMCO Energy, Inc., as its Director of Business Development and Community Engagement.

Q. Please describe your educational background and business experience.

A. I graduated from the University of Missouri in December 1989 with a Bachelor of Science degree in Mechanical Engineering. Between 1990 and 1991, I worked as a Consulting Engineer with Booker Associates in St. Louis, Missouri. At that time, my responsibilities included designing heating and cooling systems for commercial buildings. In 1991, I left Booker Associates and took a position with KPL Gas Service in Kansas City, Missouri, as a Commercial Sales Engineer. My responsibilities at KPL Gas Service included calling on commercial and small industrial customers to promote the use of natural gas for heating, cooling, and dehumidification. In 1994, I left KPL Gas Service to take a position with Missouri Public Service as a Commercial Energy Engineer. In this role, I called on commercial and small industrial customers to promote the use of natural gas and electricity in a variety of applications. Missouri Public Service was owned by Aquila (formerly UtiliCorp) and, in 1994, I was promoted to an Account Executive position with one of Aquila's unregulated affiliates, UtiliCorp Energy Solutions. In this capacity, I sold natural gas to large commercial and industrial customers.

I joined SEMCO Gas in 1996 as the Director of Key Accounts in the Marketing Department, to manage the group dedicated to working with SEMCO Gas's largest customers. In 1998, I assumed the broader role of Director of Marketing, managing all aspects of marketing at SEMCO Gas. In mid-2004, I assumed responsibility for Corporate Communications, in addition to marketing, In December 2013, my title was

changed to Director of Business Development, and I continue managing all aspects of marketing and external communications today.

Q. What are your responsibilities as Director of Business Development?

A. I am responsible for all of SEMCO Gas's marketing and external communications. This includes 1) administering the Company's Customer Attachment Program, to market natural gas the Company's service territory; 2) marketing natural gas or transportation services to the Company's largest customers; and 3) managing all of SEMCO Gas's external communications and public relations efforts.

Q. Have you previously testified before the Michigan Public Service Commission (the "MPSC" or the "Commission")?

A. Yes. I have testified before the MPSC in several of SEMCO Gas's previous general rate cases and other miscellaneous proceedings including Case Nos. U-13575, U-14338, U-14893, U-16125, U-16169, U-17790, and U-18202.

Q. What is the purpose of your direct testimony in this proceeding?

A. The purpose of my testimony is to discuss the various challenges that SEMCO Gas faces when trying to meet new customer gas requirements in the Upper Peninsula ("U.P.") of Michigan, to address the concerns that some large customers have regarding the reliability of their gas service and to discuss SEMCO Gas's outreach to tribal community. Particularly in SEMCO Gas service areas in and around Houghton and Baraga, Michigan and other areas west of Marquette served by Northern Natural Gas ("NNG") referred to as U.P. West, including the Lake Linden Lateral.

Q. Are you sponsoring any exhibits in connection with your direct testimony in this proceeding?

A. No.

Q. Did SEMCO Gas established Controlled Sales Service Rules under its MPSC approved Rate Book for Natural Gas Service its U.P. West service area?

A. Yes. SEMCO Gas established controlled service rules in its U.P. West service area in early 2009.

Q. What are "Controlled Sales Service Rules"?

A. Controlled Sales Service Rules are detailed in the Company's Tariff, Section C.2. These rules provide SEMCO Gas with the authority to control the attachment of new customers for sales service load.

Q. Why did SEMCO Gas establish Controlled Sales Service Rules in the U.P. West service area in 2009?

A. In early 2009, SEMCO Gas determined that the design day demand forecast for its retail sales customers (approximately 47,300 Dth/day) would be operating at a 92% load factor and was beginning to approach the maximum amount of its contracted interstate pipeline capacity held at that time with NNG (50,150 Dth/day). Since NNG's pipeline system did not have any capacity available (which did not require a major and costly upgrade to NNG's system) SEMCO Gas made a reasonable and prudent decision to establish Controlled Sales Service Rules in its U.P. West service area to ensure it could provide adequate deliverability of natural gas supply to its existing retail sales customers.

Q. Did SEMCO Gas cease adding system sales customers to its U.P. West service area after the Controlled Sales Service Rules were established?

A. No. It's important to understand that SEMCO Gas is controlling additional system supply load to its U.P. West service area, not stopping the addition of system supply load when such load can be reliably accommodated. When SEMCO Gas established the Controlled Sales Service Rules, it determined at the time, the rules would apply to

priority levels 4, 5 and 6 as defined in the Company's Rate Book for Natural Gas Service. Generally, the Controlled Sales Service Rules apply to new system supply customers or load increases to existing system supply customers who plan to have a consumption of 50 Dth per day or more. If SEMCO Gas determines a system supply customer can be added or if an existing customer's load can be increased without negatively impacting the Company's other system supply customers, then such a customer is allowed to be connected to the system or allowed to increase their load.

Q. Has SEMCO Gas denied any potential customer's gas sales service since the Controlled Service Rules have been in place?

A. Yes, in 2009, SEMCO Gas was working with a new customer that was locating their manufacturing facility at the former KI Sawyer Air Force Base and wanted gas supply to fuel the production of their bio-fuel briquettes. The customer requested a peak load of 60 Thousand Cubic Feet (MCF) per hour and expected that the load would be constant. At that time, SEMCO Gas determined that this customer could not be reliably served due to the inability of SEMCO Gas to align enough firm NNG pipeline capacity to the interconnection point which serves the former KI Sawyer Air Force Base. It was determined that the customer could be served as transportation customer if they wanted to purchase their own natural gas supply and arrange for their own interstate pipeline transportation from a gas marketer or NNG.

Q. Was SEMCO Gas eventually able to serve this customer?

A. Yes, but only as a transportation customer.

Q. **Has SEMCO Gas been unable to serve any potential new gas load in the L'Anse, Baraga, and Houghton Area?**

A. Yes, approximately 10 years ago, an industrial customer was considering locating in the area to process the "Stamp Sands" nearby. One of the issues for that customer was the availability of natural gas to support their process.

Q. **Did SEMCO Gas formally tell the customer they could not be served?**

A. No, however SEMCO Gas did indicate that service to the customer would require significant investment and would likely be on an interruptible basis and the customer would be required to secure gas supply from a 3rd party.

Q. **Has SEMCO Gas recently served large natural gas loads in the area.**

A. Yes, in 2017 SEMCO worked with an electric producer to build a lateral from NNG to its electric production facility near Baraga, Michigan (Mihm Rice Units).

Q. **Have any customers asked for options from SEMCO Gas if NNG were unable to deliver gas?**

A. Yes, in 2023 SEMCO Gas was approached by an electric producer in the U.P. and asked if they could take gas service through SEMCO Gas's Marquette Connector Pipeline if there was a disruption on NNG. SEMCO Gas worked with the customer to develop an off-system transportation agreement with the customer that would be executed in the event of a disruption.

Q. Has SEMCO Gas reached out to any of the area tribal communities to discuss the KCP?

A. Yes, I contacted the Keweenaw Bay Indian Community ("KBIC") to discuss the project.

Q**. How was the discussion received by KBIC?**

A. KBIC provided specific instructions to SEMCO Gas that we should email project specific information including the proposed route, the timeline, and any other relevant information about the proposed project to a specific email address for the tribe. They indicated that either someone from KBIC or someone from the Natural Resources Department would reach out with any questions, comments, or concerns.

In addition, KBIC indicated that although the route does not cross specifically their tribal lands, the pipeline route would likely impact ceded land and that the tribe may have some questions or comments about the project.

Q. Was the requested information sent to KBIC?

A. Yes, I sent the information as requested on August 27, 2024.

Q. In summary, what can be concluded from the challenges described above that SEMCO Gas faces when trying to meet new customer gas requirements in the Company's U.P. West service area?

A. SEMCO Gas concludes that NNG's current U.P. pipeline system lacks sufficient deliverability to add large new customer load and that the current interstate pipeline infrastructure does cause some customers to be concerned about gas supply if NNG's line experiences a disruption.

Q Does this conclude your direct testimony at this time?

A. Yes.

MS. WELLMAN: Thank you, your Honor.

JUDGE VARCHETTI: All right. Moving on, then, I believe Staff is the only other party that has testimony to bind in, as well as several exhibits, so Mr. Orris.

MR. ORRIS: Yes, your Honor. Thank you. Staff moves for the admission of the testimony of Kevin Spence, consisting of a cover sheet and 89 pages of qualifications, questions, and answers. Staff also has the following exhibits: Exhibit S-1, consisting of one page; S-2, consisting of four pages; S-3, consisting of 23 pages; S-4, consisting of two pages; S-5, consisting of six pages; S-6, consisting of five pages; S-7, consisting of four pages; S-8, consisting of 46 pages; S-9, consisting of two pages; S-10, consisting of one page; S-11, consisting of one page; S-12, consisting of one page; S-13, consisting of 50 pages; S-14, consisting of one page; S-15, consisting of one page; S-16, consisting of one page; S-17, consisting of ten pages; S-18, consisting of 41 pages; S-19, consisting of one page; S-20, consisting of one page. All the following ones will be one page: S-21, S-22, S-23, S-24, S-25, S-26, S-27, and S-28.

Staff moves for the binding in of Mr. Spence's testimony and the admission of those

exhibits.

JUDGE VARCHETTI: Excellent. Are there any objections to binding in the testimony of Mr. Kevin Spence or any objections to the admission of Exhibits S-1 through S-28?

MS. WELLMAN: No, your Honor.

MR. MOODY: No objection.

JUDGE VARCHETTI: Well, hearing no objections, then, the testimony of Kevin Spence is bound into the record, and Exhibits S-1 through S-28 are admitted.

(Testimony bound in.)

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S T A T E OF M I C H I G A N

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

*** * * ***

In the matter of the application of	**)**	
SEMCO ENERGY GAS COMPANY	**)**	
for a certificate of public convenience	**)**	**Case No. U-21780**
and necessity to construct and operate	**)**	
the Keweenaw Connector Pipeline.	**)**	
	)	

QUALIFICATIONS AND DIRECT TESTIMONY OF

KEVIN P. SPENCE

MICHIGAN PUBLIC SERVICE COMMISSION

January 13, 2025

QUALIFICATIONS OF KEVIN P. SPENCE
CASE NUMBER U-21780
PART I

Q. Please state your name, business address, and occupation.

A. My name is Kevin P. Spence, and my business address is 7109 West Saginaw Highway, Lansing, Michigan 48917. I am employed by the Michigan Public Service Commission (MPSC or the Commission) as a Public Utilities Engineering Specialist (PUES) in the Gas Safety and Operations Division (GSOD); my working title, per my position description, is Underground Natural Gas Storage (UNGS) Specialist.

Q. On whose behalf are you testifying?

A. I am testifying on behalf of the MPSC Staff (Staff).

Q. What is your educational background?

A. I earned a Bachelor of Science degree in Geological Engineering, with a Minor in Mining, from Michigan Technological University in December of 2013.

Q. Please briefly describe your professional work experience prior to your employment with the MPSC.

A. Prior to my employment with the MPSC, I was employed in the upstream oil and gas production industry by Dart Oil and Gas Corporation (Dart) as an Engineer in the Mason, Michigan office. During my employment with Dart, I was responsible for the following:

- The review and performance analysis of the company's oil and gas production wells, waterflood injection wells, and brine disposal wells;
- The review of operational expenses;
- The review of capital expenditure requirements and economic feasibility studies of re-work and re-completion projects;

- The geologic and reserve analysis of behind-pipe hydrocarbon production potential;
- The environmental assessment and area monitoring of chloride remediation activities;
- The production string optimization and production efficiency;
- The economic viability review and analysis of production asset acquisitions;
- The development, completion, and submittal of mid-year and year-end company reserve reports; and
- The representation of the company during drilling, open-hole logging operations, and completions of newly permitted hydrocarbon production wells and re-work operations.

Q. During your employment with Dart, did you participate in any professional meetings, seminars, or training outside of your direct work-related duties and responsibilities?

A. Yes. During my employment with Dart, I attended:

- Multiple Michigan Oil and Gas Association (MOGA) meetings;
- Core Workshop seminars hosted by the Michigan Geological Repository for Research and Education Geosciences Department and Western Michigan University, part of the Michigan Geological Survey and MOGA;
- Open-hole Log Analysis and LMKR Geographix training hosted by Boog Exploration and Consulting; and

- Hydrogen Sulfide Safety Training hosted by Scott E. Carroll Safety Training & Consulting.

Q. When did you begin your employment with the MPSC?

A. In November of 2017, I was offered, and accepted, a position as a Public Utilities Engineer (PUE) in the then Gas Operations Section of the Operations and Wholesale Markets Division, now GSOD, with the MPSC.

Q. What were your duties and responsibilities as a PUE within the Gas Operations Section of the MPSC?

A. My responsibilities as a PUE within the Gas Operations Section of the MPSC included, but was not limited to:

- Engineering duties related to the Commission's regulation of natural gas well production and proration;
- UNGS;
- Gas pipeline safety;
- Compliance with the Commission's Technical Standards for Gas Service (Gas Tech. Standards), including review of gas utilities' meter testing programs;
- Serving as case coordinator in Public Act 9 of 1929 (Act 9) siting for natural gas pipelines, Public Act 16 of 1929 (Act 16) siting for liquid and carbon dioxide pipelines, Public Act 69 of 1929 (Act 69) for Certificates of Public Convenience and Necessity (CPCN), and other Gas Operations Section cases;

- Providing technical assistance and support in the preparation of data and information pertaining to docketed natural gas related cases; and
- Various other utility functions, including review of gas utilities' customer attachment programs and complaints or inquiries related to those programs.

Additionally, I had been accompanying the Pipeline and Hazardous Materials Safety Administration (PHMSA) during the inspection of Michigan's intrastate and interstate UNGS fields beginning in 2018.

Q. When did you receive the promotion from PUE to PUES in the Gas Operations Section of the MPSC?

A. I was promoted to PUES in the Gas Operations Section, with the working title of UNGS Specialist, in September of 2021.

Q. What are your current duties and responsibilities as a UNGS Specialist within the GSOD of the MPSC?

A. In 2021, the MPSC, in cooperation with the Department of Environment, Great Lakes, and Energy's (EGLE) then Oil, Gas, and Minerals Division, now Geologic Resources Management Division (GRMD), was approved to be PHMSA's partner and granted certification[1] to conduct the inspections, and enforcement, of Michigan's intrastate UNGS fields. At this time, I was promoted to UNGS

[1] Beginning in 2024, PHMSA changed the MPSC/EGLE joint UNGS Partnership in the UNGS Program from a 60105 Certification to a 60106 Agreement due to insufficient penalties the MPSC was authorized to assess. Due to the program change, the MPSC/EGLE joint UNGS Partnership no longer had authorization for enforcement in the UNGS Program. On October 8, 2024, Senate Bill 366, which brought the MPSC's penalty authorization up to PHMSA's UNGS Program standards, was signed by the Governor and passed as Public Act 131 of 2024 (Act 131). Subsequently, on October 8, 2024, PHMSA reinstated the MPSC/EGLE joint UNGS Partnership's 60105 Certification status.

Specialist. In addition to my duties and responsibilities as a PUE within the Gas Operations Section of the MPSC as previously noted, as a UNGS Specialist, I am responsible for:

- Conducting inspections of all Michigan intrastate UNGS operators' procedures, records, and field assets related to the UNGS Facilities regulations (49 CFR 192.12) and the American Petroleum Institute (API) Recommended Practice (RP) 1170, Design and Operation of Solution-mined Salt Caverns Used for Natural Gas Storage, and API RP 1171, Functional Integrity of Natural Gas Storage in Depleted Hydrocarbon Reservoirs and Aquifer Reservoirs, industry standards, incorporated by reference;
- Coordinating all inspections of Michigan intrastate UNGS facilities with EGLE's OGMD;
- Participating in all Michigan interstate gas storage operator inspections conducted by the Federal Department of Transportation's (DOT) PHMSA;
- Tracking and conducting follow-up inspections statewide of incidents and Safety Related Conditions (SRCs) involving issues related to UNGS facilities; and
- Assist the Commission and OGMD management with the maintenance of the GSOD's MPSC Pipeline Safety Database to accommodate gas storage inspections, maintaining inspection and program data in PHMSA's database, and administration of the PHMSA Grant associated with the UNGS program.

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Q. Have you provided a leadership role in Commission activities?

A. Yes. In February of 2019, I was selected as a workgroup chair to lead the Commission's response on the natural gas portion of the Michigan Statewide Energy Assessment (SEA) report. As a follow-up to the recommendations provided in the final SEA report issued in September of 2019, I was selected as the project lead for two collaborative workgroups; one to investigate options for expanding mutual aid agreements and contingency planning between Michigan's natural gas utilities[2]; and the other to explore potential updates to the utility curtailment tariffs[3].

