

# GREENPEACE

## Comments on EX28.13

### Communicate City's Public Safety Expectations to Province

To: Mayor Tory and Executive Committee

Date: October 18, 2018

From: Shawn-Patrick Stensil, Senior Energy Analyst, Greenpeace

Re: Office of Emergency Management – Toronto's Emergency Management Program

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**Issue:** While provincial officials have indicated the Provincial Nuclear Emergency Response Plan (PNERP) will be updated before the end of the 2017, Executive Committee has not been provided a formal opportunity to communicate the City's expectations for public safety to the province.

#### Recommendations:

- Accept the Office of Emergency Management's (OEM) Annual Report.
- Support the positions taken by other municipalities that Ontario's nuclear emergency response plans should be on par with the best in the world.
- Request the Ontario government emulate Switzerland and put in place nuclear emergency response plans to address a level 7 accident on the International Nuclear Event Scale (INES).
- Direct staff to communicate the City's expectations to the Ministry of Community Safety and Correctional Services.
- Direct staff to report on the financial impacts of the revised nuclear emergency response plan once its published in 2018.

#### Background

Greenpeace urges Executive Committee to advocate for strengthened public safety by formally echoing the policies taken by other municipalities calling for the province to strengthen its nuclear emergency response plans.

Other municipalities such as Durham Region, Ajax, Windsor, Amherstburg, Essex County and Brockton have all passed motions asking the province to strengthen its preparedness for a nuclear emergency. For example, Durham Region has requested the province include the following in an updated nuclear emergency response plan:

- A recognition that the public expects world-class public safety and that provincial emergency planning should be among the best in the world;
- Expanding the delivery of potassium iodide (KI) pills beyond the current 10 km pre-distribution area;
- Meeting or exceeding international best practices wherever feasible;
- Increased transparency, including regular reporting to municipal councils;
- Strengthened protection for vulnerable communities;
- Ensure funding mechanisms are in place to compensate municipalities for maintaining additional emergency response measures; and,
- Seriously consider the detailed recommendations contained in civil society policy paper *A Call for Public Safety: Addressing Nuclear Risks on the Great Lakes*.

***Greenpeace urges Executive Committee to, at a minimum, adopt Durham Region’s policy requests and direct staff to immediately communicate the City’s expectations to the province.***

This action is necessary because of the provincial government’s decision to launch a long-awaited consultation on its nuclear emergency response plans in mid May, which prevented city staff from providing a report to the June 19<sup>th</sup> Executive Committee meeting. The provincial government’s choice of timing is unfortunate because it knew Executive Committee had expressed an interest in contributing to the consultation.

In anticipation of this consultation and in line with its role as an advocate for public safety, Executive Committee directed city staff in 2016 “...to report on the City’s draft submission to the provincial government’s consultation on its nuclear emergency plans.”<sup>i</sup> This directive sought to ensure Executive Committee could contribute to the City’s proposals for strengthening nuclear emergency response plans.

Unfortunately, the province refused a request from Toronto City Council to extend the consultation deadline until September 30<sup>th</sup> “...in order to allow municipalities and citizens to provide meaningful input.”<sup>ii</sup> Durham Region had passed a similar motion.

Notably, Ministry of Community Safety staff have stated they are working with “haste” to have provincial cabinet approve an PNERP before the end of 2017.<sup>iii</sup> This means if Toronto is to have any influence over a revised plan, it must formally communicate its expectations as soon as possible.

**Recommendation:** Adopt the positions taken by other municipalities in support of world-class nuclear emergency response planning and direct staff to communicate to City’s expectations to the Ministry of Community Safety,

***Provincial proposals would not provide Torontonians world-class public safety***

Executive Committee action is needed to encourage the province to substantively strengthen public safety measures.

On May 15 2017, the Ministry of Community Safety and Correctional Services released a Discussion Paper recommending Ontario maintain its current policy of only preparing detailed emergency plans for accidents equivalent in scale to the one that occurred at Three Mile Island in 1979. Despite the 2011 Fukushima disaster, the province recommended against strengthening public safety.

