



Nuclear Emergency Preparedness Program

Durham Emergency Management



Agenda

- 1. Nuclear Emergency Preparedness Activities 2021
- 2. Plans for 2022



1. Nuclear Emergency Preparedness Activities

- Plans
- Exercises
- Training
- Committees & Working Groups
- Public Education & Awareness
- Public Alerting Tests



Plans

- Annual review of the Durham Nuclear Emergency Response Plan (DNERP) and its supporting documents, including the Nuclear Emergency Support Functions (NESFs) and Response Specific Instructions (RSIs), were conducted. The NESFs and RSIs were further refined to align with the developed Regional Emergency Operations Centre (REOC) and Duty Officer Standard Operating Procedures (SOPs) and RSIs.
- To enhance operational response, the following resources were developed:
 - Nuclear Operations Response Table providing more detail on the Regional response at each declared provincial response level.
 - REOC Nuclear Emergency Incident Action Plan (IAP) and Emergency Workers Centre (EWC) IAP.
 - Nuclear specific emergency notification and staff recall scripts were developed and implemented into the mass notification system.



Exercises

DEM participated in the following:

- Emergency drill at DNGS.
- Nuclear discussion based exercise with the Regional Control Group and their alternates focusing on the response actions required during a nuclear emergency.
- Planning for Exercise Unified Command (ExUComm) with both REOC and EWC play as well as assisting other Regional Departments and the local area municipalities with their planning activities.



Training

- A nuclear training package was developed and will be distributed to Regional Control Group members, their alternates, and Regional ExUComm participants.
- Exercise participants will partake in general nuclear training and emergency workers centre specific training sessions in preparation for ExUComm. The training will allow participants to focus on their specific roles and responsibilities, communication pathways and validate the current plans and resources (including forms, checklists and the incident action plan templates) during the exercise.



Committees & Working Groups

| Committees, Working Groups and Meetings |
|---|
| Regional |
| Public Education |
| Nuclear Sector Working Group |
| Nuclear Exercise Meetings with Regional Departments and Local Area Municipalities |
| Durham and Toronto Office of Emergency Management Working Group |
| Durham Nuclear Health Committee |
| Provincial |
| NEMCC – Main Committee |
| NEMCC – Public Education Subcommittee |
| NEMCC – KI Working Group |
| NEMCC - Transportation |
| EPREV Provincial Working Group |
| Federal |
| EPREV Steering Group |
| CSA N1600 Technical Committee |
| CNSC Hearings |
| CNSC KI Pill Working Group |
| Exercise Unified Command |
| Steering Committee |
| Joint Exercise Planning Team |
| Scenario Development Working Group |
| Exercise Communications Working Group |
| Exercise Evaluation Working Group |



Public Education & Awareness

- Durham-Toronto Nuclear Public Education Plan
 - Describes the overall strategy for compliance with the PNERP and EMCPA for public education related to nuclear emergency preparedness.
- Ontario Tech University Nuclear Awareness Social Research Project
 - 4-year project commencing in 2021 to survey residents to determine their level of knowledge and preparedness during a nuclear emergency.
 - Survey will determine public education campaigns and tactics, measure year over year changes in resident knowledge and compare the level of preparedness between geographic nuclear planning zones.
 - Survey questions, analysis methods and reports will be reviewed and approved by Durham Region.



Public Education & Awareness

Public Alerting Campaigns

- Target audience are people who live, work, play, or go to school within 10 km of the Darlington & Pickering Nuclear Generating Stations.
- Goal is to improve awareness of the testing and where to obtain more information.
- Spring campaign was shortened due to the competing COVID-19 vaccine roll out campaigns and ran from April 19 to May 6. The fall campaign ran from September 27 to October 20.





Public Alerting Campaigns

| Public Alerting Campaign Impressions | | |
|--------------------------------------|-----------|-----------|
| | Spring | Fall |
| Social Media | 173,382 | 185,196 |
| Earned (PSAs) | 95,000 | 530,000 |
| Paid (radio, print, media ads) | 1,078,804 | 674,143 |
| Overall Impressions Total | 1,347,186 | 1,389,339 |

- An impression is one view (or listen) of a piece of content.
 Impressions are a proxy measure for awareness and a standardized way to measure shared, earned, paid and owned media.
- We also reached out to Boards of Trade and Chambers of Commerce and for the fall campaign, ads were placed with the Weather Network and Spotify to reach more people in a digital format.
- There were also 5,946 and 3,800 pageviews on the Region's nuclear preparedness website for the spring and fall campaigns.