Q. During your employment with the MSPC, have you participated in any professional meetings, seminars, workgroups, or training outside of your direct work-related duties and responsibilities?

A. Yes. I have attended:

- Multiple Oil and Gas Advisory Committee (OGAC) meetings;
- Pipeline safety training hosted by Flour and HDR Inc.;
- Asbestos awareness training hosted by Consumers Energy Company;
- Incident Investigation, Root Cause Analysis Training, and MORT Certification hosted by Conger & Elsea;
- The 13th Annual API Cybersecurity Conference for the Oil & Natural Gas Industry;

[2] MPSC Case No. U-20631
[3] MPSC Case No. U-20632

- The 2019 Pipeline Safety Conference hosted by the Gas Operations Section of the MPSC;
- The 2023 Michigan Energy Providers Conference;
- The Fundamentals of Hydrogen course hosted by GTI Energy;
- The API Task Group to revise Version 2 of the Pipeline Supervisory Control and Data Acquisition (SCADA) Security Standard 1164 to Third Edition; and
- The Fugitive Emissions of Methane and VOCs from Underground Natural Gas or refined Production Pipelines Workgroup led by EGLE's Air Quality Division (AQD).

Q. Are you a member in good standing with any professional organizations?

A. Yes. I have been a member in good standing with the Society of Petroleum Engineers since September of 2013.

Q. Have you participated in any other cases before the MPSC prior to this current proceeding?

A. Yes. I have participated, in various capacities, in the following cases before the MPSC:

Case No.	**Case Description**
U-18424	Consumers Energy Company gas rate case
U-18999	DTE Gas Company gas rate case
U-20062	DTE Gas Company Act 69 case
U-20089	Consumers Energy Company and CMS Generation Michigan Power LLC Act 9 case

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1	U-20143	Consumers Energy Company Act 69 case
2	U-20198	Zeeland Farm Services Ithaca, LLC Act 9 case
3	U-20280	DTE Gas Company C8 tariff case
4	U-20322	Consumers Energy Company gas rate case
5	U-20346	DTE Gas Company Technical Standards for Gas Service waiver case
6	U-20351	Northern States Power Company C8 tariff case
7	U-20464	Michigan Public Service Commission Statewide Energy Assessment
8	U-20479	SEMCO Energy Gas Company gas rate case
9	U-20517	Michigan Gas Utilities Corporation Technical Standards for Gas
10		Service waiver case
11	U-20568	Consumers Energy Company Act 9 case
12	U-20608	Michigan Public Service Commission Technical Standards for Gas
13		Service revision case
14	U-20618	Consumers Energy Company Act 9 case
15	U-20626	Consumers Energy Company Technical Standards for Gas Service
16		waiver case
17	U-20631	Michigan Public Service Commission Natural Gas Mutual Aid &
18		Contingency Planning Workgroup
19	U-20632	Michigan Public Service Commission Natural Gas Curtailment
20		Procedures Workgroup
21	U-20634	Michigan Public Service Commission revisions to prescribed fees for
22		Act 9 & Act 16 cases
23	U-20637	Consumers Energy Company Act 9 case

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U-20640	DTE Gas Company Act 9 case
U-20641	DTE Gas Company Act 9 case
U-20718	Michigan Gas Utilities Corporation gas rate case
U-20738	SEMCO Energy Gas Company Act 9 case
U-20745	Bluewater Gas Storage LLC inspection schedule application
U-20752	Michigan Gas Utilities Corporation Act 69 case
U-20763	Enbridge Energy, Limited Partnership Act 16 case
U-20798	Consumers Energy Company Act 9 case
U-20828	Consumers Energy Company waiver application
U-20842	Consumers Energy Company Act 9 case
U-20853	Michigan Gas Utilities Corporation Act 9 case
U-20894	DTE Michigan Lateral Company Act 9 case
U-20940	DTE Gas Company gas rate case
U-20945	Consumers Energy Company Technical Standards for Gas Service waiver case
U-20975	DTE Gas Company Technical Standards for Gas Service waiver case
U-20983	Michigan Gas Utilities Corporation Act 9 case
U-20993	Saginaw Bay Pipeline Company transportation rates case
U-20994	DTE Michigan Gathering Company Delivery Point Agreement case
U-21024	DTE Gas Company Technical Standards for Gas Service waiver case
U-21027	SEMCO Energy Gas Company Technical Standards for Gas Service waiver case
U-21086	Consumers Energy Company revision of natural gas curtailment tariff

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		provisions case
	U-21091	Lambda Gathering, LLC Act 9 case
	U-21093	Wallick-Hendy Development Company, LLC Declaratory Ruling case
	U-21098	Brightmark Castor RNG LLC Act 9 case
	U-21114	Michigan Gas Utilities Corporation Technical Standards for Gas Service waiver case
	U-21119	DTE Gas Company Act 9 case
	U-21162	DTE Gas Company Act 69 case
	U-21167	Presque Isle Electric & Gas Co-op Act 69 case
	U-21175	DTE Gas Company Act 69 case
	U-21179	Consumers Energy Company Act 9 case
	U-21181	SEMCO Energy Gas Company Act 69 case
	U-21182	DTE Gas Company Act 69 case
	U-21187	Marysville Hydrocarbons LLC Act 16 case
	U-21188	DTE Gas Company Act 69 case
	U-21190	NGL Energy Supply Terminal, LLC Act 16 case
	U-21213	Consumers Energy Company Act 9 case
	U-21226	Northern States Power Company rate case
	U-21289	De Saegher Energy LLC Act 9 case
	U-21291	DTE Gas Company gas rate case
	U-21292	Michigan Gas Utilities Corporation Act 9 case
	U-21301	Citizens Gas Fuel Company Act 9 case
	U-21308	Consumers Energy Company gas rate case

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U-21333 Consumers Energy Company Act 69 case

U-21335 Lambda Energy Resources LLC Act 9 case

U-21341 Consumers Energy Company Technical Standards for Gas Service waiver case

U-21366 Michigan Gas Utilities Corporation rate case

U-21406 DTM Michigan Gathering Company Gas transportation rates case

U-21490 Consumers Energy Company gas rate case

U-21510 Consumers Energy Company & DTE Gas Company Act 9 case

U-21525 DTE Michigan Lateral Company transportation rates case

U-21529 DTE Gas Company Act 69 case

U-21540 Michigan Gas Utilities Corporation rate case

U-21589 Consumers Energy Company Act 9 case

U-21622 Complaint against Consumers Energy Company case

U-21624 SEMCO Energy Gas Company MRP and IRIP case

U-21629 Consumers Energy Company Act 9 case

U-21637 MCL 460.6a Application Process Investigation case

U-21782 Ameresco Woodland Meadows Romulus LLC Act 9 case

U-21785 SEMCO Energy Gas Company Act 9 case

U-21806 Consumers Energy Company gas rate case

U-21825 SEMCO Energy Gas Company Act 69 case

U-21839 DTE Gas Company Technical Standards for Gas Service waiver case

U-21842 Consumers Energy Company Act 9 case

Q. Have you filed testimony before the MPSC in any of the aforementioned cases?

QUALIFICATIONS OF KEVIN P. SPENCE
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PART I

A. Yes, I have filed testimony before the MPSC in the following cases:

Case No.	Case Description
U-18424	Consumers Energy Company gas rate case
U-20198	Zeeland Farm Services Ithaca, LLC Act 9 case
U-20322	Consumers Energy Company gas rate case
U-20479	SEMCO Energy Gas Company gas rate case
U-20618	Consumers Energy Company Act 9 case
U-20894	DTE Michigan Lateral Company Act 9 case
U-20940	DTE Gas Company gas rate case
U-20993	Saginaw Bay Pipeline Company Act 9 case
U-21291	DTE Gas Company gas rate case
U-21292	Michigan Gas Utilities Corporation Act 9 case
U-21308	Consumers Energy Company gas rate case
U-21490	Consumers Energy Company gas rate case
U-21498	DTE Gas Company Act 9 case
U-21525	DTE Michigan Lateral Company transportation rates case
U-21540	Michigan Gas Utilities Corporation rate cases
U-21622	Complaint against Consumers Energy Company case

DIRECT TESTIMONY OF KEVIN P. SPENCE
CASE NUMBER U-21780
PART II

Q. What is the purpose of your direct testimony in this proceeding?

A. The purpose of my direct testimony in this proceeding is to provide Staff's analysis and recommendations to the Commission regarding SEMCO Energy Gas Company's (SEMCO Gas or the Company) application requesting the Commission grant a certificate of public convenience and necessity for the construction and operation of a new natural gas transmission pipeline, known as the Keweenaw Connector Pipeline (KCP), between Three Lakes and Baraga, Michigan, and determine that the KCP, when constructed and operated, will serve the convenience and necessities of the public.

Q. Please describe the project proposed by the Company in this application proceeding.

A. Per the Company's Application:

> The KCP and related facilities are necessary for the safe, reliable, and efficient conduct of SEMCO Gas's public utility business and will serve the public interest. The KCP will provide system redundancy and mitigate the Company's supply deliverability and reliability concerns in its U.P. West service area. Specifically in northern Baraga and Houghton Counties over 14,000 residents and critical infrastructure rely on the [Northern Natural Gas (NNG)] transmission system to supply natural gas. Failure of the existing NNG pipeline would result in outages to these residents and critical infrastructure. The KCP is required to build essential redundancy into the existing natural gas transmission system with the ability to back feed the NNG system in the event of a supply disruption. The KCP will also address a design day deficiency on the Lake Linden Lateral.

Q. Are you sponsoring any exhibits in this proceeding?

A. Yes. I am sponsoring the following 28 Staff Exhibits:

Exhibit S-1: Discovery Response 1-STAFF-2, is a 1-page exhibit which displays SEMCO Gas' response to a Staff discovery request with respect to proposed KCP project cost recovery.

Exhibit S-2: Interagency Meeting Agenda, is a 4-page exhibit which displays the discussion topics for the MPSC's December 17, 2024, Interagency Meeting for the proposed KCP project.

Exhibit S-3: Interagency Meeting Presentation, is a 23-page exhibit which displays the presentation Staff provided during the December 17, 2024, Interagency Meeting with respect to the proposed KCP project.

Exhibit S-4: Michigan State Historic Preservation Office Comments, is a 2-page exhibit which displays the email and attached comments received by Staff from the Michigan State Historic Preservation Office regarding the KCP project with respect to the proposed KCP project.

Exhibit S-5: Commission Tribal Liaison Notification, is a 5-page exhibit which displays the Commission's Tribal Liaison's notification to the Native American Tribes of Michigan of this instant case.

Exhibit S-6: Gun Lake Tribe Notification, is a 5-page exhibit which displays the response by the Gun Lake Tribe to Staff's Tribal outreach with respect to the proposed KCP project.

Exhibit S-7: Keweenaw Bay Indian Community Consultation Request, is a 4-page exhibit which displays the Keweenaw Bay Indian Community's request to Staff for a consultation with respect to the proposed KCP project.

Exhibit S-8: Keweenaw Bay Indian Community Consultation Presentation, is a 23-page exhibit which displays the presentation Staff provided during the December 16, 2024, consultation with the Keweenaw Bay Indian Community representatives with respect to the proposed KCP project.

Exhibit S-9: Discovery Response 1-STAFF-3, is a 1-page exhibit which displays SEMCO Gas' response to a Staff discovery request with respect to the communication between the Company and the Keweenaw Bay Indian Community for the proposed KCP project.

Exhibit S-10: Discovery Response 1-STAFF-12, is a 1-page exhibit which displays SEMCO Gas' response to a Staff discovery request with respect to the estimated temporary workspace and permanent easement widths for the proposed KCP project.

Exhibit S-11: Discovery Response 1-STAFF-14, is a 1-page exhibit which displays SEMCO Gas' response to a Staff discovery request with respect to the estimated construction work area widths for the proposed KCP project.

Exhibit S-12: Discovery Response 1-STAFF-13, is a 1-page exhibit which displays SEMCO Gas' response to a Staff discovery request with respect to the utilization of industry standards to determine temporary workspace and permanent easement widths for the proposed KCP project.

Exhibit S-13: Temporary Right-of-Way Width Requirements for Pipeline Construction, is a 50-page exhibit which displays a study that identifies the baseline width for a safe and maneuverable construction right-of-way based on pipeline diameter.

Exhibit S-14: Discovery Response 1-STAFF-17, is a 1-page exhibit which displays SEMCO Gas' response to a Staff discovery request with respect to the identity of the State of Michigan agency which manages portions of land which would be traversed by the proposed KCP project.

Exhibit S-15: Discovery Response 1-STAFF-7, is a 1-page exhibit which displays SEMCO Gas' response to a Staff discovery request with respect to mutual aid requirements should an incident occur prior to the construction and utilization of the proposed KCP project.

Exhibit S-16: Discovery Response 1-STAFF-6, is a 1-page exhibit which displays SEMCO Gas' response to a Staff discovery request with respect to five single-feed gate stations which will not be immediately addressed by the proposed KCP project.

Exhibit S-17: Midstream Conservation Program Presentation, is a 10-page exhibit which displays an August 2024 presentation provided by API representatives with respect to the Midstream Conservation Program.

Exhibit S-18: API Guidance for Conservation Programs on Pipeline Right-of-Ways, is a 41-page exhibit which displays an API document providing "guidelines, resources, and strategies for pipeline operators and managers to use in the development and management of conservation programs for pipeline rights-of-way (ROW) and assets."

Exhibit S-19: Discovery Response 1-STAFF-16, is a 1-page exhibit which displays SEMCO Gas' response to a Staff discovery request with respect to the API's Midstream Conservation Program.

Exhibit S-20: Discovery Response 2-STAFF-23, is a 1-page exhibit which displays SEMCO Gas' response to a Staff discovery request with respect to the Company meeting with the API to discuss the Midstream Conservation Program.

Exhibit S-21: API Midstream Conservation Program Meeting Request, is a 1-page exhibit which displays an email from Staff to representatives of the API requesting a meeting to discuss the Midstream Conservation Program with SEMCO Gas.

Exhibit S-22: Discovery Response 1-STAFF-11, is a 1-page exhibit which displays SEMCO Gas' response to a Staff discovery request with respect to API RP 1185, Pipeline Public Engagement, First Edition.

Exhibit S-23: Discovery Response 1-STAFF-15, is a 1-page exhibit which displays SEMCO Gas' response to a Staff discovery request with respect to the API Guidance for Conservation Programs on Pipeline Right-of-Ways document.

Exhibit S-24: Discovery Response 3-STAFF-25, is a 1-page exhibit which displays SEMCO Gas' response to a Staff discovery request with respect to pre-application meetings with EGLE, or any other State of Michigan agency which has permitting requirements relative to the proposed KCP project.

Exhibit S-25: Discovery Response 3-STAFF-24, is a 1-page exhibit which displays SEMCO Gas' response to a Staff discovery request with respect to exemption requests to the SHPO to perform an Archaeological Site File review for non-Section 106 of the National Historic Preservation Act compliance projects.

Exhibit S-26: Discovery Response 3-STAFF-27, is a 1-page exhibit which displays SEMCO Gas' response to a Staff discovery request with respect to a request for non-confidential shape files of the proposed KCP project route which can be shared with other State of Michigan agencies.

Exhibit S-27: Discovery Response 3-STAFF-26, is a 1-page exhibit which displays SEMCO Gas' response to a Staff discovery request with respect to a .kmz file of the proposed KCP project route identifying the portions of the route which are proposed to be constructed within previously disturbed right-of-way.

Exhibit S-28: Tribal Correspondence Request to SEMCO, is a 1-page exhibit which displays an email sent by Staff to Company witness Timothy J. Lubbers inquiring if the Company would be willing to contact the Keweenaw Bay Indian Community and discuss their concerns with the proposed KCP project in and around Menge Creek.

Q. Were these exhibits prepared by you or under your direction?

A. Yes. These exhibits were prepared by me, or under my direction; however, some of the source information contained in the exhibits may have been generated by others.

Q. How does SEMCO plan to recover the cost of the proposed KCP project?

A. Per a discovery response provided by Company witness Jennifer L. Dennis:

> All cost recovery requests will come through separate and subsequent cases filed with the MPSC. No cost recovery is being requested in the instant case.

Please refer to Staff Exhibit S-1 to review the discovery request, and response, in its entirety.

