

Staff Report

If this information is required in an alte nate accessible fo mat, please contact the Accessibility Coordinator at 905-623-3379 ext. 2131.

Report To:	Joint Committees	Report Number: ESD-006-19
Date of Meeting:	September 9, 2019	By-law Number:
Submitted By:	Gord Weir, Director of Emergency Ser	rvices Resolution#: JC-104-19
Reviewed By:	Andrew C. Allison, CAO	
File Number:		
Report Subject:	Memorandum of Understanding – Ontario Power Generation	

Recommendations:

- 1. That Report ESD-006-19 be received;
- 2. That the conditions outlined in the Memorandum of Understanding with Ontario Power Generation, for Fire Protection and Community Emergency Management (Attachment 1 to Report ESD-006-19), be endorsed; and
- 3. That the Mayor and Clerk be authorized to enter into the Memorandum of Understanding with Ontario Power Generation for Fire Protection and Community Emergency Management (Attachment 1 to Report ESD-006-19).

Report Overview

To update the Memorandum of Understanding between Clarington Emergency and Fire Services and Ontario Power Generation.

1. Background

- 1.1. <u>Report ADMIN 9-93</u>, in part, contains an agreement between the Municipality of Clarington and Ontario Power Generation (OPG), formerly known as Ontario Hydro, and sets the Municipality as the primary responder.
- 1.2. Since that time OPG has introduced on site emergency personnel which changed Clarington Emergency and Fire Services (CEFS) to the secondary tiered responder.
- 1.3. Several years later, the Canadian Nuclear Safety Commission strongly recommended that OPG and the Municipality enter into a formal Memorandum of Understanding (MOU) which was formalized in 2007 with a 5 year renewal.

2. Report

- 2.1. Arising out of the recommendations contained in <u>Report ESD-017-07</u>, the MOU was updated with modest changes, along with changes to the financial support from OPG.
- 2.2. In 2014, the MOU was revised and the financial support from OPG was increased to \$250,000. These funds provide compensation for services provided by CEFS such as co-training, tours, annual practice drills, monitored drills, fire safety plan review, annual fire inspections, etc.
- 2.3. The attached revised MOU (Attachment 1) has been issued for a term of 6 years; 2019-2024. The agreement will be reviewed annually by the Fire Chief and the Director of Fire Protection, OPG.

3. Concurrence

This report has been reviewed by the Municipal Clerk and the Municipal Solicitor who concur with the recommendations.

4. Conclusion

It is respectfully recommended that the Memorandum of Understanding (Attachment 1 to this report) be approved, and that the Mayor and Clerk be authorized to execute the MOU with OPG for Fire Protection and Community Emergency Management

Staff Contact: Gord Weir, Director of Emergency and Fire Services, 905-623-5126 ext. 2802 or gweir@clarington.net.

Attachment:

Attachment 1 - Memorandum of Understanding – Fire Protection and Community Emergency Management OPG

There are no interested parties to be notified of Council's decision.

Memorandum of Understanding

FIRE PROTECTION AND COMMUNITY EMERGENCY MANAGEMENT

Between The Municipality of Clarington and Ontario Power Generation Inc.

January 1, 2019

Memorandum of Understanding

FIRE PROTECTION AND COMMUNITY EMERGENCY MANAGEMENT

Between The Municipality of Clarington ("Clarington") and Ontario Power Generation Inc. ("OPG")

1. Application

This Memorandum of Understanding ("**MOU**") applies to the provision of fire protection services, including fire safety planning, fire inspections and coordinated emergency response between the Municipality of Clarington ("Clarington"), and OPG Darlington Nuclear Generating Station ("**DNGS**"), and financial support for Clarington's Community Emergency Management Program ("**CEMP**").

2. Purpose

It is understood that OPG and the Canadian Nuclear Safety Commission ("**CNSC**") are solely accountable for all fire safety provisions at DNGS. Nonetheless, it is recognized that there exists a cooperative and collaborative relationship between OPG and Clarington with respect to fire protection, emergency response, and community emergency management and that relationship should be maintained and enhanced.

