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MICHIGAN HOUSE OF REPRESENTATIVES

STATE REPRESENTATIVE

SARAH ROBERTS

CAUCUS CHAIR

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Good Afternoon. I'm State Representative Sarah Roberts serving in the Michigan House of Representatives.

I am not a geologist, a scientist nor an expert on nuclear waste. But I am elected to be the voice of 90,000 Michigan citizens in the communities of Eastpointe, Saint Clair Shores and Grosse Pointe Shores located in Macomb County; and I am a passionate advocate for our Great Lakes and protecting the public's health.

I want to thank the Joint Review Panel for the opportunity to provide testimony today and for your truly thorough and open process with this set of hearings.

I also want to thank Frank and Beverly Fernandez and the Stop the Great Lakes Nuclear Dump organization for their passion and commitment to providing information and facts about this issue to the general public throughout Canada, Michigan and the entire United States. And, for working with me in such a collaborative fashion to engage more citizens in this process.

My hometown is St. Clair Shores. My community's and Macomb County's entire eastern border is Lake St. Clair. This lake defines us. People live on the lake and it's connected canals, we have restaurants and parks on the lake and many marina's line the shore.

Where I come from we consider our neighbors on the east side of the lake our good friends. We have much in common: commerce; the water we drink, boating destinations, fishing and other quality of life

activities connected to the water. The United States and Canada share many miles of beautiful shoreline and we both care about protecting this valuable natural resource.

We also share a deep commitment to collaboration when it comes to protecting our Great Lakes, which is evidenced by our involvement in the Great Lakes Water Quality Agreement and the International Joint Commission. We know it is in our best interest to protect our water and to work together and with the other Great Lakes States.

I am here today to share my concerns with you and, to be the voice of many concerned Michigan residents, regarding a potential critical threat to our Great Lakes, connected waterways, the public's health and our local and state economy. This threat is Ontario Power Generation's proposed nuclear waste site, which is roughly 120 miles upstream from my district's drinking water source.

Although I first learned about this proposal in 2007, since about 2009 I have heard nothing about it moving forward until recently. Once I learned things were moving forward I again became involved in trying to stop the proposed site from being constructed.

I have come here today to oppose this dangerous plan, to encourage you to oppose it as well, and to ask OPG to seek an alternative safer location.

The longevity and dangerous nature of the low and intermediate-level radioactive wastes that would be buried in OPG's DGR concerns me greatly. Intermediate-level waste can be radioactive for approximately 100,000 years.

It is impossible for any scientist or geologist to guarantee the geological safety of the proposed location for that many years into the future, especially when one considers the fact that the Great Lakes were formed only about 10,000 years ago.

In order to make predictions about the repository, OPG used computer modeling. However, many have raised concerns about this type of computer modeling use.

Allison McFarlane, an MIT trained professor of geology and the present Chair of the US Nuclear Regulatory Commission, has stated that *"Many assumptions go into these models. The problem, though is that one cannot make assumptions about the processes or features that one is not aware of.. [and that] "others have explored the use and misuse of models in the earth sciences and technical policy decision making. ...One of the main conclusions from these works is that these models cannot be validated or verified."*¹²

The bottom line is, it is impossible to guarantee the geologic integrity of the proposed location for the DGR. There will always be unanticipated or unpredictable natural occurrences that take place. The disaster at the Fukushima Nuclear Power Plant demonstrates the devastating effects of these occurrences. The earthquake and subsequent tsunami that occurred in Japan in 2011 damaged several reactors and reactor cooling systems, which has caused severe radiation leaks.

In addition, the Tokyo Electric Power Company (TEPCO) reported in August that about 300 tons of radioactive contaminated water was escaping into the Pacific Ocean every day. We should learn from Fukushima and do everything in our power to deter a catastrophic nuclear incident, whether from a reactor or from storage challenges.

We should be especially cognizant of the potential for an earthquake to cause a nuclear disaster in this particular situation, due to the fact that Ontario is no stranger to earthquakes.

In fact, an earthquake in Ontario occurred in May of this year. I worry that even the slightest seismic shift could compromise the ecological safety of the repository and have severe consequences.