Q. Has Staff contacted other State of Michigan agencies regarding the Company's proposed KCP project?

A. Yes. On December 17, 2024, Staff hosted an interagency meeting to discuss the Company's application for the proposed KCP project. Staff invited representatives from the following State agencies to participate in the meeting and discuss their roles in the project, and to express any concerns:

- Michigan Department of Natural Resources (DNR);
- EGLE;
- Michigan Department of Transportation (MDOT); and
- Michigan State Historic Preservation Office (SHPO).

Please refer to Staff Exhibit S-2 to review Staff's agenda for the interagency meeting.

Q. Which State agencies, in addition to the MPSC, participated in the Interagency Meeting?

A. In addition to Staff, representatives from the following State agencies attended the Interagency Meeting:

- Michigan Department of Natural Resources (DNR);
- EGLE;
- Michigan Department of Transportation (MDOT); and
- Michigan State Historic Preservation Office (SHPO).

Q. What was discussed during the Interagency Meeting?

A. Staff gave attendees a general overview of the MPSC process for Act 9 natural gas pipeline siting applications and summarized the proposed KCP project

application and the Company's filed testimony and exhibits. The remainder of the meeting was allotted for open discussion, and for agency members to ask questions or voice concerns related to their specific agency-roles. Please refer to Staff Exhibit S-3 to review Staff's presentation to the attending State Agency representatives.

Q. Were there any concerns discussed during the Interagency Meeting?

A. Yes, Staff's understanding of the concerns discussed during the Interagency Meeting are summarized thusly:

- DNR – Representation from the DNR is concerned that GEI Consultants of Michigan, P.C. (GEI Consultants), SEMCO's consultant for their Environmental Assessment Report (EAR), was not able to perform an archaeology review for the proposed KCP route as archaeology documentation isn't publicly available due to the confidential and sensitive nature of the information. The DNR also noted that portions of the proposed KCP route cross the Baraga State Forest, of which the DNR has an interest; the DNR mentioned that they would need to look closer at this area for the presence of cultural and other resources.
- EGLE – Representation from the EGLE noted that they will be doing a more thorough review of wetland impacts, and require alternatives to permanent impacts to wetlands if horizontal directional drill (HDD) or other trenchless construction methods are feasible options in these sensitive environmental areas. EGLE also recommended that SEMCO

Gas request a pre-application meeting with their divisions to discuss the project, and related permitting requirements, in greater detail.

- MDOT – Representation from the MDOT mentioned that trenchless installation would be required for all crossings of roadways which are maintained by the MDOT.
- SHPO – Representation from the SHPO noted that while Archaeological Site File reviews are typically reserved for Section 106 of the National Historic Preservation Act (NHPA) compliance projects, companies may request an exception for the SHPO to conduct Archaeological Site File reviews for non-Section 106 projects by contacting Scott Slagor (slagors2@michigan.gov), SHPO's Cultural Resource Manager. The SHPO was also interested in understanding which portions of the proposed KCP route would be constructed through previously disturbed right-of-way (ROW) and which portions would be constructed through undisturbed ROW; and the SHPO recommended that an archaeological survey be conducted for all portions of the KCP route which are to be constructed in undisturbed ROW. The SHPO would like to review a shape file (.shp) of the proposed route to determine if there are any resources which were not identified by GEI Consultants' review. Additionally, the SHPO noted that they are currently undertaking a process to make their records available online for qualified professionals to review; SHPO anticipates that the information will be available in January of 2025 for Applicants to review

for archaeological, cultural, and historic resources without heavily relying on the SHPO for review.

Subsequent to the Interagency Meeting, the SHPO provided comments to Staff on December 18, 2024, regarding the Interagency Meeting discussion and the Company's filings; please refer to Staff Exhibit S-4 to review the SHPO's comments in their entirety.

Q. How has Staff addressed the aforementioned agency concerns?

A. Staff addresses the agencies' concerns in Section IV of this direct testimony. Furthermore, for any agency concerns which may, or may not, be addressed during this instant case, Staff assured each attending agency representative that a Commission order approving the Company's proposed KCP project would not supersede their own respective agency reviews, permitting procedures, and determinations.

Q. Were any of the agency representatives attending the Interagency Meeting opposed to the proposed KCP project?

A. None of the attending agency representatives stated that they were opposed to the Company's proposed KCP project, understanding that their concerns would either need to be addressed during this proceeding or their respective permitting processes.

Q. Why did Staff conduct the December 17, 2024, Interagency Meeting?

A. While Staff is well aware that many other State agencies have their own applicable rules and permitting requirements that the Company must adhere to, in addition to the Commission's issuance of a CPCN, it is Staff's opinion that the

input of these additional agencies is instrumental in establishing Staff's position, particularly if there are any concerns that should be addressed in Staff's testimony. Additionally, the other agencies may not be afforded advance notice prior to permits being filed, which does not allow the opportunity for State agencies to collectively and collaboratively discuss the project, potential issues, and possible solutions prior to permitting. Expressing these concerns during the Interagency Meeting allows Staff the opportunity to address the issues during the Commission's proceedings.

Q. Has Staff, in accordance with Executive Directive 2019-17[4], provided a summary overview of the Company's application and extended an offer for an informal consultation meeting to Michigan's Tribes?

A. Yes. On September 27, 2024, the Commission's Legislative and Tribal Liaison emailed the Tribes of Michigan with an application overview and invitation for an informal consultation, in accordance with Executive Directive 2019-17. Please refer to Staff Exhibit S-5 to review the email which was provided to Michigan's Tribes by the Commission's Tribal Liaison, including an Application Summary for this instant case.

Q. Have any of Michigan's Tribes requested an informal consultation regarding this instant case?

A. Per the correspondence emailed to Michigan's Tribes by the Commission's Tribal Liaison, the time limit to request an informal consultation was October 11, 2024;

[4] Executive Directive 2019-17 can be reviewed by clicking the following link: https://www.michigan.gov/whitmer/news/state-orders-and-directives/2020/02/21/executive-directive-2019-17#:~:text=This%20Accord%20served%20as%20an,to%20minimize%20and%20avoid%20disputes.

however, Staff did receive correspondence from two Tribes after the aforementioned date. On November 6, 2024, the Gun Lake Tribe sent an email to the Commission's Tribal Liaison relaying that "[g]iven the undertakings' location [is] outside of the Tribe's Area of Interest, [they] are not providing any additional comments and defer consultation on [this] undertaking … unless the area of potential effect (APE) changes and expand past current county and/or state boundaries." Please refer to Staff Exhibit S-6 to review the correspondence from the Gun Lake Tribe, relative to this instant case, in its entirety. Additionally, on November 19, 2024, the Keweenaw Bay Indian Community (KBIC) requested a consultation with Staff regarding the subject of this instant case. Please refer to Staff Exhibit S-7 to review the correspondence from the KBIC in its entirety. Subsequently, Staff hosted the requested informal consultation with representatives from the KBIC on December 16, 2024. Please refer to Staff Exhibit S-8 to review Staff's presentation to the KBIC regarding this instant case.

Q. What information were the KBIC representatives most interested in discussing during the consultation?

A. The KBIC representatives were most interested in understanding the Commission's contested case process, Staff's review process, discussing the Company's application and environmental review, and relaying their concerns.

Q. What concerns did the KBIC representatives relay to Staff during the consultation?

A. The KBIC representatives mentioned that the KBIC, jointly with the DNR, is engaged in a project in and around Menge Creek. The KBIC representatives were

particularly focused on how the Company's KCP could impact their project with the DNR. The KBIC representatives requested a map from Staff that was more detailed than those publicly available in the Company's filings. Additionally, the KBIC representatives noted that Alden Connor, the Tribal Historic Preservation Officer (THPO) for the KBIC should be included as a contact in the Company's Unanticipated Discoveries Plan (UDP).

Staff addresses the KBIC's concerns in Section IV of this direct testimony.

Q. Has the Company contacted any Tribes of Michigan with regard to the proposed KCP project?

A. Per the direct testimony of Company witness Lubbers:

> Yes, I contacted the Keweenaw Bay Indian Community ("KBIC") to discuss the project.

Q. What was discussed between the Company and the KBIC?

A. Per the direct testimony of Company witness Lubbers:

> KBIC provided specific instructions to SEMCO Gas that we should email project specific information including the proposed route, the timeline, and any other relevant information about the proposed project to a specific email address for the tribe. They indicated that either someone from KBIC or someone from the Natural Resources Department would reach out with any questions, comments, or concerns.
>
> In addition, KBIC indicated that although the route does not cross specifically their tribal lands, the pipeline route would likely impact ceded land and that the tribe may have some questions or comments about the project.

Q. Was the information requested by the KBIC sent?

A. Per the direct testimony of Company witness Lubbers:

> Yes, I sent the information as requested on August 27, 2024.

However, upon response to a line of Staff discovery requests, Company witness Lubbers stated the following:

> During the preparation of my response to this Discovery Request, I discovered that the email that was intended for EXHIBITS OF was not sent properly and ultimately was not received by the intended party. SEMCO Gas has not had any additional conversation with KBIC since my first and only conversation with the tribe in August 2024. On November 22, 2024, I sent the email to [KBIC] and confirmed receipt.

Please refer to Staff Exhibit S-9 to review the line of discovery requests, and responses, in its entirety.

Q. Have intervenors been admitted into this instant case?

A. Yes. During the October 17, 2024, prehearing conference, the Administrative Law Judge (ALJ) admitted the Attorney General (AG) and Jordan Murray, a landowner who received the Company's Notice of Hearing for this instant case, as intervening parties to this instant case.

Q. Please describe the planned construction timeline for the proposed KCP project.

A. Per the direct testimony of Company witness Dustin A. Youngs:

> Preliminary engineering work, route selection and the Environmental Assessment Report are complete. Upon certification, the right-of-way acquisition, material procurement, permits, engineering, and contract awards will take 9-12 months. Construction will then commence and take approximately 12 months. The Company is seeking to have the KCP in-service as of Q4 2026.

Q. Please summarize Staff's review of the Company's application, direct testimony, and exhibits.

A. Staff has reviewed the Company's filings in this proceeding with a focus on the project route, necessity, engineering specifications, and environmental impact.

Furthermore, Staff has worked with the Company to obtain additional information via discovery request, in addition to reviewing discovery responses to the intervening parties to this case. Additionally, the Company hosted a Technical Conference on December 30, 2024, to discuss the details of this instant case, and address questions thereof, with the parties to this instant case. The Company also permitted Staff to extend the Technical Conference invitation to the State of Michigan agencies who participated in the Interagency Meeting to address their concerns; of which, DNR and MDOT representatives were in attendance for the Technical Conference.

Q. What was addressed during the Technical Conference?

A. The Technical Conference discussion included, but was not limited to, an overview of the project route, a discussion of future plans for added redundancy to the Company's pipeline system north of Baraga, Michigan, various outage scenarios for normal winter and peak-day demand, and discussion of discovery request responses.

Q. How is your direct testimony organized?

A. The remainder of my direct testimony is organized into the following five sections:

I. Staff's Review of the Proposed KCP Route;

II. Staff's Review of the Necessity of the Proposed KCP;

III. Staff's Review of the Engineering Specifications of the Proposed KCP;

IV. Staff's Review of the Environmental Impact of the Proposed KCP; and

DIRECT TESTIMONY OF KEVIN P. SPENCE
CASE NUMBER U-21780
PART II

V. Staff's Overall Recommendations Regarding the Proposed KCP.

I. Staff's Review of the Proposed KCP Route

Q. Please describe the Company's proposed KCP route.

A. Per the Company's Application:

> The KCP will begin near Three Lakes, Michigan where it will originate at the proposed interconnection with an existing Northern Natural Gas ("NNG") mainline transmission pipeline. The KCP will then follow an existing American Transmission Company ("ATC") electric transmission right-of-way ("ROW") to the northwest and west for approximately 8.5 miles to Old U.S. Highway 41. The KCP will follow Old U.S. Highway 41 to the north/northwest for approximately 1.5 miles where the KCP will continue to the northwest along another existing ATC electric transmission line for approximately 16.75 miles to Krolik Road. The KCP will then follow Krolik Road 0.5 miles west then turn north and follow Grist Mill Road for 2.5 miles to State Highway M-38 to the proposed interconnect with an existing SEMCO Gas pipeline.

Q. Please describe how the Company's proposed KCP route was selected.

A. Per Section 2.2., Route Siting Alternatives, of the Company's EAR, included as Company Exhibit A-3 (DAY-1) to Company witness Youngs' direct testimony:

> UPEA – Route 1 Alternative (Proposed KCPP Corridor)
>
> UPEA – Route 1 follows a similar path as the Route B Alternative utilizing the two existing ATC electrical transmission corridors between Three Lakes and Pelkie. The route follows Old U.S. Hwy 41 for approximately 1.5 miles to transition between the two ATC corridors. Similar to Route B, utilizing this route would allow SEMCO to temporarily utilize easement currently occupied by ATC and would minimize additional impacts to property owners and minimize ROW clearing and construction easement needs. The considerations remain the same as the Route B Alternative, except UPEA – Route 1 avoids the large coniferous bog east of Grist Mill Road that is the headwaters of Gristmill Creek and Little Carp River. UPEA – Route 1 avoids the bog leaving the ATC ROW and following Krolik Road 0.5 miles west then turning north to

follow Grist Mill Road for 2.5 miles to State Hwy M-38 to the proposed interconnect with an existing SEMCO pipeline. The UPEA – Route 1 along Grist Mill Road would primarily traverse agricultural land that has been previously cleared for pastureland and hay production, lessening the overall required ROW clearing. UPEA – Route 1 is a total of 866 feet longer than Route B but avoids the sensitive headwaters of Gristmill Creek and Little Carp River.

Staff addresses the Company's route alternatives, including a no-action alternative, further into this section of direct testimony.

Q. Please describe Staff's review of the Company's proposed KCP route.

A. In the Company's application, direct testimony, and exhibits, the Company provided descriptions and aerial photographs along the entirety of the proposed KCP route, allowing for a review of the proposed project. Subsequent to the Company's filing of its application, direct testimony, and exhibits, the Company provided to Staff, through discovery response, geospatial data of the proposed KCP project for viewing on Google Earth software. Google Earth allows for the geospatial data to be overlain onto satellite imagery to create an interactive map. Additionally, Staff compared the wetlands data included in the geospatial data sent to Staff through discovery with a wetlands inventory overlay available from The National Wetlands Inventory from the U.S. Fish & Wildlife Service.

Q. What factors did Staff consider when reviewing the proposed KCP route?

A. The primary factors Staff considered were the impacts of the proposed route to the environment and landowners. Environmental impacts of concern to Staff include, but are not limited to, the near and long-term impacts of crop production, ROW clearing, surface waters, and wetlands; further environmental

considerations are addressed in Section IV of this direct testimony. The magnitude of landowner impacts involves the proximity of the proposed KCP, including proposed route locations, to existing dwellings and other building structures, the quantity of landowners impacted, the amount of ROW required, and the inconvenience and safety of the adjacent landowners during pipeline construction.

Q. Please describe the general ROW, and other land-use, requirements of the proposed KCP.

A. Per the direct testimony of Company witness Youngs:

> The land use along the KCP proposed route is largely rural and low density residential with diverse topography, including some flat sections and undulating landscape. Approximately 87% of the proposed 12-inch pipeline follows the Existing American Transmission Company ("ATC") power transmission right-of way or pipeline corridors minimizing any environmental impact which may arise from the construction of the KCP.

Additionally, per Section 3.1., Land Use and Land Cover, of the Company's EAR, included as Company Exhibit A-3 (DAY-1) to Company witness Youngs' direct testimony:

> The SEMCO KCPP Corridor is located in Baraga County to the west/southwest of the L'Anse Bay of Lake Superior, with the northern terminus of the KCPP Corridor located approximately five miles west of the Village of Baraga. The Villages of L'Anse and Baraga comprise the two nearby population centers, situated along the southeast and southwest coast of L'Anse Bay, respectively. The land cover within the KCPP Corridor is predominantly comprised of deciduous forest, mixed forest, and woody wetlands, comprising approximately 73% of the land cover.

Q. What are the estimated temporary workspace and permanent easement widths for the KCP?

A. Per a discovery response provided by Company witness Youngs:

> The widths will be determined during the 30% design phase, which is not yet complete. The 30% design is scheduled to be completed in Q1 2025. For reference, the 10-inch high-pressure Marquette Connector Lateral had a permanent easement of 40 feet, along with an additional 35 feet for temporary workspace. In areas adjacent to transmission lines, the permanent easement was adjacent to the ATC easement, while the temporary workspace was located on the opposite side.

Please refer to Staff Exhibit S-10 to review the discovery request, and response, in its entirety.