In order to clarify and strengthen the co-operative working relationship between OPG and Clarington, it is appropriate that the two parties execute this MOU concerning fire protection and community emergency management.

This MOU recognizes the significant benefits to be gained by both parties in developing and maintaining a co-operative working relationship with respect to community emergency management and fire safety.

3. Mutual Aid Arrangements for on-site and off-site Emergencies

Both Clarington and DNGS have substantial fire-fighting and emergency response resources at their disposal. It is acknowledged that the combined resources are a significant force that should be made available to help safeguard the community in the event of a major incident. It is also recognized that a major incident, either on-site or offsite, would tax the resources of the respective fire and emergency crews either at DNGS or Clarington.

In the event of a major off-site incident, OPG agrees to provide assistance to Clarington, if requested, and within the limitations of the DNGS license, the DNGS Waste Facility license, OPG's regulatory commitments to the CNSC, all applicable CNSC regulatory guidance documents and all laws in force at the time the assistance is sought. This assistance may include personnel (e.g. drivers for OPG vehicles), equipment and supplies to support Clarington in their efforts to control and/or mitigate an emergency.

Notwithstanding the foregoing, it is acknowledged that OPG personnel will not engage in active firefighting activities off OPG property but will provide assistance in a support capacity.

DNGS is staffed with full time National Fire Protection Association 1081 qualified emergency response personnel available 24 hours a day, seven days a week. Nonetheless, Clarington Fire Services ("**CFS**") will be called to all fire events at DNGS to provide assistance as required. DNGS shall provide clearly marked access routes for responding emergency vehicles and shall provide a security escort as required to the fire location.

4. Community Emergency Management

As a host municipality to a nuclear power plant, Clarington has greater obligations and responsibilities than many municipalities in dealing with community planning and emergency situations.

To support Clarington in dealing with major emergency situations and community emergency management functions, OPG agrees to provide annual financial assistance to Clarington in accordance with this MOU. An overview of Clarington's CEMP under the direction of the Fire Chief - CFS is contained in Appendix C to this MOU.

5. Fire Safety Plan

Section 2.8.2 of the National Fire Code of Canada requires the preparation of a fire safety plan in cooperation with the fire services and other applicable regulatory authorities, in order to protect people and property from fire and its effects. To this end, OPG shall prepare a fire safety plan that is consistent with the requirements of the National Fire Code of Canada.

The Manager of Fire Protection – OPG, or an authorized delegate, and the Fire Chief – CFS, or an authorized delegate, shall jointly sign the fire safety plan, and the executed fire safety plan shall be submitted to CNSC.

In order to ensure the fire safety plan remains current and up-to-date, it shall be reviewed at least once a year and amendments shall be made as required. These amendments shall be approved by the Manager - Fire Protection OPG, or an authorized delegate, and the Fire Chief – CFS, or an authorized delegate, and submitted to CNSC.

6. Mutual Work Plan

In every calendar year to which this MOU applies, OPG and CFS will collaborate and agree on the joint activities which CFS and OPG propose to undertake during the year.

Examples of the focus areas for joint work activities are identified in Appendix A to this MOU.

7. Financial Support

In every calendar year to which this MOU applies, OPG shall provide an annual payment to Clarington in the amount of \$250,000.00. These funds will assist Clarington with costs associated with being a host community of a nuclear power plant. The financial support will be allocated to CFS emergency response, training, personnel, equipment costs, and to implement Clarington's CEMP. In exchange for the annual payments by OPG, CFS agrees to respond to fires and emergencies at DNGS and Darlington Nuclear Waste Facility for which external emergency response is requested by OPG and for which CFS is notified. CFS will also commit to annual familiarization tours, joint fire training activities and joint fire response exercises at DNGS, the Darlington Waste Management Facility and Wesleyville Fire Training Academy. OPG and CFS recognize that drills and exercises contribute toward creating a robust joint response capability and unified command structure. In support of this, CFS agrees to participate in 2 drills annually jointly with OPG at DNGS and will also participate in 1 additional drill every 2 years at the Darlington Waste Management Facility. CFS will jointly participate with OPG in the planning of response drills, exercises, tours and training, but it is understood that the implementation of response drills, exercises, tours and training shall be the responsibility of OPG and DNGS. Drill participation may include up to 2 CFS trucks fully staffed and a CFS Incident Commander where drill scope and municipal staffing supports.