The construction of the DGR would set a dangerous precedent. Nowhere in the Great Lakes Basin is there currently a DGR for nuclear waste. In fact, there is only one in the entire United States (**New**

Mexico), and at the present time there are none in Canada that I am aware of. The reason for their rarity and widespread skepticism is the possibility of dangerous outcomes if any releases occur.

I am deeply concerned about the potential for devastating effects that the storage of nuclear waste underground might have on the Great Lakes and the drinking water for many Michiganders.

Millions of Michigan citizens live downstream from the proposed repository and this could be a serious risk to the public's safety and the quality of our water. There are several drinking water intakes downstream from the proposed site. What happens if we can no longer drink the water?

Drinking water isn't the only thing that could be impacted.

Tourism and agriculture are two of Michigan's top industries that could also be devastated if the waste site leaks. Roughly 96 million travelers visit Michigan each year, and Michigan's agriculture industry adds more than \$91.4 billion to our state's economy.

Radioactive contaminated Great Lakes Water would be devastating to our 2 top industries in Michigan.

Lake St. Clair is vital to our economy in Macomb County. Referred to as The Heart of the Great Lakes it represents 46% of the entire Great Lakes recreational fishing industry.

It is internationally known as the US premier Musky fishery and ranks high nationally for its smallmouth bass and walleye fishing.

All this account for over \$36 million annually into our economy.

Recreational boating accounts for \$1.7 billion and Lake St. Clair, on the US side has the highest number of registered boats anywhere in the US. Macomb County has over 60 active marina's and ranks highest in the US in the number of boat slips available.

As we work our way out of our depression in Michigan, Macomb County is targeting our water as a key economic driver. What would happen if our jewel of a lake was contaminated?

The Great Lakes define us as a state. We are the only state in the US that is located entirely within the Great Lakes Basin. So much of who we are and what we do is connected to the water.

My concerns became elevated when I read that the consultant you hired to review OPG's analysis of the proposed site stated the report was not credible or defensible. Those are strong statements and I hope they, along with the thousands of concerned citizens who have voiced their opposition, weigh heavy in the decision you will be making about this proposal.

Although I wish the members of the Michigan Legislature were more proactive in protecting our lakes, we do have some good laws on the books.

In 1978, Michigan passed a law which prohibits radioactive waste from being deposited in Michigan with a few very limited exceptions. Public Act 113 of 1978 allows above ground storage of radioactive waste at nuclear power plants until the plant is decommissioned.

Public Act 113 does not allow for the material to be permanently stored underground.

As stated in the Great Lakes Water Quality Agreement between the United States and Canada it is important to "acknowledge the vital importance of the Great Lakes to the social and economic well-being of both countries."

Both nations have an "obligation not to pollute boundary waters" and recognize "that nearshore areas must be restored and protected because they are the major source of drinking water for communities within the basin, are where most human commerce and recreation occurs, and are the critical ecological link between watersheds and the open water of the Great Lakes."

In conclusion I again ask you to oppose this proposal. The radioactive material that you anticipate being placed here will be contaminated for thousands of years.

We simply don't know what challenges natural disasters will bring, nor the long-term geologic integrity of the DGR. We do know that far too often, we simply have not been careful enough and we have not planned well. enough. I am asking you to be more careful and plan better.

I think we often take our Great Lakes for granted because we are so close to them. But they are fragile. They give us food and water and enjoyment and life. The lakes take really good care of us. We have a moral obligation to return that favor.

Thank you for allowing me to speak to you today and share my thoughts and concerns with you.



September 30, 2013

Joint Review Panel Members:

Please accept this letter as our formal endorsement of the Request for a Ruling filed by the Canadian Environmental Law Association and other interveners regarding Ontario Power Generation's inclusion of decommissioning wastes in the proposed Deep Geological Repository. This request is filed as PMD 13-P1.80B on the Panel's registry of hearing documents.

Sincerely,

A handwritten signature in black ink, appearing to read "Hoon-Yung Hopgood".

HOON-YUNG HOPGOOD
State Senator
8th District

A handwritten signature in black ink, appearing to read "Sarah Roberts".

SARAH ROBERTS
State Representative
18th District