Q. What are the estimated construction work area widths for the KCP?

A. Per a discovery response provided by Company witness Youngs:

> This will be determined between SEMCO and the chosen design contractor. The estimated construction work area widths for the trenched pipeline installation of the KCP have not yet been finalized.

Please refer to Staff Exhibit S-11 to review the discovery request, and response, in its entirety.

Q. Has, or will, the Company refer to the 1999 Interstate Natural Gas Association of America (INGAA) publication, Temporary Right-of-Way Width Requirements for Pipeline Construction, or any other relevant industry standard, when determining the necessary temporary workspace and permanent easement widths for the KCP?

A. Per a discovery response provided by Company witness Youngs:

> This will be determined between SEMCO and the chosen design

> contractor. The widths for temporary workspace and permanent easements for KCP have not yet been finalized.

Please refer to Staff Exhibit S-12 to review the discovery request, and response, in its entirety.

Q. Does Staff have any recommendations regarding the Company's calculation and determination of necessary temporary workspace and permanent easement widths for the KCP?

A. Yes. Staff recommends the Company refer to the 1999 INGAA publication, Temporary Right-of-Way Width Requirements for Pipeline Construction, or similar industry standards, when determining the necessary temporary workspace and permanent easement widths for the KCP. Please refer to Staff Exhibit S-13 to review the 1999 INGAA publication, Temporary Right-of-way Width Requirements for Pipeline Construction, in its entirety. To be clear, Staff does not recommend that the Company be required to implement the guidelines of the INGAA publication, or other relevant industry standards; Staff is simply recommending that the Company, at a minimum, review the standards and determine if the guidelines are appropriate for implementation in the calculations of easement widths for the proposed KCP project.

Q. Did the Company evaluate a "No Action Alternative" to the proposed KCP?

A. Yes. Per Section 2.1., No Action Alternative, of the Company's EAR, included as Company Exhibit A-3 (DAY-1) to Company witness Youngs' direct testimony:

> The No Action alternative assumes the KCPP would not be constructed and there would be no impacts to the environmental setting. This alternative fails to meet the purpose and need of the project to build essential redundancy into the existing natural

> gas transmission system. Without the redundancy in the natural gas transmission system and the ability to back feed the NNG system in the event of a supply disruption, over 14,000 residences, hospitals, and power plants in rural Michigan could face gas delivery outages.

Q. Did the Company review alternative pipeline routes to meet the needs that would be fulfilled by the proposed KCP?

A. Yes. Per the direct testimony of Company witness Youngs:

> A total of six routes were considered. The locations of these routes are detailed in Exhibit A-3 (DAY-1), Section 2. SEMCO Gas concluded that the alternative routes were not viable in comparison with the proposed route due to the following factors:
>
> • National Historic Landmarks (NHL) List (NPS 2024a).
> • National Register of Historic Places (NRHP) Geographic Information System (GIS) Public Database maintained by the National Park Service (NPS) (NPS 2024b).
> • Tribal Directory Assessment Tool (TDAT).
>
> These factors would add to the overall cost, schedule, environmental impact, and complexity of the KCP.

Additionally, per Section 2.2, Route Siting Alternatives, of the Company's EAR, included as Company Exhibit A-3 (DAY-1) to Company witness Youngs' direct testimony:

> SEMCO contracted with Metro Engineering Solutions to complete a *Keweenaw Connector Pipeline Feasibility Study* in early 2024 (Metro Engineering Solutions, 2024). SEMCO also contracted with U.P. Engineers & Architects (UPEA), Inc to complete a *Keweenaw Connector Pipeline Review and Feasibility Study & Additional Connection Recommendations* (UPEA, 2024). These two documents identified six potential routes for the KCPP and evaluated the feasibility of each route based on factors including environmental impacts, permitting complexity, property ownership, construction accessibility, overall length, and cost. The six routes were identified as Route A, Route B, Route C, Route D, UPEA – Route 1, and UPEA Route – 2 (**Figure 2-1**). A summary of the route alternatives analysis is presented in **Table 2-1**.

Table 2-1of the Company's EAR, included as Company Exhibit A-3 (DAY-1) to Company witness Youngs' direct testimony, is reproduced herein:

Evaluated Route (length in miles)	**Waterway Crossings[1]**	**Wetland Crossing (miles)[2]**	**State Forest Land Crossing (miles)[3]**	**Notes and Other considerations**
Route A (31.6 mi.)	21	5.61	8.3	Greater number of waterway, wetland, and state forest land crossings.
Route B (30.2 mi.)	20	4.40	4.6	Crosses large coniferous bog east of Grist Mill Road that is the headwaters of Gristmill Creek and Little Carp River.
Route C (30.8 mi.)	31	5.7	2.0	Significant amount of waterway crossings. 2nd longest route with significant amount of ROW clearing. Crosses tribal land with greater regulatory permit considerations.
Route D (37.7 mi.)	35	3.52	3.7	Greatest number of water way crossings. Longest route with greatest amount of ROW clearing. Significant disruption to traffic.
UPEA-Route 1 (30.3 mi.) **(KCP Corridor)**	18	3.40	4.6	Least amount of wetland crossings. Entire route along existing transmission / transportation corridor.
UPEA-Route 2 (30.6 mi.)	16	3.63	4.5	Requires 1.4 miles of additional ROW corridor clearing along South Nestoria Road. Traffic disruption along U.S. Highway 41 during construction.

Notes:
1. Waterway crossings were evaluated using the National Hydrography Dataset of perennial and intermittent waterways.
2. Wetland crossings were evaluated using the National Wetland Inventory for Route A, Route B, Route C, and Route D. Wetland crossings were evaluated using the 2024 GEI delineated wetlands for UPEA-Route 1 (KCPP Corridor). Wetland crossings were evaluated using aerial imagery, LiDAR Hillshade, and 2-foot elevation contours for UPEA-Route 2.
3. State Forest Land Crossing was evaluated using the Michigan DNR Forestry – State Land Dataset.

Q. What is the existing land use along the Company's proposed KCP route?

A. Per Section 3.1., Land Use and Land Cover, of the Company's EAR, included as Company Exhibit A-3 (DAY-1) to Company witness Youngs' direct testimony:

> The KCPP Corridor intersects 106 parcels owned by 41 separate entities. Within the KCPP Corridor, approximately 80.2% of the land area is privately owned. Two private timber companies own approximately 54.9% of the total, which is used for timber production. Small private landowners accounting for 24.8%, with 6.2% for agriculture, 7.7% residential, and the remainder as undisclosed land use and is predominantly undeveloped. Private utility companies own 0.5% of the total area of land. The remaining 19.8% of the land area within the KCPP Corridor is owned by public entities, including the State of Michigan and the Baraga County Road Commission, with the State of Michigan owning 19.7% of the total. Much of the publicly owned land is utilized as undeveloped forested areas or developed open space. The land owned by the Baraga County Road Commission is part of an actively excavated gravel pit.

Q. Which State of Michigan agency maintains the identified 19.7% of land traversed by the proposed KCP?

A. Per a discovery response provided by Company witness Youngs:

> The parcel data provided by Baraga County does not specify the owning agency and only indicates that the State of Michigan is the owner. An analysis was conducted comparing the Protected Areas Database of the U.S. (PAD-US) with the parcel data. The findings suggest that almost all state-owned parcels are likely owned by the Michigan Department of Natural Resources. However, parcel 002-227-005-00 is probably owned by the Michigan Department of Transportation (MDOT), as it is a narrow, linear parcel along State Highway M38.

Please refer to Staff Exhibit S-14 to review the discovery request, and response, in its entirety.

Q. What residential areas are near the proposed KCP?

A. As discussed above, and in Section 3.1., Land Use and Land Cover, of the Company's EAR, included as Company Exhibit A-3 (DAY-1) to Company witness Youngs' direct testimony, "The SEMCO KCPP Corridor is located in Baraga County to the west/southwest of the L'Anse Bay of Lake Superior, with

the northern terminus of the KCPP Corridor located approximately five miles west of the Village of Baraga. The Villages of L'Anse and Baraga comprise the two nearby population centers, situated along the southeast and southwest coast of L'Anse Bay, respectively."

Q. Does Staff have any concerns with the Company's proposed KCP project route given the existing land use and proximal residential areas?

A. Yes, Staff has concerns with the depth of cover for segments of pipeline constructed within agricultural areas along the proposed KCP project route.

Q. Why does Staff have concerns with the depth of cover for segments of pipeline constructed within agricultural areas along the proposed KCP project route?

A. Specifically, Staff is concerned with the pipeline being placed with insufficient depth of cover to prevent incidents due to farming activities.

Q. Has the Company declared a specified depth of cover for the proposed KCP project?

A. Per Section IX., Trenching and Pipe Laying, of the Company's General Engineering Specifications Keweenaw Connector Pipeline included as Company Exhibit A-5 (DAY-3) to the direct testimony of Company witness Youngs:

> The trench into which the proposed pipeline will be laid shall be of sufficient width to provide ample clearance for the installation of pipe and fittings and shall be of sufficient depth to permit a cover according to 49 CFR 192.327.

Q. What are the depth of cover requirements according to 49 CFR 192.327?

A. 49 CFR 192.327, adopted by reference in R 460.20606 of the Michigan Gas Safety Standards (MGSS), states, in part:

> (a) Except as provided in paragraphs (c), (e), (f), and (g) of this section, each buried transmission line must be installed with a minimum cover as follows:

Location	Normal soil	Consolidated rock
Inches (Millimeters).		
Class 1 locations …….....	30 (762)	18 (457)
Class 2, 3, and 4 locations …...	36 (914)	24 (610)
Drainage ditches of public roads and railroad crossings …	36 (914)	24 (610)

Q. Does Staff have any recommendations with regard to the proposed KCP located within agricultural land?

A. Yes. Staff recommends that the depth of cover within all agricultural areas along the proposed KCP route be specified for a minimum of five feet.

Q. Does Staff consider a depth of cover at a minimum of five feet, specifically in agricultural areas, a best practice?

A. Yes. By providing an additional two feet of cover above the pipeline, especially in agricultural areas, the Company would mitigate accidental strikes from deep-tilling and other normal farming practices. If Staff's recommendation is accepted, and the depth of cover within all agricultural areas along the proposed route is specified to be a minimum of five feet, Staff would consider this a best practice.

Q. Has the Company secured all of the necessary easements and ROW agreements for the proposed KCP project?

A. Per the direct testimony of Company witness Youngs:

> No. However, SEMCO Gas has compiled a list of property owners along the proposed route as shown in Exhibit A-4 (DAY 2), to whom notice will be given. Upon certification, the Company will pursue the necessary rights-of-way.

DIRECT TESTIMONY OF KEVIN P. SPENCE
CASE NUMBER U-21780
PART II

Q. Has SEMCO Gas been in contact with the property owners along the proposed KCP route?

A. Per the direct testimony of Company witness Youngs:

> Yes, the Company has been in contact with many of the property owners along the KCP route. There are 41 separate entities that own 106 parcels along the proposed route. Letter's seeking permission to survey were sent to most parcel owners, with the exception of public land and areas where surveys could be completed from right of way.

Q. What is the Company's process for securing land rights with landowners who are unwilling to negotiate?

A. Per the direct testimony of Company witness Youngs:

> The Company's process for obtaining new land rights involves initiating negotiations with the landowner to try to reach a mutually beneficial agreement. If direct negotiations prove to be unsuccessful, the Company will explore other options such as alternative routes of adjacent properties/property owners, or routes within road right of way that can meet the Company's needs. As a last resort, the Company may also consider the possibility of condemnation.

Q. Does Staff have any concerns with the Company's stated process for obtaining new land rights, as described in the direct testimony of Company witness Youngs?

A. Yes. Particularly, Staff has concerns with the Company "explor[ing] other options such as alternative routes of adjacent properties/property owners". Specifically, Staff has concerns with the Company exploring options which could involve landowners who were not noticed of, and therefore not afforded an opportunity to participate in, this instant case. Staff further address this concern later in this section of direct testimony.

DIRECT TESTIMONY OF KEVIN P. SPENCE
CASE NUMBER U-21780
PART II

Q. Will the Company's proposed KCP project route cross any roads?

A. Yes. Per the direct testimony of Company witness Youngs:

> [T]he project route will intersect US Highway 41 twice and M 38 once. It crosses US Highway 41 approximately 4.7 miles west of Nestoria and again about 0.40 miles north of Alberta near the intersection of US Highway 41 and Baraga Plains Rd. The proposed project route crosses M-38 near the intersection of M-38 and Grist Mill Rd.

Q. Does the Company propose construction techniques for road crossings?

A. Yes. Per Section 1.4.7., Horizontal Directional Drill (HDD), of the Company's General Engineering Specifications Keweenaw Connector Pipeline included as Company Exhibit A-5 (DAY-3) to the direct testimony of Company witness Youngs:

> <u>Alternative Trenchless Installation Methods</u>
>
> Heavily utilized roadways (i.e. US 41) and railroad crossings are proposed to be completed using trenchless methods. A few methods commonly accepted by the MDOT for trenchless pipeline installation include horizontal auger boring (HAB), pipe ramming, pipe jacking, horizontal directional drilling (HDD), and microtunneling. The appropriate installation method for a given site is highly dependent upon utility size, subsurface conditions, allowable settlement and vibration constraints, space constraints, nearby surface features, etc. The installation method for each crossing will be evaluated during design.

Q. Does Staff have any recommendations with regard to the Company's proposed KCP project route, specifically as it relates to road crossings?

A. Not specifically. Staff understands that the Company is required to secure certain permits from the MDOT specifically with regard to the crossing of MDOT

maintained roadways. The MDOT will require the Company to adhere to specific construction techniques for the crossing of MDOT maintained roadways.

Q. Will the Company's proposed KCP project route cross any railroads?

A. Yes. Per the direct testimony of Company witness Youngs:

> The proposed project route will cross the Escanaba and Lake Superior Railroad, which is currently out of service and only used for railcar storage.

Q. Does the Company propose construction techniques for road crossings?

A. Yes. As identified above, "railroad crossings are proposed to be completed using trenchless methods."

Q. Does Staff have any recommendations with regard to the Company's proposed KCP project route, specifically as it relates to railroad crossings?

A. While Staff understands that the Escanaba and Lake Superior Railroad may not be currently in active operation, the future operation status of the railroad is unknown. Therefore, Staff recommends the Company contact the relevant authority over the Escanaba and Lake Superior Railroad to apply for any necessary permits and to determine the most appropriate construction technique for the railroad crossing.

Q. Will the Company's proposed KCP project route cross existing pipelines?

A. Yes. Per the direct testimony of Company witness Youngs:

> There will be one crossing of an existing pipeline. The proposed KCP route will cross Northern Natural Gas's Lake Linden Lateral in Section 21 Baraga Township (SE1/4 of SE1/4 of SW1/4, T50N, R34W).

DIRECT TESTIMONY OF KEVIN P. SPENCE
CASE NUMBER U-21780
PART II

Q. Does Staff have any recommendations with regard to the Company's proposed KCP project route, specifically as it relates to the crossing of existing pipelines?

A. No, not specifically. Staff understands that for a project of this scope and location, specifically with the proposed end-points of the KCP, the crossing of the Northern Natural Gas (NNG) Lake Linden Lateral is inevitable. Staff also understands that construction practices in accordance with the MGSS should mitigate any incidents during construction and operation of the KCP.

Q. Does the Company's application, direct testimony, or exhibits address deviations to the proposed KCP route as deemed necessary during pipeline construction?

A. The Company's application does mention "minor deviations", but the term is not defined in the Company's filings for this instant case.

Q. Does Staff have any recommendations with regard to the possibility of deviations to the Company's proposed KCP route as may be deemed necessary during pipeline construction?

A. Yes. Should the Commission approve the Company's proposed KCP route, Staff recommends the Commission allow for minor route deviations with the consent of private landowners, the relevant authority over public rights-of-way, or by authority granted from condemnation proceedings. Minor route deviations shall be limited to alterations in locations which do not involve the impact of additional unnoticed landowners to this case.

Q. Why is Staff recommending the Commission allow for minor deviations from the Company's proposed KCP route?

A. Allowing for deviations of the pipeline route provides the Company with the flexibility to address unforeseen complications realized during construction without the need to return to the Commission to request authorization for such deviations. Additionally, limiting the deviations to the locations of which landowners were provided notice of this case will mitigate scenarios in which an impacted, and unnoticed, landowner would be disenfranchised by not being afforded the opportunity to fully participate in this instant case proceeding.

Q. Is Staff's aforementioned definition of "minor route deviations" consistent with prior Commission orders?

A. Yes. The Commission has addressed "minor route deviations" in its prior Act 9 orders, for both fully contested and settlement agreements, which are consistent with Staff's aforementioned definition in this instant case.