Notwithstanding the foregoing, it shall be understood that participation by CFS in response drills, exercises, tours and training is conditional on the availability of overtime staffing and fire vehicles. All emergency responses shall take precedence over any response drills, exercises, tours and training.

CFS has a responsibility to maintain minimum response capability to Clarington and therefore, CFS staffing shall remain at minimum complement at all Clarington fire stations during any response drills, exercises, tours and training, and that any staff that participate in response drills, exercises, tours and training shall be called in on overtime or taken from on duty complement provided minimum complement at all Clarington fire stations is met, and subject to approval by the Fire Chief – CFS.

CFS staff will actively participate in interior firefighting response protocol drills with OPG industrial fire brigade. The intention is that these drills will provide learning opportunities for all participants and promote team culture. CFS participation in fire drills or training activities at Wesleyville Fire Training Academy is in addition to the station and waste facility drills noted above and is at the sole discretion of CFS.

8. Employees

Notwithstanding any provisions or arrangements contained within this MOU, all employees of Clarington and all employees of the OPG shall remain employees of their respective organizations. Furthermore, all collective agreements terms of employment of the respective organizations shall remain in full force and effect.

9. Liabilities

OPG shall indemnify and save harmless Clarington from and against all claims, losses, damages, actions, suits or proceedings arising out of this MOU and resulting from acts or omissions of OPG, its employees, agents and contractors involving gross negligence or misconduct in responding to a request for assistance by Clarington and acts or omissions of Clarington or its employees, agents or contractors related to any involvement at DNGS, other than acts or omissions involving gross negligence or willful misconduct of Clarington, or its employees, agents or contractors.

Subject to the application of the *Nuclear Liability and Compensation Act,* S.C. 2015 (the "**Nuclear Liability Act**"), Clarington shall indemnify and save harmless OPG from and against all claims, losses, damages, actions, suits or proceedings arising out of this MOU and resulting from acts or omissions of Clarington , its employees, agents and contractors involving gross negligence or misconduct related to any involvement at DNGS and acts or omissions of OPG, or its employees, agents, or contractors in responding to a request for assistance by Clarington, other than acts or omissions involving gross negligence or willful misconduct of OPG, or its employees, agents, or contractors.

In the event that damages, loss or injury caused by the hazardous properties of nuclear material, as defined under the Nuclear Liability Act, occur wholly or partially as a result of an unlawful act or omission of an employee, agent, contractor, or sub-contractor of Clarington done with the intent to cause injury or damage, OPG will not pursue any right of recourse it may have against Clarington in such an event and any subrogation rights its insurers may have, will be exercised in accordance with the letter from OPG's insurer dated July 11, 2019, which forms Appendix D to this MOU.

In no event whatsoever will either OPG or Clarington be liable for:

- a) indirect, special, incidental, contingent or consequential damages including loss of goodwill, loss or damage to data, or any information, loss of actual or anticipated revenue or profits, failure to realize expected savings, loss of use or any other economic loss whatsoever, even if OPG or Clarington, as the case may be, has been advised of the potential for such damages. However, Clarington shall be reimbursed for replacement and rental costs incurred pending delivery of new vehicle(s) and/or associated equipment in the event that any vehicle and/or associated equipment related to any involvement at DNGS become(s) unusable as a result of contamination; and
- b) Punitive, exemplary or aggravated damages.

Additionally, in no event whatsoever will Clarington be liable for:

- a) direct physical damage to the radioactive or non-conventional (nuclear) parts of DNGS;
- b) direct physical damage to the conventional (non-nuclear) parts of DNGS,

where such damage results from radioactive contamination; and

c) any physical damage to DNGS or DNGS property damaged or lost while on the DNGS site, provided that the damage or loss is not covered by conventional Commercial General Liability and/or Motor Vehicle Liability insurance policies.