In contrast, Switzerland announced in June it would put in place emergency plans to protect its citizens in the event of a level 7 accident on the International Nuclear Event Scale (INES). This is the most severe accident on the INES scale. As a result, Switzerland will expand their emergency zones, prepare for large-scale evacuations, and ready themselves for the long-term care of evacuees in the event of an accident. Under the province’s proposal, such measures would not be in place in Ontario.

**Recommendation:** The City of Toronto should ask the Ontario government to emulate Switzerland and put in place nuclear emergency response plans to address a level 7 INES accident.

***Request expanded potassium iodide (KI) delivery***

Executive Committee should endorse Durham Region’s request for a revised PNERP to require expanded potassium iodide (KI) delivery beyond the current 10 km distribution zone.

The Canadian Nuclear Safety Commission (CNSC) imposed KI delivery requirements on reactor operators in 2014 due to public expectations for public safety, international practices and concerns

related to the province's slow response to Fukushima. The province and reactor operators opposed KI delivery despite it being a common practice internationally.

However, the CNSC's KI distribution requirements were applied somewhat arbitrary because they relied on the existing provincial emergency planning zones without any specific analysis of what would be appropriate for KI distribution. For example, the current 10 km Primary Zone was designed for evacuation and the 50 km Secondary Zone for ingestion control. Both were established before Chernobyl. Indeed, in 2016 report to Executive Committee, city staff stated that they could "...not find any evidence that linked the distances between potassium iodide pre-distribution and evacuation planning zones."<sup>iv</sup>

Citing international best practices and the GTA's growing population, Durham Region has asked the province to "...expand the pre-distribution of potassium iodide (KI) pills beyond the current 10 km Primary Zone."<sup>v</sup> Similarly, the Amherstburg and Essex County asked for a revised PNERP to include requirements "...for the funding, public education and pre-distribution and availability of potassium iodide (KI) pills for communities living in proximity to the Fermi and Davis-Besse nuclear stations."<sup>vi</sup>

Moreover, the CNSC has also requested that the province include requirements for KI delivery and availability in a revised PNERP, and clarify how it will promptly deliver KI to vulnerable communities outside of the current 10 delivery zone in the event of an emergency.<sup>vii</sup> There is thus broad support for the inclusion of enhanced KI delivery requirements in an updated PNERP.

**Recommendations:** Greenpeace urges Executive Committee to formally endorse the Durham Region's request for expanded KI delivery and instruct city staff to communicate the city's expectations to the provincial government.

### ***The proposed Contingency Zone: Too early to assess financial impacts***

In April 2016 Executive Committee directed city staff to report "...on the financial impacts of the provincial government's proposal to establish an expanded 20km emergency planning zone as well as other measures."<sup>viii</sup>

The Discussion Paper released in May did recommend a new "Contingency Zone" be put in place between 10 and 20 km around each Ontario-based nuclear stations. However, the CNSC, Health Canada, Durham Region and Greenpeace have voiced concerns about the proposed zone's lack of alignment with international safety guidance, its unclear public safety benefits, and the lack of evidence to justify limiting it to 20 km.

For example, Durham Region asked the province to clarify and "distinguish the operational intent" of the Contingency Zone<sup>ix</sup> from the current Primary Zone. Health Canada also observed there is "no clear explanation of the choice of arrangements proposed..." for the Contingency Zone.<sup>x</sup>

The CNSC has also expressed concerns regarding the proposed Contingency Zone. It recommended the province implement instead the International Atomic Energy Agency's (IAEA) post-Fukushima recommendation for an Extended Planning Distance (EPD).<sup>xi</sup> The objective of IAEA's EPD is to address the need to monitor and address localized contamination (known as "hotspots") beyond evacuation zones. As seen following Chernobyl and Fukushima, such localized contamination could require localized evacuations. The CNSC observed that the limited 20 km Contingency Zone would be "...inadequate for hotspot monitoring."<sup>xii</sup> Health Canada has also observed there was no "solid rationale" for limiting the Contingency Zone to 20 km.<sup>xiii</sup>