Q. Does Staff have further recommendations with regard to deviations of the Company's proposed KCP route, as may be deemed necessary, during pipeline construction?

A. Yes. If the Company determines, during pipeline construction, that route deviations are necessary, Staff recommends that the Company must commit to work with the relevant landowner(s) to locate the proposed KCP within private property to a mutually beneficial location, as reasonably practicable, for both parties.

Q. Does Staff have any further concerns with the Company's proposed route of the KCP?

A. No, Staff does not have any further concerns with the Company's proposed route of the KCP.

Q. Does Staff have any further recommendations regarding the Company's proposed KCP route?

A. Yes. Staff recommends that the Company secure all easements for the KCP project before construction commences.

Q. In Staff's opinion, is the Company's proposed KCP route the most reasonable considering the landowner impact?

A. If the Company incorporates Staff's aforementioned recommendations, Staff is of the opinion that the Company's proposed KCP route is the most reasonable considering the landowner impacts.

Q. In Staff's opinion, is the Company's proposed KCP route the most reasonable considering the environmental impact?

A. Staff addresses its environmental review, including its opinion regarding whether or not the proposed KCP route is the most reasonable considering the environmental impact, in Section IV of this direct testimony.

II. Staff's Review of the Necessity of the Proposed KCP

Q. Please explain the rationale for the Company's requested authority to construct and operate the proposed KCP.

A. Per the Company's Application:

> The KCP and related facilities are necessary for the safe, reliable, and efficient conduct of SEMCO Gas's public utility business and will serve the public interest. The KCP will provide system redundancy and mitigate the Company's supply deliverability and reliability concerns in its U.P. West service

> area. Specifically in northern Baraga and Houghton Counties over 14,000 residents and critical infrastructure rely on the NNG transmission system to supply natural gas. Failure of the existing NNG pipeline would result in outages to these residents and critical infrastructure. The KCP is required to build essential redundancy into the existing natural gas transmission system with the ability to back feed the NNG system in the event of a supply disruption. The KCP will also address a design day deficiency on the Lake Linden Lateral.

Q. How is natural gas currently supplied to the Company's U.P. West service area?

A. Per the direct testimony of Company witness Michael A. Foster:

> [T]he Company's U.P. distribution systems are currently served by two upstream interstate gas pipeline transportation providers, NNG and Great Lakes Gas Transmission ("GLGT"). NNG's pipeline system consists of a single interstate transmission pipeline entering Michigan's U.P. at the Wisconsin border in Gogebic County. Within the U.P., NNG's pipeline splits into three lateral interstate transmission pipelines which provide supply to all of the Company's U.P. West service area distribution systems. NNG's U.P. lateral pipelines are commonly known as the Ontonagon Lateral, Lake Linden Lateral, and Marquette Lateral. Each of these lateral pipelines is located at the end of NNG's 14,800 mile pipeline network originating in the state of Texas. As of 2019, GLGT, by way of the Company's Marquette Connector Pipeline ("MCP"), also provides regular flowing supply to the U.P. West service area; specifically serving those customers in the greater Marquette area. GLGT's main interstate gas transmission system consists of twin 36" diameter pipelines beginning in Emerson, Manitoba, Canada (supplied by TransCanada's Canadian mainline system) and terminating in St. Clair, Michigan near Union Gas's Dawn Storage Hub. The GLGT pipeline system is capable of operating bi-directionally and has 14 Michigan gas supply receipt points with major receipt points located at Emerson, Manitoba (TransCanada); Farwell, Michigan (ANR Pipeline Co.); and St. Clair, Michigan (DTE and Union Gas/TransCanada).

Q. How is natural gas currently supplied to the Company's distribution systems in the Keweenaw Peninsula?

A. Per the direct testimony of Company witness Foster:

> Natural gas is supplied to the Company's customers in the Keweenaw Peninsula solely via NNG's lateral, commonly referred to as the Lake Linden Lateral. The Lake Linden Lateral originates at NNG's mainline tap near Watton, MI, supplying the 8" northbound transmission line with natural gas to approximately 14,000 SEMCO Gas GCR, GCC, and LVT customers in the L'Anse, Baraga, Chassel, Houghton, Hancock, Lake Linden and Calumet communities.

Q. Does a pipeline system currently exist to parallel or loop NNG's Lake Linden Lateral to provide a level of redundancy to the Company's customers in this area?

A. No, there currently are no pipeline systems in existence which parallel or loop NNG's Lake Linden Lateral to provide a level of redundancy to the Company's customers in this area. NNG has a supply receipt point into its U.P. pipeline system at Wakefield, MI, and the Company has the Marquette Connector Pipeline, but neither would provide the level of redundancy as the proposed KCP.

Q. Does the Company depend solely on NNG to provide reliable and uninterrupted natural gas supply to the Company's customers in the Keweenaw Peninsula?

A. Per the direct testimony of Company witness Foster:

> Yes. Without a redundant means to deliver natural gas to the Company's customer in the Keweenaw Peninsula, a severe outage impacting thousands of customers, including hospitals, educational facilities, power generation, and low-income communities remains of immense concern for SEMCO Gas.

Q. Why does NNG's Lake Linden Lateral present a supply reliability concern to the Company?

A. Per the direct testimony of Company witness Foster:

> Since NNG's Lake Linden Lateral is not looped, this pipeline does not feature a level of reliability necessary for the dependable delivery of supply. Such a lack of dependability presents a supply reliability concern for the Company and its

> customers due to the risk of a sudden loss of gas supply from NNG. Specifically, in the event of an interruption on the NNG's Lake Linden Lateral at any location south of the Company's L'Anse takeoff in the Keweenaw Peninsula, to the west of the Lake Linen offtake on the NNG mainline, or on a small part to the east of the Lake Linden Lateral offtake, all of the Company's 14,000 customers in this area would be at risk of a sudden loss of supply resulting in a mass outage. If such an interruption occurred during the winter period, such a mass outage would likely be a catastrophic event leaving the Company and its customers without any supply options for space heating, hot water, cooking, manufacturing, or power generation.

Additionally, per the direct testimony of Company witness Mark VanderHeuvel:

> [D]ue to the lack of redundancy on the NNG pipeline serving the Keweenaw Peninsula, any failure that occurs approximately 3.17 miles east of the Lake Linden lateral and 16.8 miles west of the Lake Linden Lateral (total of 19.97 Miles between sectionalizing valves) on the 16" lateral or any location along the 8" Lake Linden Lateral south of L'Anse/Baraga (17.9 miles) will result in approximately 14,000 customers losing gas supply including the Mihm RICE Units. A failure north of L'Anse/Baraga would result in approximate 12,000 customer outage. This lack of redundancy creates a significant reliability issue for SEMCO Gas and its customers. There is no other place on the Company's system where a single failure can result in the loss of so many customers.

Q. Are there any significant infrastructure, facilities, or large employers located in the Keweenaw Peninsula that would be impacted if an outage were to occur on the Lake Linden Lateral?

A. Per the direct testimony of Company witness VanderHeuvel:

> Yes. There are several including the Mihm RICE Units near Baraga, Michigan, Michigan Technological University in Houghton, Michigan, as well as various schools, hospitals, medical centers, nursing homes, as identified on Exhibit A-2 (MV-2).

Q. If a rupture, or similar incident resulting in a natural gas outage, were to occur between the isolation valves on the 16" NNG pipeline where the Lake Linden 8" lateral ties in or on the Lake Linden Lateral, what would be the outcome?

A. Per the direct testimony of Company witness VanderHeuval:

> A rupture on the 16" pipeline between the two isolation valve locations or on the 8" Lake Linden Lateral would [require] isolation of the ruptured area. Because there is currently no redundancy in the Keweenaw Peninsula, the rupture would [deplete] any residual gas, and 14,000 customers would [be] left without natural gas supply.

Company witness VanderHeuval continues by stating in direct testimony:

> Based on actual experience with the New Mexico Gas Company's 28,700 customer gas outage in February 2011, the total process in this scenario would take at least two to four weeks to re-establish gas service to all facilities affected by this outage.
> Unfortunately, if this failure scenario were to occur in the winter, it would place an enormous burden on the general public to find warmth. Schools, hospitals, elder care facilities, and other public buildings would struggle to keep buildings and residents warm. Warming centers would be limited to buildings heated by another source of energy such as electric, wood, oil, or propane. The outage could cause incidents of unsafe utilization of alternative sources of energy as the general public is forced to heat their home with electric, propane, oil or kerosene space heaters or fireplaces utilizing wood or coal. The outage also would certainly put a strain on the U.P. electric infrastructure as the Mihm RICE Units would not have gas supply.

Q. If an incident were to occur on the 16-inch NNG pipeline between the two isolation valves, or on the 8-inch NNG Lake Linden Lateral, which requires isolation of the impacted area, would the Company reasonably be able to re-establish gas service to all 14,000 customers and other facilities on its own, or would the Company seek mutual aid assistance?

A. Per a discovery response provided by Company witness VanderHeuvel:

> The Company would seek mutual aid assistance. SEMCO Gas lacks sufficient resources to re-establish 14,000 customers promptly. For example, when an outage in L'anse occurred in 2016 resulting in 1,193 customers impacted where SEMCO Gas crews (30 two person crews qualified for required activities) from across all service territories were dispatched to shut in each service/home/business and then re-visit each service/home/business to re-establish service, the duration for all SEMCO Gas personnel to complete shut-ins, purge and pressurize system after repairs and then re-establish each service was 32.5 hours. With the entire Keweenaw Peninsula area requiring similar need, the duration would be expected to be approximately 11 times longer in duration. While mutual aid assistance would be requested, the support services including muster locations, schedule, and coordination, ensuring qualifications, temporary housing where gas service is unavailable, would all factor into a lengthy restoration of services to this magnitude of customers.

Please refer to Staff Exhibit S-15 to review the discovery request, and response, in its entirety.

Q. How will the KCP create supply redundancy?

A. Per the direct testimony of Company witness Foster:

> The KCP will interconnect with NNG's U.P. pipeline system near Three Lakes, Michigan. Should any pipeline supply interruption occur directly on NNG's Lake Linden lateral, the KCP will offer a secondary route for gas supply to continue feeding the Company's customers in the Keweenaw Peninsula. Additionally, if an interruption were to occur on NNG's mainline west of the Lake Linden Lateral take-off, the KCP could provide an alternate route for gas supply originating from the MCP to continue serving the Keweenaw Peninsula customer base. In both scenarios, at the tie-in of KCP with the Company's Baraga Pipeline, SEMCO Gas could then backfeed NNG's pipeline at the Baraga gate to ensure supply is maintained further north into the Company's peninsular distribution systems.

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Q. Will the KCP address the five single-feed NNG gate stations identified by Company witness VanderHeuvel?

A. Per a discovery response provided by Company witness VanderHeuvel:

> No, the KCP will not address the single feed risk present on five of the gate stations in the Keweenaw. After the implementation of the KCP, there would be five single feed areas remaining. The Company intends to mitigate the risk of large customers outages at any one of the gate stations listed below through additional projects that are not transmission projects in future years. The KCP is a necessary starting point to mitigate the risk at these gate stations through these future projects. Below are the numbers of customers by gate station:
>
> L'Anse – 1,316
> Baraga #1 – 711
> Hancock #1 – 2,283
> Lake Linden – 1,346
> Calumet – 3,732

Please refer to Staff Exhibit S-16 to review the discovery request, and response, in its entirety.

Q. If there is a supply disruption directly on NNG's Lake Linden Lateral, how will the Company route natural gas supply to the KCP?

A. Per the direct testimony of Company witness Foster:

> Given the KCP is sized for full redundancy of the Keweenaw Peninsula load, should a supply disruption occur directly on NNG's Lake Linden Lateral north of its offtake form NNG's mainline, and south of the L'Anse offtake, the Company will coordinate with NNG to ensure that the Baraga 2 station, where SEMCO Gas's distribution system ties in with NNG near Baraga Township, is configured to accept a backfeed from SEMCO Gas's KCP at that time. At that point, normal flowing supply that the Company receives from NNG receipt points such as Demarc, Ventura, Ogden, or Carlton would continue north via KCP towards the Company's service areas in the Keweenaw Peninsula. Once the gas is delivered to the Company's Baraga 2 station interconnect between SEMCO Gas and NNG, gas

could then be redelivered to NNG and continue north to the Calumet, Hancock, and Houghton systems.

Q. If there is a supply disruption on NNG's mainline upstream of NNG's Lake Linden Lateral offtake, how will the Company route natural gas supply to the KCP?

A. Per the direct testimony of Company witness Foster:

> In order to facilitate supply to customers in the Keweenaw Peninsula, the Company would rely upon scheduling increased deliveries into NNG's mainline system at the M-35 interconnect, via the MCP and GLGT, to ensure that customers in the Keweenaw Peninsula and the Marquette area can continue to be reliably served. To ensure that adequate volumes could be received at GLGT to the MCP in reasonable time, SEMCO Gas may utilize a combination of 1) its existing Operational Balancing Agreement ("OBA") with GLGT at the GLGT-MCP interconnect for supply during such an emergency, 2) backhaul volumes from its Lower Peninsula GLGT receipt points such as Belle River, Deward, and at Farwell, MI, and 3) increased deliveries from its GLGT Emerson to Belle River capacity. These volumes would be delivered to MCP via GLGT, flow through MCP to SEMCO Gas's interconnect with NNG, and finally for redelivery to the Company's gates in the Marquette area to the east, and to the Company's gates in the Keweenaw Peninsula to the west via KCP.

Q. Has the Company entered into an Operational Balancing Agreement (OBA) with both NNG and GLGT?

A. Per the direct testimony of Company witness Foster:

> Yes. With construction of the MCP completed in 2019, SEMCO Gas entered into OBAs with both NNG and GLGT to facilitate streamlined operations at both interconnects. An OBA was executed with NNG at the M-35 delivery point in November 2019, and with GLGT at the Arnold Road receipt point in September 2019.

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Q. Because the KCP will act as a physical connection between SEMCO Gas and NNG, will the KCP be subject to the FERC rules and regulations as they pertain to the interstate transportation of natural gas?

A. Per the direct testimony of Company witness Foster:

> No. Utility owned intrastate transmission pipelines, such as the KCP, qualify for an exemption from FERC regulations under the Natural Gas Act, known as the "Hinshaw" exemption, if they meet certain requirements. The requirements for the Hinshaw exemption are: (i) the pipeline must be located entirely within one state, (ii) all gas must be received from others in that state, (iii) the pipeline's rates must be regulated by the state commission, and (iv) all gas received must ultimately be consumed in the state. The KCP will satisfy each of these requirements.

Q. Because new interconnection facilities will be constructed between the NNG and KCP pipelines, is FERC approval required for the construction of the interconnection?

A. Per the direct testimony of Company witness Foster:

> Yes. FERC approval is required for the construction of NNG's portion of the KCP – NNG interconnection facility; however, FERC has authorized NNG to construct such new delivery facilities under FERC's blanket construction certificate process. The blanket certificate process authorizes interstate natural gas pipelines, such as NNG, to engage in minor, routine construction activities without prior application to FERC. FERC's blanket certificate regulations require a pipeline to comply with applicable environmental laws and to engage in landowner notification prior to construction. The pipeline must also report its blanket certificate projects to FERC in the following year.

Q. What is the Company's current level of capacity on NNG to serve the Lake Linden Lateral?

A. Per the direct testimony of Company witness Foster:

> Currently, NNG's Lake Linden Lateral has a capacity of 30,389 Dth/day, with 3,174 Dth/day of available, uncontracted capacity. Of this capacity, the Company is allocated 18,150 Dth/day of contracted firm capacity for GCR/GCC which can serve its distribution systems located off of NNG's Lake Linden Lateral.

Q. What is the Company's current design day forecast for the U.P. West service territories, including customers in the Marquette and the Lake Linden Lateral areas?

A. Per the direct testimony of Company witness Foster:

> [T]he Company's design day forecast for the entirety of the U.P. West service territory is approximately 79,000 Dth/day, with an approximate 29,000 Dth/day calculated for the customers served via the Lake Linden Lateral alone, including GCR, GCC, and LVT customers.

Q. Does this design day forecast present a deficiency in available capacity on the Lake Linden Lateral?

A. Per the direct testimony of Company witness Foster:

> Yes. Even if the Company were to contract for the remaining available capacity on the existing NNG Lake Linden Lateral, the resulting capacity on this pipeline would still present an overall deficiency on a design day, and prevention of any natural growth of the Company's existing GCR, GCC, and LVT customers.