10. Insurance

OPG and Clarington shall each maintain in effect Commercial General Liability insurance in the amount of at least 25 million dollars and Motor Vehicle Liability insurance in the amount of at least 2 million dollars. Clarington and OPG shall be named as additional insured's on the respective Commercial General Liability insurance policies and supply a certificate of insurance evidencing such coverage and shall further provide certified copies of insurance policies upon request, such request only to be made in the event of a potential claim situation where OPG's or Clarington's interests may be insured by the insurance coverage noted herein.

The Commercial General Liability insurance coverage shall not be cancelled or materially changed by either party without providing the other party with 60 days written notice. The party's insurers shall provide a waiver of subrogation to the other party, its employees, agents or contractors for such liability as the parties have assumed under this provision of the MOU.

11. Confidentiality of Security Related Information

All information obtained by Clarington in the course of carrying out the terms of this MOU and which is identified as confidential by OPG because of its security implications, shall not be disclosed by Clarington to third parties except with the prior written consent of OPG and except in accordance with applicable law. Without limiting the generality of the foregoing, such information may include the type, location and operation of the emergency systems of all buildings, the nature and location of any hazardous materials and the operation, features and location of security equipment. Clarington shall make its employees who are likely to become involved in the activities contemplated in this MOU aware of Clarington's non-disclosure obligations as stated herein.

12. Cyber Security

Clarington will, at all times throughout the Term, maintain or cause to be maintained those cyber security requirements as outlined in Schedule 12.

13. Term of this Memorandum

This MOU is effective as of the date first noted and, unless terminated earlier as provided hereunder, will remain in full force and effect for a term of [6] year[s] terminating on December 31, 2024 (the "Initial Term"). The Initial Term will thereafter automatically renew for additional [1] year periods (the Initial Term and any renewal thereof being collectively referred to herein as the "Term") unless either party terminates this MOU by no less than 30 days written notice prior to the end of the then current Term.

14. Termination of this Memorandum

Notwithstanding the provisions of Section 13 of this MOU, either party to this MOU may provide written notice of intent to terminate this MOU to the other party at any time. A copy of the written notice of intent shall be forwarded to the CNSC. Immediately following the expiry of 180 days after such notice the MOU shall no longer be in effect.

15. Amendments

Except as otherwise expressly provided in this Agreement, no supplement, restatement or termination of this MOU in whole or in part is binding, unless it is in writing and signed by each party.

16. Authorization

Clarington has duly and validly authorized the execution, delivery and performance of this MOU and no other approvals are necessary to authorize this MOU.

17. Severability

If any term of this MOU is or becomes illegal, invalid or unenforceable, the illegality, invalidity or unenforceability of that term will not affect the legality, validity or enforceability of the remaining terms of this MOU and the parties will, if necessary, amend this MOU to accomplish the intent of the parties as originally set out in this Agreement to the maximum extent allowed by applicable laws.

18. Governing Law

This MOU and each of the documents contemplated by this MOU are governed by, and are to be construed and interpreted in accordance with, the laws of Ontario and the laws of Canada applicable in Ontario. Each of the parties irrevocably submits to the non-exclusive jurisdiction of the courts of Ontario. No party will oppose the enforcement against it in any other jurisdiction of any judgment or order duly obtained from an Ontario court respecting this MOU. A party may effect service of summons or any other legal process that may be served in any action, suit or other proceeding by delivering any such process to another party in accordance with Section 20.

19. Counterparts

This MOU and any amendment, restatement or termination of this MOU in whole or in part may be signed and delivered in any number of counterparts, each of which when signed and delivered is an original but all of which taken together constitute one and the same instrument. Any counterpart signature transmitted by sending a scanned copy by electronic mail or similar electronic transmission will be deemed to be an original signature.

20. Notices

Any communication concerning this MOU shall be issued in writing and delivered or mailed to the following addresses of the parties respectively:

If to Clarington:

The Municipality of Clarington Attention: Fire Chief Cc:

If to OPG:

Ontario Power Generation Attention: VP Security and Emergency Services

IN WITNESS WHEREOF the parties have executed this MOU through their officers duly authorized on that behalf.

