

January 12, 2024

Ms. Lisa Felice
Executive Secretary
Michigan Public Service Commission
7109 West Saginaw Highway
Post Office Box 30221
Lansing, MI 48909

RE: MPSC Case No. U-21358 – In the matter, on the Commission’s own motion, to conduct a nuclear feasibility study pursuant to Sec. 1094k of Article 5 of Public Act 166 of 2022 and MCL 460.10hh.

Dear Ms. Felice:

Enclosed for electronic filing in the above-captioned case, please find **Consumers Energy Company’s Comments on the MPSC Nuclear Feasibility Study Draft Report**. This is a paperless filing and is therefore being filed only in PDF.

Sincerely,

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STATE OF MICHIGAN

BEFORE THE MICHIGAN PUBLIC SERVICE COMMISSION

In the matter, on the Commission’s own motion,)
to conduct a nuclear feasibility study pursuant)
to Sec. 1094k of Article 5 of Public Act 166 of)
2022 and MCL 460.10hh.)
_____)

Case No. U-21358

CONSUMERS ENERGY COMPANY’S COMMENTS
ON THE MPSC NUCLEAR FEASIBILITY STUDY DRAFT REPORT

I. INTRODUCTION

Public Act 166 of 2022 directed the Michigan Public Service Commission (“MPSC” or the “Commission”) to engage an outside consulting firm to examine the feasibility of nuclear power generation in Michigan. Public Act 218 of 2022 provided the parameters for a nuclear feasibility study and directed the Commission to issue a report to the legislature by April 15, 2024. In response, on March 24, 2023, the MPSC issued an Order in Case No. U-21358 establishing the Nuclear Feasibility Study workgroup and indicating that no later than December 2023, the Commission will provide a nuclear feasibility study draft report to interested stakeholders for comment. The Commission enlisted the help of Enercon Services East, PC to facilitate the exploration of nuclear feasibility in Michigan and author a Michigan Nuclear Feasibility Study Report. The report was issued by the MPSC on December 19, 2023, along with notification of the third Nuclear Feasibility Study Workgroup (“Workgroup”) on January 9, 2024. During the Workgroup, the MPSC offered the opportunity to provide written public comments to the Commission no later than January 12, 2024 at 5:00 PM. Consumers Energy Company (“Consumers Energy” or the “Company”) appreciates the opportunity to provide feedback and offers the following comments.

II. COMMENTS

Consumers Energy appreciates being included as a stakeholder in the Nuclear Feasibility Study Workgroup. Workgroup meetings have included an opportunity for stakeholders to provide feedback and ask questions regarding the study and the draft report. As a result, the Company generally supports the content included in the report and suggests a few revisions. Consumers Energy would like the MPSC to clarify that clean controllable generation, not specifically nuclear generation, is necessary to achieve the 2023 Michigan Energy Law. In addition, the Company recommends the MPSC update the report to specify the advantages of using electricity from nuclear generation to produce hydrogen and to highlight risks that present a challenge to cost and schedule projections. Details of these suggested revisions are as follows.

- Section 9 states that the report concludes that “additional new nuclear and continuing nuclear power generation for the state of Michigan (Palisades restart, license extensions, power uprates, and new generation) will be necessary to achieve the Michigan Clean Energy Future Bill’s goals.” This is an overgeneralization of the information collected and power study completed for this report. Page 74 of the power study identifies that the benefits nuclear power would bring to Consumers Energy’s power system would be to provide “a stable and consistent power supply” which can “operate continuously, providing a very reliable electricity source to complement renewables.” But nuclear is not the only clean energy system as defined by the 2023 Michigan Energy Law that can provide those described benefits. Rather, what the power study concluded is that clean controllable generation will be needed to complement renewables, of which nuclear is one of the feasible options that should be considered. The report should reflect this conclusion.
- Nuclear power which is used to fuel hydrogen production needs to be carefully considered. The process of using electricity to generate hydrogen (via electrolysis) has been shown to be only 62% efficient. Industries considering hydrogen firing, such as the steel industry (as noted in the report), need to consider the all-in cost of firing hydrogen versus using electricity directly which is already zero carbon from a nuclear power plant. The report’s section 6.2.a should address how generating hydrogen with nuclear energy and losing 38% of the energy in this conversion is more advantageous than using electricity directly from a nuclear power plant.
- The Company observes that the report characterizes nuclear costs as nearly equivalent to community benefits. The Company cautions the MPSC to not underestimate the construction costs for a nuclear plant as demonstrated by numerous previous projects built in the United States which have incurred budget overruns due to delays in

schedule and supply chain upsets. Section 1.6.a provides details of the upfront cost disadvantage but this risk of cost escalation during a project needs to be more clearly stated in this section.

- Section 5 provides an illustrative schedule for the major steps in building a nuclear plant, beginning at feasibility and going through Commissioning/Start up based on information provided the U.S. Department of Energy. While this can be useful to establish a generic schedule regardless of location within the United States, only considering Federal timelines and neglecting specific State requirements paints an overly optimistic view of the process timeline needed to implement such a technology within Michigan. The report should note the end-to-end process in its entirety including state regulatory approvals (Integrated Resource Plans, Certificates of Necessity, EGLE permitting, etc.) and local permitting considerations which will extend the timelines currently shown.

Respectfully submitted,

CONSUMERS ENERGY COMPANY