Q. How would the KCP help alleviate this deficiency in design day needs for the Lake Linden Lateral?

A. Per the direct testimony of Company witness Foster:

> KCP can also provide incremental capacity to the end of the existing Lake Linden Lateral, thereby increasing the firm capacity options for the Company's GCR/GCC customers in this area. If the Company (or any NNG shipper who normally delivers gas into NNG's pipeline system upstream of Wakefield) is able to redirect deliveries through the NNG-SEMCO Gas interconnect from MCP, through displacement, the available

> capacity to the upstream NNG Lake Linden lateral take-off can increase and KCP further supports this. In addition, this new capacity could afford the Company's LVT customers the opportunity for acquiring firm capacity rights on NNG's system, as a majority of these customers currently must rely upon secondary or interruptible capacity on NNG, or greater growth in this customer segment.

Q. What factors has Staff considered when reviewing the public need for the proposed KCP project?

A. Per the Company's rationale, previously noted, Staff's review for public need for the proposed KPC project focused on the necessity for redundancy in natural gas supply provided by a looped pipeline system and the benefits of alleviating design day deficiencies.

Q. Has the Commission recommended natural gas utilities look for opportunities to develop solutions that mitigate risk of outages, improve operational flexibility, accommodate future growth in demand, and include consideration of more resilient design day plans?

A. Yes. The Commission included a multitude of recommendations and observations in the SEA Report, filed to the U-20464 docket on September 11, 2019 (Filing # U-20464-0063). Most notably, the SEA Report states, in part:

> • **G-4:** The utilities should have diversity in supplies, redundancies in key assets, and limited dependency on any one facility. In future rate and GCR plan and reconciliation cases the **Commission clarifies that: 1) the utilities should consider contingency options for resilience at key facilities and 2) the Commission Staff should consider these issues and make recommendations to further the safety and reliability of the state's natural gas system, including consideration of more resilient design day plans.**
> • **G-5:** The need for new system interconnections and the use of existing connections must be better understood and vetted in

future cases before the Commission. Natural gas distribution utilities should have diversity in supplies and limit dependency on any one interconnection. **The Commission recommends the utilities consider the necessity and cost of new transmission interconnections including the diversity in supply sources available and propose prudent investments to increase the reliability of the natural gas system. Similarly, the utilities should consider diversification of supply sources in the portfolio, providing for redundancy and reliability through the use of all the existing interconnections available in GCR plan and reconciliation cases.**

• **G-6:** The utilities must be diligent in their system modeling / planning work to identify the necessity of system redundancy and **the Commission recommends the utilities look for opportunities to develop solutions that mitigate risk of outages, improve operational flexibility, and accommodate future growth in demand.**

Q. Does Staff have any concerns that the Company's proposed KCP would not serve the public convenience and necessity?

A. No, Staff does not have any concerns that the Company's proposed KCP would not serve the public convenience and necessity.

Q. In Staff's opinion, is the construction and operation of the Company's proposed KCP, and related facilities, necessary for the safe, reliable, and efficient conduct of the Company's public utility business, serve the public interest, provide system redundancy, mitigate the Company's supply deliverability and reliability concerns in its U.P. West service area, and address design day deficiencies on the Lake Linden Lateral?

A. Yes. In Staff's opinion, the construction and operation of the Company's proposed KCP will serve the public interest by providing a redundant system of natural gas supply in the Company's U.P. West service area and thereby mitigate

the Company's supply deliverability and reliability concerns. Additionally, the proposed KCP would address design day deficiencies on the Lake Linden Lateral.

III. Staff's Review of the Engineering Specifications of the Proposed KCP

Q. Has Staff reviewed the engineering specifications for the Company's proposed KCP project?

A. Yes. Staff has reviewed Company Exhibit A-5 (DAY-3), General Engineering Specifications Keweenaw Connector Pipeline, included in the direct testimony of Company witness Youngs.

Q. Does Staff agree that the Company's proposed engineering specifications for the KCP meet, or exceed, the Michigan Gas Safety Standards (MGSS)?

A. Yes, Staff agrees that the Company's proposed engineering specifications meet, or exceed, the MGSS. Additionally, if the Commission approves of the Company's proposed KCP project, Staff will continue to review the construction, maintenance, and operation of the pipeline to ensure that it meets applicable safety regulations.

Q. What agency would be responsible for enforcing pipeline safety regulations on the proposed KCP should the Commission approve the Company's application in this instant case?

A. Safety regulations would be enforced by the MPSC, which has enforcement jurisdiction of the MGSS granted under Public Act 165 of 1969.

Q. What types of requirements are contained within the MGSS?

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A. In general, the MGSS includes requirements for: design, construction, pressure testing, operations and maintenance, integrity management, operator qualification, and corrosion control.

Q. What is the proposed maximum allowable operating pressure (MAOP) of the proposed KCP?

A. Per the direct testimony of Company witness VanderHeuvel:

> The tap site is expected to be located near Three Lakes NNG 16" pipeline. Based on discussions with NNG, SEMCO Gas used 650 PSIG as the normal inlet pressure to the pipeline for purposes of modeling the pressure drop and flow rate in the KCP on a peak day. The outlet pressure for the KCP was designed to not exceed the MAOP of the existing SEMCO Gas transmission pipeline and deliver a minimum of 564 PSIG. The minimum pressure of 564 PSIG allows the KCP to deliver enough pressure to flow into the NNG pipeline and feed the NNG system in the Keweenaw Peninsula as required for system supply to NNG or to stabilize the NNG system during high-demand or maintenance periods.

Q. What design and safety factors has the Company applied to the engineering specifications of the proposed KCP?

A. Per Section II., Design & Materials, of the Company's General Engineering Specifications Keweenaw Connector Pipeline included as Company Exhibit A-5 (DAY-3) to the direct testimony of Company witness Youngs:

> The proposed pipeline will be designed to Class 3 specifications with the majority of the pipeline consisting of Class 1 locations. A design factor of 0.50 will be used for this pipeline. The operating temperature design factor and the longitudinal joint factor will be 1.00.

Q. Will the proposed KCP be designed and constructed for passage of in-line inspection (ILI) tools?

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A. Per the direct testimony of Company witness Youngs:

> Yes. The Pipeline will be designed and constructed to allow for in-line inspection assessment.

Additionally, per Section II., Design & Materials, of the Company's General Engineering Specifications Keweenaw Connector Pipeline included as Company Exhibit A-5 (DAY-3) to the direct testimony of Company witness Youngs:

> Pig launchers and receivers will be installed at the start and end of the proposed pipeline to provide internal inspection capabilities.

Q. Does the Company plan to odorize the KCP?

A. Per the direct testimony of Company witness Youngs:

> Yes. The KCP will be connected to the Upper Michigan Energy Resources Corporation Baraga transmission main, which is already odorized. Consequently, the Company's connecting facilities will also be odorized, with odorization equipment being installed at the NNG interconnection facility near Three Lakes.

Q. How does odorizing the KCP impact the Company's plan to back feed into the NNG system near Baraga?

A. Per the direct testimony of Company witness Youngs:

> NNG has agreed, in principle, to odorize their system immediately south of their L'Anse lateral. This odorizer will be maintained and operated by the Company and allow for the future retirement of SEMCO Gas's local odorizers at nine different interconnection locations. The interconnection locations are the L'Anse interconnection, Baraga interconnection, Baraga #2 interconnection, Chassel interconnection, Houghton interconnection, Hancock #1 interconnection, Hancock #2 interconnection, Lake Linden interconnection and the Calumet interconnection.

Q. What monitoring and control systems will the Company employ for the proposed KCP?

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A. Per Section I.c., Monitoring and Control, of the Company's General Engineering Specifications Keweenaw Connector Pipeline included as Company Exhibit A-5 (DAY-3) to the direct testimony of Company witness Youngs:

> Using a Supervisory Control and Data Acquisition System (SCADA), all interconnect sites and valve stations will be remotely monitored and controlled 24 hours per day, 7 days per week by personnel at the SEMCO Gas Control room.

Q. What tests will be performed by the Company to ensure that the proposed KCP is ready for operation?

A. Per Section X., Testing, of the Company's General Engineering Specifications Keweenaw Connector Pipeline included as Company Exhibit A-5 (DAY-3) to the direct testimony of Company witness Youngs:

> Prior to being placed into service, the proposed pipeline will be tested in accordance with the 26th Edition of the Michigan Gas Safety Standards.

Q. Does Staff have any concerns with the engineering specifications of the Company's proposed KCP?

A. In general, no.

Q. Does Staff have any recommendations with regard to the engineering specifications of the Company's proposed KCP?

A. Yes. If the Commission approves the Company's proposed KCP, Staff recommends the Company perform the following upon completion of construction:

- SEMCO Gas shall construct the proposed KCP utilizing API 5L PSL 2 pipe;

- SEMCO Gas shall utilize Alternating Current Voltage Gradient/Direct Current Voltage Gradient (ACVG/DCVG) tools to assess for coating faults which, if found to present future corrosion, will be required to be remediated prior to completing the pressure test of the pipeline;
- SEMCO Gas shall, upon completion of the ACVG/DCVG survey, perform an additional electrical Close Interval Survey (CIS) which will be conducted on the entire length of the line to identify dips in current potential. If areas are identified, SEMCO Gas shall install additional corrosion control test stations;
- SEMCO Gas shall, no later than three months after the in-service date of the pipeline, conduct an above-ground electrical survey of the KCP. Specifically, this inspection will attempt to identify defects in the pipeline coating that could cause future corrosion of not addressed. All detected anomalies that become anodic when the cathodic protection system is off shall be remediated within one year after detection. Within six months of the electrical survey, the data gained from the electrical survey will be used to place additional external corrosion test stations, as necessary, at any identifiable and significant dips in electric potential in accordance with 49 CFR 192.469;
- SEMCO Gas shall, no later than one year after the in-service date of the pipeline, conduct an in-line inspection of the KCP. Specifically, the inspection shall consist of a geometry tool capable of detecting dents or other anomalous conditions that may have arisen during construction of

the pipeline. The remediation of dents shall occur in accordance with the latest 49 CFR Part 192 Subpart O and ASME B31.8S versions adopted as of the project completion; and

- SEMCO Gas shall perform a Global Positioning System (GPS) survey to record the location of all welds, bends, and bore profiles.

Q. Is it Staff's opinion that the Company's engineering specifications for the proposed KCP project adhere to the minimum requirements?

A. Yes, it is Staff's opinion that the Company's engineering specifications for the proposed KCP project adhere to the minimum requirements. Additionally, if the Company incorporates Staff's aforementioned recommendations the Company's engineering specifications for the proposed KCP project would exceed the minimum requirements and would add additional safeguards to project the adjacent landowners and the environment.

IV. Staff's Review of the Environmental Impact of the Proposed KCP

Q. Has the Company conducted an environmental analysis with regard to the proposed KCP?

A. Yes. Per the Executive Summary of the Company's General Engineering Specifications Keweenaw Connector Pipeline included as Company Exhibit A-5 (DAY-3) to the direct testimony of Company witness Youngs:

> T[he] Environmental Assessment Report (EAR) has been prepared [by GEI Consultants of Michigan, P.C.] in support of SEMCO Energy Gas Company's (SEMCO) application for approval from the Michigan Public Service Commission (MPSC) to construct and operate a natural gas pipeline pursuant to 1929 PA 9; Michigan Compiled Laws (MCL) 483.101 et seq. (Act 9). This EAR describes the project being proposed, project

alternatives, the environmental setting, potential impacts to the environment, and potential environmental mitigation measures.

Q. Will ROW clearing be required for the proposed KCP project?

A. Yes. Per Section 1.4.2., Right of Way Clearing, of the Company's EAR, included as Company Exhibit A-3 (DAY-1) to Company witness Youngs' direct testimony:

> ROW clearing will be required to provide a temporary workspace for construction, allow adequate access routes for construction equipment, and provide permanently maintained (cleared of trees) easement corridor. Exact dimensions of the temporary workspace and permanent easement will be calculated during the design phase.

Q. What construction methods does the Company intend to utilize for the proposed KCP project?

A. Per Section 1.4.3., Trenched Pipeline Installation, of the Company's EAR, included as Company Exhibit A-3 (DAY-1) to Company witness Youngs' direct testimony:

> The KCPP will utilize open cut trenching methods for pipeline installation along most of the alignment.

Per Section 1.4.7., Horizontal Directional Drill (HDD), of the Company's EAR, included as Company Exhibit A-3 (DAY-1) to Company witness Youngs' direct testimony:

> The HDD method of pipeline installation will be used when possible to reduce or eliminate impacts to the environment and to install pipe where physical barriers such as large waterways do not allow conventional means of installation (i.e., open trench). For shorter crossings such as roadways and railroads, horizontal boring methods can be used as described below. HDD is typically completed in three steps: pilot hole, pre reaming, and pullback.
>
> Heavily utilized roadways (i.e. US 41) and railroad crossings are

> proposed to be completed using trenchless methods. A few methods commonly accepted by the MDOT for trenchless pipeline installation include horizontal auger boring (HAB), pipe ramming, pipe jacking, horizontal directional drilling (HDD), and microtunneling. The appropriate installation method for a given site is highly dependent upon utility size, subsurface conditions, allowable settlement and vibration constraints, space constraints, nearby surface features, etc. The installation method for each crossing will be evaluated during design.

Q. Will the Company obtain a Temporary Soil Erosion Control permit from the EGLE?

A. Per Section 1.4.8., Temporary Soil Erosion Control, of the Company's EAR, included as Company Exhibit A-3 (DAY-1) to Company witness Youngs' direct testimony:

> Construction activities that disturb one or more acres of land and have a point source discharge of storm water to waters of the state (streams, rivers, lakes, and wetlands) are required to obtain a National Pollutant Discharge Elimination System (NPDES) permit from the EGLE Water Resources Division (WRD). The WRD has adopted a process called "Permit-by-Rule" (Rule 323.2190, promulgated under Part 31, Water Resources Protection, of the NREPA, 1994 PA 451, as amended) for issuing the necessary storm water coverage. Permit-by-Rule "streamlines" the permitting process and is dependent upon the applicant first obtaining Part 91 coverage (Part 91, Soil Erosion and Sedimentation Control, of the NREPA), i.e., obtaining a Soil Erosion and Sedimentation Control (SESC) permit from Baraga County.
>
> A project specific Soil Erosion Plan will be completed as part of the Part 91 permit process.

Q. Does the Company's EAR address permanent restoration?

A. Yes. Per Section 1.4.9., Permanent Restoration, of the Company's EAR, included as Company Exhibit A-3 (DAY-1) to Company witness Youngs' direct testimony:

> Restoration will occur following construction to prevent future erosion. Permanent erosion control measure will be installed in accordance with federal, state, and local agency requirements as applicable. Efforts will be made to limit the amount of time between ROW clearing, construction, and final restoration. Restoration will include backfilling to original grade, decompacting soils where necessary, and planting disturbed areas with native Michigan plant species.

Q. Does Staff have any recommendations specific to the Company's current restoration plan?

A. Yes. Staff recommends that the Company plant disturbed areas with plant species native to the impacted areas. Native Michigan plant species can vary greatly across the regions of the state. The Company should specifically identify the native species which inhabit the areas of the proposed KCP project and commit to planting those select plant species during the restoration process.

Q. Are there any professional organizations which have programs regarding conservation and ROW restoration relative to pipeline projects?

A. Yes. The American Petroleum Institute (API) has organized the Midstream Conservation Program. API has designed its conservation program to support the oil and gas industry's conservation on ROW in a manner that also provides opportunities for more effective engagement with communities.

Q. To what extent is Staff's familiarity with API's Midstream Conservation Program.

A. API representatives met with Staff, virtually, on August 27, 2024, to discuss the Midstream Conservation Program. Please refer to Staff Exhibit S-17 to review the API's Midstream Conservation Program presentation to Staff in its entirety.

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Q. Who are the API representatives who met with Staff to discuss the Midstream Conservation Program?

A. The API representatives Staff met to discuss the Midstream Conservation Program were: Robin Rorick, Vice President of Midstream Policy (rorickr@api.org) and Mary Youpel, Midstream Policy Advisor (YoupelM@api.org).

Q. How does API support conservation in a manner that also provides opportunities for more effective engagement with communities.

A. API's Midstream Conservation Program encourages pipeline utilities to adopt and utilize the requirements of API RP 1185 – Pipeline Public Engagement, and to follow the API Guidance for Conservation Programs on Pipeline Right-of-Ways. Please refer to Staff Exhibit S-18 to review the API Guidance for Conservation Programs on Pipeline Right-of-Ways in its entirety.

Q. Is the Company aware of API's Midstream Conservation Program?

A. Per a discovery response provided by Company witness Youngs:

> Yes, the Company will consider API's Midstream Conservation Program as the permanent restoration procedures are developed during subsequent KCP design phases.