ONTARIO POWER GENERATION INC.

By:

Name: Title:

THE MUNICIPALITY OF CLARINGTON

By:

Name: Title:

By:

Name: Title:

Schedule 12 Cyber Security

- **1.1 Certain Definitions.** For the purposes of this Schedule 12:
- (a) **"Cyber Asset**" means:
 - (1) any asset designated by OPG as a Cyber Asset; or
 - (2) any computing hardware, software, firmware or other computing or information technology that:
 - (A) is transferred, licensed, made available or otherwise provided by Clarington to OPG under this MOU, or is used exclusively by Clarington for OPG under this MOU, and
 - (B) has the ability to impact the availability, integrity or confidentiality of OPG Systems and Information,

unless OPG expressly specifies that such computing hardware, software, firmware or other computing or information technology is not considered a Cyber Asset under this MOU.

- (b) **"Cyber Equipment**" means any of Clarington 's computing hardware, software, firmware or other computing or information technology that is:
 - (1) not a Cyber Asset; and
 - (2) connected to any OPG Systems and Information or is used to access, create, modify, store, process or transmit OPG Data in the course of performing Clarington's obligations under this MOU.
- (c) "**Cyber Services**" means any application, infrastructure or related service provided by Clarington in relation to:
 - (1) any asset designated by OPG as a Cyber Asset; or
 - (2) any computing hardware, software, firmware or other computing or information technology that has the ability to impact the availability, integrity or confidentiality of OPG Systems and Information, unless OPG expressly specifies that such application, infrastructure or related service is not considered Cyber Services under this MOU.
- (d) "OPG Data" means all information relating to OPG, its business, financial position, assets, technology, operations, activities or proposed activities and prospects, including any technical, commercial, legal, financial, strategic, tactical, regulatory or governmental information, reports, drawings, specifications, contracts, business plans, projections, forecasts or other documents or information, whether written or oral, and including such information that is provided to Clarington by OPG or its representatives, or otherwise received or accessed by Clarington , under this MOU, or created or provided to OPG by Clarington under this MOU.

(e) **"OPG Systems and Information**" means OPG's networks, information systems, industrial control systems, or any components thereof (including computing hardware, software, firmware or other computing or information technology), or any OPG Data.

1.2 Cyber Security Requirements. Clarington:

- (a) represents and warrants to OPG that: (i) Clarington has a written and enforceable cyber security policy, and has established and maintains a cyber security program that is designed and implemented to prevent, detect and respond to cyber attacks that may impact OPG Systems and Information; and (ii)Clarington 's personnel (which, for the purposes of these requirements, includes any Clarington personnel having access to OPG Systems and Information) have completed positionappropriate cyber security training;
- (b) will immediately revoke all access to OPG Systems and Information for any of Clarington's personnel who are terminated or no longer need access to OPG Systems and Information;
- (c) will notify OPG by sending an email to sccs@opg.com within 48 hours after discovering any security breach, incident or vulnerability impacting or otherwise involving OPG Systems and Information (including any Cyber Equipment if Clarington , acting reasonably, believes any such security breach, incident or vulnerability may have impacted or may potentially impact OPG Systems and Information), and furthermore if such security breach, incident or vulnerability relates to any Cyber Asset, Cyber Equipment, or Cyber Services, Clarington will also: (i) include in such written notification of any security breach, incident or vulnerability to OPG a description of the breach, incident or vulnerability, its potential security impact, its root cause, a remediation plan, and recommended mitigating or corrective actions; and (ii) promptly and continuously cooperate and coordinate with OPG to prevent, stop, contain, mitigate, resolve, recover from, respond to, and otherwise deal with any security breach, incident or vulnerability, including by providing OPG with ongoing status reports;
- (d) will (i) ensure that no contaminants, including viruses, worms, Trojan horses, adware, spyware, trackware, hack tools, dialers, joke programs, time locks or other software routines, codes or instructions of a similar nature are placed on, or allowed access to, any OPG Systems and Information; and (ii) perform patching and testing on any Cyber Equipment, including through the performance of anti-malware and vulnerability scans, in order to identify and correct or mitigate any cyber security weaknesses or vulnerabilities;
- (e) will, if OPG provides specific personnel of Clarington with a unique user identification (ID) to access OPG Systems and Information ("Designated Named Account(s)") (i) ensure only Clarington 's personnel designated by name may use the Designated Named Account(s); (ii) ensure the Designated Named Account(s) are not shared with any individual or entity other than Clarington 's designated personnel; and (iii) notify OPG immediately after becoming aware of a decision to terminate or re-assign any of Clarington 's personnel to whom OPG provided Designated Named Account(s) to