Public Alerting Tests - Indoor

The spring test was conducted on May 3 and the fall test was conducted on October 18.

| Darlington – Indoor Alerting Test Results | | | | |
|---|-----------------|-----------------|-----------------|-----------------|
| | Spring | | Fa | all |
| Zone | Number of Calls | Time | Number of Calls | Time |
| 0 – 3 km | 55 | 11min | 55 | 4min:06sec |
| 3 – 10 km | 33,567 | 3hr:12min:35sec | 24,308 | 1hr:17min:32sec |
| Total | 33,622 | 3hr:23min:35sec | 24,363 | 1hr:21min:38sec |

| Pickering – Indoor Alerting Test Results | | | | |
|--|-----------------|-----------------|-----------------|-----------------|
| | Spring | | Fa | all |
| Zone | Number of Calls | Time | Number of Calls | Time |
| 0 – 3 km | 4,700 | 32min:51sec | 2,900 | 12min:40sec |
| 3 – 10 km | 52,175 | 5hr:35min:52sec | 36,428 | 1hr:55min:03sec |
| Total | 56,875 | 6hr:08min:43sec | 39,328 | 2hr:07min:43sec |
| Grand Total | 90,497 | 9hr:32min:18sec | 63,691 | 3hr:29min:21sec |



Public Alerting Tests - Indoor

The following is a summary of calls from May 3 to 10 and October 18 to 25, respectively:

| Summary of Calls to the Dedicated Public Alerting Line | | | |
|--|--------|------|--|
| Issue | Spring | Fall | |
| Hang up | 15 | 14 | |
| Not received on cell phone | 3 | 1 | |
| Request to remove number | 3 | 2 | |
| Time of siren testing | 3 | 1 | |
| Caller ID | 1 | 1 | |
| Did not hear siren | 1 | 1 | |
| KI pill request | 1 | 1 | |
| Other | 5 | 6 | |
| Total Number of Calls | 32 | 27 | |

The number of calls to the dedicated phone line have fallen drastically over the past few years. We attribute this success to using more focused tactics to reach our target audience regarding the tests.



Public Alerting - Outdoor

- The spring test was conducted on May 4 and the fall test on October 19. The sirens were activated for one minute for each test.
- We continue to ensure semi-annual inspections and required work are completed to maintain the siren system.



2. Plans for 2022

| Program Component | Priorities | |
|---|---|--|
| | Review the Draft 2022 Provincial Nuclear Emergency Response Plan (PNERP) and provide feedback to the province. | |
| Plans | Review and revision of the Durham Nuclear Emergency Response Plan (DNERP) and supporting documents including Nuclear Emergency Support Functions, Standard Operating Procedures, Response Specific Instructions, Forms, Checklists and Memory Aids based on the 2022 PNERP. | |
| | Implement the identified Regional requirements from the PNERP and the Implementing Plans. | |
| | Participate in the Ministry of Transportation led evacuation planning. | |
| | Deliver nuclear based training to exercise participants to prepare for Exercise Unified Command consisting of general nuclear training and emergency workers centre (EWC) specific training. | |
| Training | Revise training materials and resources such as the Nuclear Emergency Operations Response Table and nuclear specific Incident Action Plan templates, forms and checklists for the Regional Emergency Operations Centre (REOC) and EWC based on lessons learned from the exercise. | |
| | Participate in Exercise Unified Command in February through a virtual REOC and EWC. | |
| Exercises | Assist other Regional Departments and local area municipalities with their nuclear exercise planning, development and evaluation. | |
| | Ensure all recommendations and action items in the After-Action Reports and Improvement Plans from Exercise Unified Command are implemented. | |
| Committees, Working Groups and Meetings | The DEM team will continue to participate in nuclear committees and working groups and attend nuclear meetings. | |

Plans for 2022

| Program Component | Priorities |
|-------------------------------------|---|
| Public Education and Awareness | Continue to collaborate with the City of Toronto and OPG on the Nuclear Public Education Plan and have an integrated communications framework to amplify messaging, identify synergies, co-ordinate strategic decisions and share resources. Development and launch of the second annual survey within Durham Region to understand our communities and their knowledge of nuclear emergency preparedness. This is part of a 4-year City Studio research project in collaboration with Ontario Tech University. Conduct the spring and fall public alerting campaigns for testing of |
| | the indoor and outdoor alerting systems. Investigate further communication strategies with stakeholders and improve messaging used in the 0 – 3 km zone and the 3 – 10 km zone. |
| | Conduct semi-annual tests of the mass notification (auto-dialer) system. |
| Public Alerting – Indoor System | Continue to improve the integrity of the current landline data and investigate how to obtain better data for future tests. |
| | Continue to test and update nuclear notification and activation scripts for use in the system. |
| | Conduct semi-annual tests of the siren system. |
| Public Alerting – Outdoor System | Ensure all semi-annual inspections of the siren system are completed by the service provider, including ground maintenance. |
| | Continue with the approved upgrades and maintenance to the siren system. |





Thank You

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