Please refer to Staff Exhibit S-19 to review the discovery request, and response, in its entirety.

Q. Does Staff support the Company's consideration of API's Midstream Conservation Program?

A. Yes. Staff does support the Company's consideration of API's Midstream Conservation Program.

Q. Would the Company be interested in Staff facilitating a meeting with API to discuss their Midstream Conservation Program, and how the API's lessons learned and best practices could benefit the KCP project?

A. Per a discovery response provided by Company witness Youngs:

> Yes, the Company would be interested in participating in a meeting with API, facilitated by Staff, to discuss their Midstream Conservation Program and how the API's lessons learned and best practices could benefit the KCP project.

Please refer to Staff Exhibit S-20 to review the discovery request, and response, in its entirety.

Q. Has Staff contacted it's API representative contacts to request a meeting with API, the Company, and Staff to discuss the Midstream Conservation Program in greater detail, and how the API's lessons learned and best practices could benefit the KCP project?

A. Yes. On January 2, 2025, Staff sent an email to Mary Youpel and Robin Rorick requesting a meeting between API, the Company, and Staff to discuss the Midstream Conservation Program and how the API's lessons learned and best practices could benefit the KCP project. Please refer to Staff Exhibit S-21 to review Staff's email to its API representative contacts in its entirety.

Q. Has the Company reviewed API RP 1185, Pipeline Public Engagement, First Edition, for guidance on effective public engagement?

A. Per a discovery response provided by Company witness Youngs:

> The Company did not reference this standard before public engagement on KCP. However, the Company has now obtained this standard and will review and utilize guidance before any further public engagement activities.

Please refer to Staff Exhibit S-22 to review the discovery request, and response, in its entirety.

Q. Does Staff support the Company's utilization of API RP 1185?

A. Yes. Staff supports the Company's utilization of API RP 1185. Specifically, and directly related to this instant case, Staff recommends that the Company utilize API RP 1185 for all future public engagement activities associated with the proposed KCP project.

Q. Has the Company reviewed the API Guidance for Conservation Programs on Pipeline Right-of-Ways for consideration when developing its restoration procedures?

A. Per a discovery response provided by Company witness Youngs:

> Yes, the Company will review and consider the guidance document prior to developing restoration practices for the KCP project.

Please refer to Staff Exhibit S-23 to review the discovery request, and response, in its entirety.

Q. Does Staff support the Company's utilization of the API Guidance for Conservation Programs on Pipeline Right-of-Ways for consideration when developing its restoration procedures?

A. Yes. Staff supports the Company's utilization of the API Guidance for Conservation Programs on Pipeline Right-of-Ways. Specifically, and directly related to the Company's aforementioned discovery response, Staff recommends that the Company utilize the API Guidance for Conservation Programs on

Pipeline Right-of-Ways for the restoration activities associated with the proposed KCP project.

Q. Has the Company identified all of the agencies which have permitting requirements regarding the proposed KCP project?

A. Yes. Per Section 1.5., Permitting and Consultation, of the Company's EAR, included as Company Exhibit A-3 (DAY-1) to Company witness Youngs' direct testimony:

> The KCPP requires compliance with various federal, state, and local environmental regulations. In addition to compliance with regulations, coordination and consultation with landowners and land managers will be completed to obtain easements and maintain consistency with land use plans. A summary of the applicable environmental permits, approvals, and consultations related to natural gas pipeline construction in Michigan is presented in **Table 1-1**. The table is not inclusive of all permits that may be required to construct the KCPP such as mechanical, electrical, and building permits.

Q. Does Staff have any recommendations with regard to the Company's permitting process?

A. Yes. First, Staff recommends the Company secure all necessary federal, state, local, and tribal permits prior to commencing construction of the proposed KCP project. And second, in relation to the comment made by the EGLE representation during the Interagency Meeting, Staff recommends the Company contact each of the permitting agencies to request pre-application meetings for the purpose of discussing the proposed KCP project in detail and to ascertain exactly which permits are required for the project by each agency.

Q. Has the Company conducted an alternatives analysis regarding the proposed KCP project route?

A. Yes; please refer back to Section I of this direct testimony where the Company's route alternatives were previously addressed.

Q. Has the Company performed a surface water analysis regarding the proposed KCP project?

A. Yes. Per Section 3.3.1., Surface Water, of the Company's EAR, included as Company Exhibit A-3 (DAY-1) to Company witness Youngs' direct testimony:

> A wetland delineation was completed by GEI Consultants of Michigan, P.C. (GEI) to evaluate and map wetland boundaries, wetland plant community types, and wetland condition present within the KCPP Corridor…. The KCPP Corridor was specifically surveyed for wetlands (as defined under Section 404 of the Clean Water Act) and other aquatic resources such as seasonal ponds, seeps, springs, ditches, and streams (intermittent, ephemeral, and perennial).
>
> Wetland impacts associated with the KCPP will primarily be temporary. Pipeline trenches, HDD bore pits, and associated infrastructure requiring excavation/dredging in wetlands will be restored to preconstruction contours and revegetated with native species. Any forested wetland within the permanent maintenance ROW corridor will be converted to either emergent or scrub-shrub wetland types through the removal of trees and subsequent periodic vegetation management within the ROW. Compensatory mitigation will be provided for any forested wetlands converted to another wetland type. Final wetland impacts will be determined when final design is completed and a mitigation plan will be submitted to the regulatory agencies for approval.
>
> Along the KCPP Corridor, there are no river reaches designated as Federal or state Wild and Scenic Rivers (National Wild and Scenic River System, 2024). All the streams that are crossed by the KCCP Corridor are designated as Type 1 Trout streams (MDNR, 2024a). **Figure 3-3** provides an overview of water resources located within and in the vicinity of the KCPP

> Corridor. **Table 3-1** provides a detailed summary of these streams, including their type, flow rates, velocities, and whether they intersect or lie within the KCPP Corridor.
>
> **Table 3-2** summarizes the regulated lakes and ponds (greater than 1 acre) that are crossed or within the KCPP Corridor. Note that the Alberta Pond is stocked with brook trout by the MDNR and it is a Class C lake (MDNR, 2024b).
>
> The construction and operation of the KCPP Corridor within floodplain will adhere to FEMA requirements, utilizing methods to mitigate any impact to the floodplain and minimizing any significant impact on the floodplain areas along the Sturgeon River.

Q. Has the Company performed a ground water analysis regarding the proposed KCP project?

A. Yes. Per Section 3.3.2., Ground Water, of the Company's EAR, included as Company Exhibit A-3 (DAY-1) to Company witness Youngs' direct testimony:

> In Baraga County, water supply from groundwater is an important resource for residents of rural areas, smaller villages, and farm operations. Due to the geologic setting of the area, many water supply wells are finished deep (50-300 ft) in bedrock. Select areas with deeper glacial deposits contain quaternary sediment aquifers and select locations with sandy soils with a shallow water table allow for the use of drive point wells.
>
> According to EGLE's Water Well Viewer (EGLE, 2024b), seven wells have been identified within 500 feet of the KCPP Corridor. **Table 3-3** summarizes the distance from the KCPP Corridor, geology, well screen depth, and static water levels. Pipeline construction will be limited to an approximate depth of 5 feet in trenched installations. The depth of HDDs or other trenchless installation techniques will be determined during subsequent design efforts. All the well logs with known lithology show that the well screen has been installed below a deep clay layer and all static water levels are at least 18 feet below grade or greater. Excavation and construction activities will be temporary and occur near the surface, well above the static water level identified in these nearby wells. The [KCPP]

> construction will be well above the static water levels; therefore, the KCPP construction will not impact existing groundwater resources.

Q. Has the Company performed an air quality analysis regarding the proposed KCP project?

A. Yes. Per Section 3.4.1., Air Quality, of the Company's EAR, included as Company Exhibit A-3 (DAY-1) to Company witness Youngs' direct testimony:

> The USEPA established National Ambient Air Quality Standards (NAAQS) (USEPA 2024b) for six primary air pollutants (commonly known as "criteria" pollutants), including particulate matter (PM), sulfur dioxide (SO2), lead, carbon monoxide (CO), nitrogen dioxide (NO2), and ozone, as required by the Clean Air Act (CAA). The CAA identifies two types of NAAQS, including primary standards which provide public health protection, and secondary standards which provide public welfare protection (decreased visibility, damage to crops/infrastructure, etc.). The USEPA periodically reviews these standards to determine whether changes are warranted.
>
> During construction, air emissions from equipment will be intermittent and are not expected to exceed NAAQS. Fugitive emissions during operation will primarily involve methane leaks, which are not anticipated to occur. If such incidents occur, the best management practices outline in Section 4, **Table 4-1**, will be implemented.

Q. Has the Company performed a climate plan analysis regarding the proposed KCP project?

A. Yes. Per Section 3.4.2., Climate Plan, of the Company's EAR, included as Company Exhibit A-3 (DAY-1) to Company witness Youngs' direct testimony:

> The Michigan Healthy Climate Plan (EGLE, 2022) aims for economy-wide carbon neutrality by 2050. Natural gas pipelines, such as the KCPP, are essential in this transition by offering a cleaner alternative to coal and oil, supporting renewable energy integration, and ensuring a reliable energy supply.

> The Michigan Healthy Climate Plan emphasizes a just transition benefiting all communities, especially those disproportionately affected by climate change and pollution. As a transitional energy source, natural gas provides cleaner energy while renewable infrastructure develops, maintaining affordable and reliable energy access for all communities.

Q. Has the Company performed a noise analysis regarding the proposed KCP project?

A. Yes. Per Section 3.5., Noise, of the Company's EAR, included as Company Exhibit A-3 (DAY-1) to Company witness Youngs' direct testimony:

> Noise impacts are anticipated from the project construction activities but are not anticipated from operation of the KCPP. Construction noise impacts are temporary and are expected to occur during the project's construction phase. Construction will typically be performed utilizing one day shift from Monday to Saturday. The estimated duration of construction is 12 months. The Federal Highway Administration Construction Noise Handbook identifies typical noise levels for typical construction equipment range from 70 – 95 decibels (dBA) measured at 50 feet from the equipment. The construction contractor would employ noise reducing BMPs.

Q. Has the Company performed an aesthetic resources analysis regarding the proposed KCP project?

A. Yes. Per Section 3.6., Aesthetic Resources, of the Company's EAR, included as Company Exhibit A-3 (DAY-1) to Company witness Youngs' direct testimony:

> The strategic placement of the KCPP adjacent to existing transmission and transportation corridor is designed to minimize environmental and aesthetic impacts. Since the corridor has already been modified for utility use, it serves as an ideal location for additional utilities, reducing the need for extensive land clearing and tree removal. Furthermore, as the overhead transmission line is a familiar feature in the landscape, situating the KCPP in the same corridor minimizes additional visual disruptions. Additionally, because the KCPP will be installed underground, it will be virtually invisible after the construction

and restoration processes are completed.

Q. Has the Company performed a threatened and endangered species and habitat analysis regarding the proposed KCP project?

A. Yes. Per Section 3.8., Threatened and Endangered Species and Habitats, of the Company's EAR, included as Company Exhibit A-3 (DAY-1) to Company witness Youngs' direct testimony:

> The desktop review for state listed threatened and endangered species was completed through the Michigan State University Extension's Michigan Natural Features Inventory (MNFI) database. The MNFI database contains known locations of rare species listed under the Endangered Species Act of the State of Michigan, Part 365 of the Michigan Natural Resources Protection Act (NREPA). The MNFI review identified state threatened, endangered, or otherwise significant plant and animal species, natural plant communities, and other natural features that have been previously been documented to occur within or near the KCPP and therefore may be impacted. The Information for Planning and Consulting (IPaC) tool managed by the United States Fish and Wildlife Service (USFWS) was used to assist in identifying species that are listed under the federal Endangered Species Act (ESA) of 1973 that may be present at or near the project site.

Q. What State Listed Species were identified within, or near, the proposed KCP project route?

A. Table 3-5, State Listed Species Identified by Michigan Natural Features Inventory, as included in Section 3.8.1., State Listed Species, of the Company's EAR, included as Company Exhibit A-3 (DAY-1) to Company witness Youngs' direct testimony, is reproduced herein:

Table 3-5. State Listed Species Identified by Michigan Natural Features Inventory

Scientific Name	Common Name	State Status
Acipenser fulvescens	Lake sturgeon	Threatened
Canachites canadensis	Spruce grouse	Threatened
Gavia immer	Common loon	Threatened
Glyptemys insculpta	Wood turtle	Threatened
Myotis lucifugus	Little brown bat	Threatened
Setophaga kirtlandii	Kirtland's warbler	Threatened
Terrapene Carolina carolina	Eastern box turtle	Threatened
Piptatherum canadense	Canada rice grass	Threatened

Q. What Michigan Resources of special concern were identified within, or near, the proposed KCP project route?

A. Table 3-6, Michigan Resources of Special Concern, as included in Section 3.8.1., State Listed Species, of the Company's EAR, included as Company Exhibit A-3 (DAY-1) to Company witness Youngs' direct testimony, is reproduced herein:

Table 3-6. Michigan Resources of Special Concern

Category	Scientific Name	Common Name
Animal	*Boloria freija*	Freija fritillary
Animal	*Boloria frigga*	Frigga Fritillary
Animal	*Bombus borealis*	Northern amber bumble bee
Animal	*Bombus terricola*	Yellow banded bumble bee
Animal	*Haliaeetus leucocephalus*	Bald eagle

Animal	*Necturus maculosus*	Mudpuppy
Animal	*Opheodrys vernalis*	Smooth green snake
Animal	*Pandion haliaetus*	Osprey
Animal	*Picoides arcticus*	Black-backed woodpecker
Other	Multiple bat hibernacula	Multiple bat hibernacula
Plant	*Callitriche hermaphroditica*	Autumnal water-starwort
Plant	*Littorella uniflora*	American shore-grass
Plant	*Mertensia paniculata*	Northern bluebell

Q. What federally listed species were identified within, or near, the proposed KCP project route?

A. Table 3-7, Federally Listed Species Identified by Michigan Natural Features Inventory, as included in Section 3.8.2., Federally Listed Species, of the Company's EAR, included as Company Exhibit A-3 (DAY-1) to Company witness Youngs' direct testimony, is reproduced herein:

Table 3-7. Federally Listed Species Identified by Michigan Natural Features Inventory

Scientific Name	Common Name	Federal Status	DKey Determination
Canis lupus	Gray wolf	Endangered	Not likely to adversely affect
Myotis septentrionalis	Northern Long-eared bat	Endangered	Not likely to adversely affect
Calidris canutus rufa	Rufa red knot	Threatened	No effect
Lynx canadensis	Canada lynx	Threatened	Not likely to adversely affect
Perimyotis subflavus	Tricolored bat	Proposed Endangered	No effect
Danaus Plexippus	Monarch butterfly	Candidate	No effect

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Q. Has the Company performed a socioeconomic condition analysis regarding the proposed KCP project?

A. Yes. Per Section 3.9., Socioeconomic Condition, of the Company's EAR, included as Company Exhibit A-3 (DAY-1) to Company witness Youngs' direct testimony:

> The KCPP is within Baraga, L'Anse, Spurr, and Covington Township, within Baraga County, Michigan. According to the US Census Bureau, the 2020 population of Baraga County is 8,158. The median 2022 household income is $51,911 with an employment rate of 42.6%. As of 2020, there are 5,052 housing units and 169 businesses…. The construction and operation of the KCPP are not expected to have significant long-term adverse impacts on the socioeconomic conditions of the surrounding communities. Potential temporary impacts during the construction, such as changes in employment rates and economic activity, will most likely not be impacted due to the requirement of highly skilled and trained workers.

Q. Has the Company performed a cultural, archaeological, ceremonial, and historic resources analysis regarding the proposed KCP project?

A. Yes. Per Section 3.10., Cultural, Archaeological, Ceremonial, and Historic Resources, of the Company's EAR, included as Company Exhibit A-3 (DAY-1) to Company witness Youngs' direct testimony:

> GEI completed a records search and prepared a memorandum of findings to append to SEMCO's application to the MPSC. The memorandum provides information about the presence or absence of known cultural resources within and near the KCPP selected route. The cultural resources records review was completed for the selected route and an approximate one-mile buffer to assess the potential effects of the Project on known cultural resources. For the review, GEI examined the following resources:
> • National Historic Landmarks (NHL) List (NPS 2024a).
> • National Register of Historic Places (NRHP) Geographic Information System (GIS) Public Database maintained by the

National Park Service (NPS) (NPS 2024b).
• Tribal Directory Assessment Tool (TDAT).