allow OPG to revoke such Clarington 's personnel's access on a timely basis;

- (f) will, if OPG provides Clarington with a generic user identification (ID) to access OPG Systems and Information ("Generic Account"), (i) ensure only Clarington 's personnel authorized by OPG may use the Generic Account; (ii) ensure the Generic Account is not shared with any individual or entity other than Clarington's designated personnel; (iii) change the password for the Generic Account on a periodic basis in accordance with best practices; and (iv) notify OPG immediately after becoming aware of a decision to terminate or re-assign any of Clarington 's personnel authorized by OPG and change the password for the Generic Account immediately following such termination or re-assignment;
- (g) will, if remote access (such as Clarington -initiated interactive remote access or system-to-system remote access) is required to access OPG Systems and Information, (i) only use those internet protocol (IP) addresses, ports, and minimum privileges required for the remote access as mutually agreed by the parties; (ii) only use Designated Named Account(s); and (iii) in case of system-to-system connections that may limit OPG's capability to authenticate the personnel connecting from Clarington 's systems, maintain complete and accurate books, user logs, access credential data, records, and other information applicable to connection access activities for the entire Term of this MOU;
- (h) will ensure that OPG Data is properly safeguarded; and
- (i) will, if Clarington is required by OPG to dispose of OPG Systems and Information, ensure that: (i) the disposal is done securely and in a timely manner and in compliance with applicable laws; and (ii) if Clarington retains any OPG Data created on Clarington 's Cyber Equipment by its normal back-up procedures, Clarington : (a) has restricted access to any backed-up OPG Data; (b) does not intentionally attempt to recover such OPG Data, unless directed by OPG or required by applicable laws; and (c) if Clarington does recover any such OPG Data (including as a result of a disaster recovery procedure), Clarington will immediately dispose of such OPG Data, unless directed by OPG or required by applicable laws, provided that if Clarington is required by applicable laws to recover or disclose any such OPG Data, Clarington will provide OPG prompt notice of such requirement and the details thereof so that OPG may challenge such requirement or seek an appropriate protective order; consult with OPG on the advisability of taking legally available steps to resist or narrow such requirement; disclose only such OPG Data as is required by applicable law; and use best efforts to obtain an order or other reliable assurance that confidential treatment will be accorded to such OPG Data.
- **1.3 Cyber Assets or Cyber Services.** If Clarington is providing any Cyber Asset or Cyber Service to OPG, in addition to the foregoing, Clarington will:
- (a) provide to OPG: (i) documentation that describes Clarington 's applicable aspects of its system development lifecycle and patch management program and update processes; (ii) documentation that describes the cyber security features and wireless or remote networking capabilities of the Cyber Asset; and (iii) cyber security-focused

instructions, including manuals, for the maintenance, support and reconfiguration of the Cyber Asset, and best practice recommendations for hardening of the Cyber Asset and, as applicable, OPG Systems and Information;