The table below compares the zone sizes recommended by the IAEA with the province’s proposed emergency planning zones. The 20 km Contingency Zone falls well short of the 100 km EPD recommended by the IAEA.

| Emergency zones and distances                      | Suggested maximum radius (km) |                     | Discussion Paper’s Recommendations for Ontario’s Multi-Unit Nuclear Stations |
|--|-------------------------------|---------------------|--|
|  | > 1000 MW (th)                | 100 to 1000 MW (th) |  |
| Precautionary action zone (PAZ)                    | 3 to 5                        |                     | 3<br>(Contiguous Zone)   |
| Urgent protective action planning zone (UPZ)       | 15 to 30                      |                     | 10<br>(Primary Zone)   |
| Extended planning distance (EPD)                   | 100                           | 50                  | 20<br><b>(Contingency Zone)</b>  |
| Ingestion and commodities planning distance (ICPD) | 300                           | 100                 | 50<br>(Secondary Zone)   |

The CNSC has also encouraged the province to include other preparedness measures for the Contingency Zone, including “...evacuation plans, the availability of KI before or at time of emergency, location of centres outside this zone.”<sup>xiv</sup> Notably, inclusion of such measures would make the proposed Contingency Zone operationally almost identical to the current 10 km Primary Zone.

**Recommendation:** In light of the contested scope and adequacy of the Contingency Zone as currently proposed, Greenpeace recommends Executive Committee direct staff to report on the financial impacts of the revised nuclear emergency response plan once its published in 2018.

**Information:**

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<sup>i</sup> EX14.9, *Emergency Management - Nuclear Power Generation*, April 18, 2016.  
<sup>ii</sup> MM31.31, *Request for Extension of the Government of Ontario’s deadline for comments on its Discussion Paper on nuclear emergency preparedness - by Councillor Neethan Shan, seconded by Councillor Paul Ainslie*, July 4, 2017.  
<sup>iii</sup> August 17<sup>th</sup> meeting of the Canadian Nuclear Safety Commission, pgs. 102 – 103  
<sup>iv</sup> Deputy City Manager, Cluster B to Executive Committee, *Emergency Management – Nuclear Power Generation*, EX14.9, March 31, 2016, pg. 10.  
<sup>v</sup> The Regional Municipality of Durham, Regional response to Provincial Discussion Paper entitled “Provincial Nuclear Emergency Response Plan (PNERP) Planning Basis Review and Recommendations, #2017-COW-137 [as amended by Council June 14, 2017].  
<sup>vi</sup> Town of Amherstburg – Resolution #20170612 – 742, June 22, 2017 and Essex County Council Regular Meeting Agenda, Resolution 9.2.1, July 19, 2017.  
<sup>vii</sup> Kathleen Heppell-Masys, (Director General, CNSC) to Leslie Coleman (Manager, Community Safety and Intergovernmental Policy Branch), “Consolidated CNSC Comments on PNERP Discussion Paper and Proposed Changes,” July 28, 2017, E-Doc# 5287028, pg. 5, Acquired through Access to Information (A-2017-00066).  
<sup>viii</sup> EX14.9, *Emergency Management - Nuclear Power Generation*, April 18, 2016.  
<sup>ix</sup> The Regional Municipality of Durham, *Ibid*, pg. 2.  
<sup>x</sup> Health Canada – Radiation Protection Bureau, EBR Registry 013-0560, Comment ID 210075, July 11, 2017.  
<sup>xi</sup> Kathleen Heppell-Masys, (Director General, CNSC), *Ibid*, pg. 8.  
<sup>xii</sup> *Ibid*, pg. 9.  
<sup>xiii</sup> Health Canada, *Ibid*.  
<sup>xiv</sup> Kathleen Heppell-Masys, (Director General, CNSC), *Ibid*, pg. 9.