Q. What were the findings of the National Historic Landmarks (NHL) List review?

A. Per Section 3.10., Cultural, Archaeological, Ceremonial, and Historic Resources, of the Company's EAR, included as Company Exhibit A-3 (DAY-1) to Company witness Youngs' direct testimony:

> There are no NHLs located in Baraga County, Michigan; therefore, there are no NHLs located in the KCPP Corridor or within a one-mile radius (NPS 2024a).

Q. What were the findings of the National Register of Historic Places (NRHP) and State Register List review?

A. Per Section 3.10., Cultural, Archaeological, Ceremonial, and Historic Resources, of the Company's EAR, included as Company Exhibit A-3 (DAY-1) to Company witness Youngs' direct testimony:

> There are no resource listed on the NRHP located in the KCPP selected route and one NRHP-listed resource within one-mile. The Canyon Falls Bridge is a listed structure located about 0.85 mile away from the selected route (NPS 2024a). It is a long span, steel girder ribbed deck-arch bridge that was listed in the NRHP in 1999. The bridge is listed under NRHP Criterion C for its significance in engineering (NPS 1999). The Canyon Falls Bridge will not be impacted by the KCPP.

Q. Does the Company have a plan in place should archaeological or cultural resources be discovered during the course of project construction activities?

A. Yes. Per Section 3.10., Cultural, Archaeological, Ceremonial, and Historic Resources, of the Company's EAR, included as Company Exhibit A-3 (DAY-1) to Company witness Youngs' direct testimony:

> If cultural resources are discovered during the course of the

> project construction activities, SEMCO will follow the procedures outlined in the Unanticipated Discoveries Plan (Appendix E).

Q. Does Staff have any recommendations regarding the Company's Unanticipated Discoveries Plan?

A. Yes. Staff recommends the Company consult with DNR Archaeology and the SHPO to review its Unanticipated Discoveries Plan for cultural resources and human remains to address appropriate revisions per each respective agency's discussion.

Q. Please summarize the Company's EAR.

A. Per Section 5., Summary, of the Company's EAR, included as Company Exhibit A-3 (DAY-1) to Company witness Youngs' direct testimony:

> Environmental impacts associated with the KCPP will primarily be temporary. Construction methods will be utilized that minimize environmental impacts such as HDD (or other trenchless methods) under waterways, timber matting through wetlands, soil erosion and sedimentation control BMPs, and timing construction to avoid sensitive resources. Temporary impacts from pipeline trenches, HDD bore pits, and associated infrastructure requiring excavation will be restored to preconstruction contours and revegetated with native species. Unavoidable impacts to environmental resources will be mitigated. Compensatory mitigation will be provided for any forested wetlands converted to another wetland type. Mitigation and monitoring measures implemented by the KCPP are designed to avoid, minimize, and prevent potential impacts and will allow the project to be executed effectively with appropriate safeguards and within the required timeframes. The final KCPP design and alignment will go through a permitting process to comply with federal, state, and local regulations. In addition to compliance with regulations, coordination and consultation with landowners and land managers will be completed to obtain easements and maintain consistency with land use plans.
>
> Final alignment designed to avoid and minimize sensitive

resources to the extent practicable, regulatory permit compliance, construction BMPs and mitigation measures, temporary impact restoration, and compensatory mitigation for unavoidable permanent impacts all contribute to the KCPP having a limited impact to the environmental setting.

Q. Please reiterate the environmental concerns of the Interagency Meeting participants.

A. To reiterate, the Interagency Meeting participants expressed the following concerns:

- The DNR is concerned that GEI Consultants of Michigan, P.C. (GEI Consultants), SEMCO's consultant for their Environmental Assessment Report (EAR), was not able to perform an archaeology review for the proposed KCP route as archaeology documentation isn't publicly available due to the confidential and sensitive nature of the information.
- The DNR also noted that portions of the proposed KCP route cross the Baraga State Forest, of which the DNR has an interest; the DNR mentioned that they would need to look closer at this area for the presence of cultural and other resources.
- The EGLE noted that they will be doing a more thorough review of wetland impacts, and require alternatives to permanent impacts to wetlands if horizontal directional drill (HDD) or other trenchless construction methods are feasible options in these sensitive environmental areas.

- The EGLE also recommended that SEMCO Gas request a pre-application meeting with their divisions to discuss the project, and related permitting requirements, in greater detail.
- The MDOT mentioned that trenchless installation would be required for all crossings of roadways which are maintained by the MDOT.
- The SHPO noted that while Archaeological Site File reviews are typically reserved for Section 106 of the NHPA compliance projects, companies may request an exception for the SHPO to conduct Archaeological Site File reviews for non-Section 106 projects by contacting Scott Slagor (slagors2@michigan.gov), SHPO's Cultural Resource Manager.
- The SHPO was interested in understanding which portions of the proposed KCP route would be constructed through previously disturbed ROW and which portions would be constructed through undisturbed ROW; and the SHPO recommended that an archaeological survey be conducted for all portions of the KCP route which are to be constructed in undisturbed ROW. Related, the SHPO would like to review a shape file (.shp) of the proposed route to determine if there are any resources which were not identified by GEI Consultants' review.

Q. How are each of the aforementioned agency concerns expressed during the Interagency Meeting addressed?

A. The aforementioned agency concerns are addressed as follows:

- Regarding the DNR's concern that an archaeology review for the proposed KCP route was not performed, and in accordance with statements made by

representatives from the SHPO, Staff makes a recommendation immediately following this summary of concerns.

- Regarding EGLE's statement about a pre-application meeting, in a discovery request sent to the Company on December 18, 2024, Staff inquired as to whether or not the Company had requested a pre-application meeting with EGLE, or any other State of Michigan agency which has permitting requirements relative to the proposed KCP project. Per a discovery response provided by Company witness Youngs, "[t]he Company is working with a pipeline design firm that is supporting and coordinating these pre-application meetings. The Company expects that the pre-application meeting with EGLE will be scheduled in January 2025. The Company will be working with the design firm to determine if any other pre-application meetings are necessary." Please refer to Staff Exhibit S-24 to review the discovery request, and response, in its entirety.
- Regarding the SHPO's statement about exceptions for the SHPO to conduct Archaeological Site File reviews for non-Section 106 projects, in a discovery request sent to the Company on December 18, 2024, Staff inquired as to whether or not the Company is aware that an exemption may be requested for SHPO to perform an Archaeological Site File review for non-Section 106 of the National Historic Preservation Act compliance projects by sending the request to Scott Slagor (slagors2@michigan.gov), SHPO's Cultural Resource Manager. Per a discovery response provided by Company witness Youngs, "the Company understands that an

exemption can be requested. An exemption request will be considered as the propose running line becomes more finalized." Please refer to Staff Exhibit S-25 to review the discovery request, and response, in its entirety.

- Regarding the SHPO's statement about reviewing a shape file (.shp) of the proposed KCP route, in a discovery request sent to the Company on December 18, 2024, Staff inquired as to whether or not the Company could provide a non-confidential shape file (.shp) of the proposed KCP route that Staff may share with other State of Michigan agencies for review. Per a discovery response provided by Company witness Youngs, the Company provided the requested shape files, which Staff subsequently forwarded on to the Interagency Meeting participants. Please refer to Staff Exhibit S-26 to review the discovery request, and response, less the attached shape files. Additionally, regarding the SHPO's statement about disturbed and undisturbed portions of the proposed KCP route, in a discovery request sent to the Company on December 18, 2024, Staff inquired as to whether or not the Company could provide, in .kmz format, the portions of the filed KCP route which are proposed to be constructed within previously disturbed ROW. Per a discovery response provided by Company witness Youngs, the Company provided the requested .kmz file. Please refer to Staff Exhibit S-27 to review the discovery request, and response, less the attached .kmz file.

Q. Does Staff have any recommendations for the Company's proposed KCP project which relate to the aforementioned agency concerns?

A. Yes. Staff recommends that an archaeological survey be conducted for all portions of the KCP project route which will be located within previously undisturbed ROW.

Q. Please reiterate the environmental concerns of the KBIC representatives.

A. To reiterate, the KBIC representatives expressed the following concerns:

- The KBIC representatives were particularly focused on how the Company's KCP could impact their project with the DNR in and around Menge Creek. The KBIC representatives requested a map from Staff that was more detailed than those publicly available in the Company's filings.
- The KBIC representatives noted that Alden Connor, the THPO for the KBIC, should be included as a contact in the Company's UDP.

Q. What responses can Staff provide to address the KBIC's aforementioned concerns?

A. With regard to the KBIC's request for a more detailed map, while Staff did receive geospatial data of the proposed KCP project for viewing on Google Earth software, this information was provided to Staff through a confidential discovery response and, therefore, could not be shared directly with the KBIC. Staff did contact Company witness Timothy J. Lubbers, SEMCO Gas' Director of Business Development and Community Engagement, on December 16, 2024, asking if the Company would be willing to meet with the KBIC representatives to discuss their route concerns in greater detail; Staff, additionally, offered to facilitate such a meeting if necessary. Please refer to Staff Exhibit S-28 to review the correspondence to Company witness Lubbers in its entirety. As of the filing date

of this direct testimony, Staff is unaware if Company witness Lubbers, or any other Company witness, has contacted KBIC to discuss their route concerns in greater detail. Additionally, with regard to the KBIC's discussion that Alden Connor's contact information should be included in the Company's UDP, Staff has confirmed that the Company's UDP, included as Appendix E to the Company's EAR, included as Company Exhibit A-3 (DAY-1) to Company witness Youngs' direct testimony, does include Alden Connors contact information as the THPO for the KBIC.

Q. Does Staff have any concerns regarding the environmental impacts that will be realized from the construction and operation of the Company's proposed KCP project?

A. If the Company adheres to the practices proposed in testimony and exhibits by its expert witnesses, and adopts Staff's recommendations proposed herein, Staff believes that any impacts to the environment resulting from the construction and operation of the proposed KCP will be *de mininis*.

Q. Does Staff have any further recommendations regarding mitigative measures the Company could implement to reduce the overall environmental impact of the proposed KCP?

A. Again, if the Company adheres to the practices proposed in testimony and exhibits by its expert witnesses, and adopts Staff's recommendations proposed herein, Staff believes that the mitigative measures to reduce the overall impact of the proposed KCP project would meet, and in some areas exceed, the minimum requirements.

Q. Is it Staff's opinion that the Company's proposed KCP route is the most reasonable considering the environmental impact?

A. Yes. Staff is of the opinion that the Company's proposed KCP route is the most reasonable considering the environmental impact.

V. Staff's Overall Recommendations Regarding the Proposed KCP

Q. Does Staff have any further recommendations regarding the proposed KCP project which have not already been addressed within this direct testimony?

A. No. Staff does not have any further recommendations regarding the proposed KCP project which have not already been addressed within this direct testimony.

Q. Please briefly reiterate Staff's recommendations to the Commission regarding the proposed KCP.

A. To reiterate, Staff recommends the following to the Commission with regard to the Company's proposed KCP project:

Route Recommendations

- The Company refer to the 1999 INGAA publication, Temporary Right-of-Way Width Requirements for Pipeline Construction, or similar industry standards, when determining the necessary temporary workspace and permanent easement widths for the KCP;
- The depth of cover within all agricultural areas along the proposed KCP route be specified for a minimum of five feet;
- The Company contact the relevant authority over the Escanaba and Lake Superior Railroad to determine the most appropriate construction technique for the railroad crossing;

- The Commission allow for minor route deviations with the consent of private landowners, the relevant authority over public rights-of-way, or by authority granted from condemnation proceedings; minor route deviations shall be limited to alterations in locations which do not involve the impact of additional unnoticed landowners to this case;
- The Company must commit to work with the relevant landowner(s) to locate the proposed KCP within private property to a mutually beneficial location, as reasonably practicable, for both parties;
- The Company secure all easements for the KCP project before construction commences;

Engineering Specification Recommendations

- The Company shall construct the proposed KCP utilizing API 5L PSL 2 pipe;
- The Company shall utilize ACVG/DCVG tools to assess for coating faults which, if found to present future corrosion, will be required to be remediated prior to completing the pressure test of the pipeline;
- The Company shall, upon completion of the ACVG/DCVG survey, perform an additional electrical CIS which will be conducted on the entire length of the line to identify dips in current potential; if areas are identified, the Company shall install additional corrosion control test stations;
- SEMCO Gas shall, no later than three months after the in-service date of the pipeline, conduct an above-ground electrical survey of the KCP.

Specifically, this inspection will attempt to identify defects in the pipeline coating that could cause future corrosion of not addressed. All detected anomalies that become anodic when the cathodic protection system is off shall be remediated within one year after detection. Within six months of the electrical survey, the data gained from the electrical survey will be used to place additional external corrosion test stations, as necessary, at any identifiable and significant dips in electric potential in accordance with 49 CFR 192.469;

- SEMCO Gas shall, no later than one year after the in-service date of the pipeline, conduct an in-line inspection of the KCP. Specifically, the inspection shall consist of a geometry tool capable of detecting dents or other anomalous conditions that may have arisen during construction of the pipeline. The remediation of dents shall occur in accordance with the latest 49 CFR Part 192 Subpart O and ASME B31.8S versions adopted as of the project completion; and
- The Company shall perform a GPS survey to record the location of all welds, bends, and bore profiles;

Environmental Recommendations

- The Company plant disturbed areas with plant species native to the impacted areas;
- The Company utilize API RP 1185 for all future public engagement activities associated with the proposed KCP project;

- The Company utilize the API Guidance for Conservation Programs on Pipeline Right-of-Ways for the restoration activities associated with the proposed KCP project;
- The Company secure all necessary federal, state, local, and tribal permits prior to commencing construction of the proposed KCP project;
- The Company contact each of the permitting agencies to request pre-application meetings for the purpose of discussing the proposed KCP project in detail and to ascertain exactly which permits are required for the project by each agency;
- The Company consult with DNR Archaeology and the SHPO to review its Unanticipated Discoveries Plan for cultural resources and human remains to address appropriate revisions per each respective agency's discussion; and
- An archaeology survey be conducted for all portions of the KCP project route which will be located within previously undisturbed ROW.

Q. Does Staff support the Company's application for the construction and operation of the proposed pipelines, and related facilities, associated with the Keweenaw Connector Pipeline?

A. If the Company further enhances the proposed KCP project as filed by the Company, and supplemented by the Company's testimony and exhibits, in this instant proceeding, to include the recommendations made by Staff herein, Staff would support the Company's application on the basis of the proposed route, engineering specifications, project necessity, and environmental impact.

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Q. If the aforementioned recommendations are satisfied, would Staff recommend the Commission grant a CPCN to the Company for the proposed KCP project?

A. Yes. If the aforementioned recommendations are satisfied, Staff would recommend the Commission grant a certificate of public convenience and necessity, pursuant to Public Act 9 of 1929, to SEMCO Energy Gas Company for the construction and operation of the Keweenaw Connector Pipeline. It is Staff's opinion that the KCP project, as filed in this instant proceeding, and supplemented to include the recommendations made herein by Staff, when constructed and in operation, will serve the convenience and necessities of the public.

Q. Is there anything further that Staff needs to address regarding this instant case?

A. Yes. Staff deems it important to highlight that the proposed KCP project has received approval from the Company's Board of Directors. Per the direct testimony of Company witness Dennis:

> Pending the approval of the certificate of convenience and necessity requested by this filing, the KCP has been reviewed and approved for construction by the AltaGas Board of Directors.

Q. Does this conclude your direct testimony?

A. Yes, it does.

JUDGE VARCHETTI: So it appears, then, that the evidentiary presentation is complete at this time. Are there any matters that we might have to resolve at today's hearing?

MS. WELLMAN: Nothing from the Company.

MR. ORRIS: Nothing from Staff.

MR. MOODY: Nothing from the AG. Thank you.

JUDGE VARCHETTI: All right. In that case, thank you so much for coming out today. I'm hearing no objections or no further items that need to be taken care of, so we have completed everything that we need to complete, and this hearing is now adjourned and we are off the record.

MS. WELLMAN: Thank you.

(At 9:11 a.m., the hearing concluded.)

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C E R T I F I C A T E

I, Lori Anne Penn (CSR-1315), do hereby certify that I reported in stenotype via Microsoft Teams the proceedings had in the above-entitled matter, that being Case No. U-21780, before James M. Varchetti, J.D., Administrative Law Judge with Michigan Office of Administrative Hearings and Rules, for the Michigan Public Service Commission, Lansing, Michigan, on Thursday, March 20, 2025; and do further certify that the foregoing transcript, consisting of Volume 2, pages 11-167, constitutes a true and correct transcript of my stenotype notes.

Lori Anne Penn

Lori Anne Penn, CSR-1315
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Dated: March 24, 2025