- (b) provide to OPG the appropriate patches and/or updates to remediate any security vulnerabilities in the Cyber Asset within seven days after becoming aware of any vulnerabilities, disclose to OPG its mechanisms to deliver software, firmware and patches, including checksums, digital signatures or other means of identification for all software, patches and configuration files, and ensure its controls will enable OPG to verify the authenticity and integrity of the patches delivered through these mechanisms. If patches and/or updates cannot be made available by Clarington within the specified period, Clarington will provide mitigations and/or workarounds until the patches and/or updates are available and provided. This provision also applies to all third-party components used in the Cyber Asset;
- (c) if applicable, use tamper-evident packaging when supplying to OPG any computing hardware and, at OPG's request, provide copies of any documentation to show the chain-of-custody for such hardware; and
- (d) use information technology security best practices in the development of the Cyber Asset and will ensure that: (i) there are no hardcoded passwords utilized in the Cyber Asset; (ii) there are no accounts or known methods that are able to bypass authentication in the Cyber Asset, unless Clarington has made OPG aware of, and OPG has accepted in writing, such accounts or methods; and (iii) the most critical cyber security weaknesses are addressed in Clarington 's system development life cycle (Clarington will refer to applicable standards, such as the <u>SANS Top 25 Most</u> <u>Dangerous Software Errors</u>, the <u>OWASP Top 10</u>, or their successors).

APPENDIX A

Mutual Work Plan Areas of Focus ("Work Plan")

Defined Terms

All capitalized terms used in this Work Plan have the meaning given to those terms in the MOU.

A1. Annual Fire Safety Inspection

An annual fire safety inspection of DNGS by Clarington staff is mutually beneficial. Clarington will gain an improved understanding of DNGS, its layout and its unique fire protection requirements. DNGS staff will gain from the observations, knowledge and experience of seasoned fire protection professionals.

In every calendar year to which this MOU applies, OPG and CFS shall discuss and outline as required, any annual fire safety inspections of DNGS. At any time throughout the year, OPG or CFS can request a fire safety inspection.

The fire safety inspection details will be developed jointly by OPG and CFS. OPG will track any corrective actions required via OPG's corrective action program.

A2. Annual Fire Safety Plan Review

Section 2.8.2 of the National Fire Code of Canada requires the preparation of a fire safety plan in co-operation with the fire services and other applicable regulatory authorities in order to protect people and property from fire and its effects. OPG has prepared a fire safety plan for DNGS that is consistent with the requirements of the National Fire Code of Canada. It is agreed that a joint annual review of the fire safety plan shall be conducted and amendments shall be made as required. These amendments shall be approved by OPG and CFS and submitted to CNSC.

A3. Joint Fire Training

It is agreed that annually CFS and OPG Fire Protection staff will participate in fire drills and/or live fire training as determined jointly between the parties. This training may be arranged so that each of the five crews at DNGS and each of the crews at CFS have the opportunity to participate at least once annually. The purpose of the fire drills and/or live fire training is to improve the joint response of both organizations to a simulated major fire at DNGS and to identify continuous improvements to the response. Deficiencies will be documented via the OPG drill process reports and corrective action program as appropriate for resolution or for operational experience.

Fire drills may be conducted in conjunction with other emergency response organization drills. Joint response to any unplanned events can also be counted however the response should be documented within the OPG processes and reviewed for lessons learned.

The purpose of the fire drills are to evaluate joint response and to ensure that adequate procedures are in place at DNGS to enable effective joint responses.

The schedule for the jointly evaluated fire drills will be established collaboratively between OPG and CFS.

CFS has a responsibility to maintain minimum response capability to Clarington and therefore, CFS staffing shall remain at minimum complement at all Clarington fire stations during any fire drills and/or live fire training, and that any staff that participate in fire drills and/or live fire training shall be called in on overtime or taken from on duty complement provided minimum complement at all Clarington fire stations is met, and subject to approval by the Fire Chief – CFS.

In addition to the foregoing, it shall be understood that participation by CFS in fire drills and/or live fire training is conditional on the availability of overtime staffing and fire vehicles. All emergency responses shall take precedence over any fire drills and/or live fire training.

A4. Joint Incident Command Training, specialized training and conference attendance for Municipality of Clarington Senior Fire Service Officers

In the event of a major fire at DNGS, significant external resources will be required. It is agreed that command level staff from CFS and command level staff from DNGS would benefit from in-depth incident command training and specialized training on how to deal with fires in nuclear generating stations. The combination of station knowledge and incident command experience is indispensable in a major fire emergency.

In recognition of the unique personnel control and incident command issues around fires in nuclear power plants it is agreed that joint incident command training will be undertaken by OPG and CFS.

It is agreed that command level staff from CFS together with commend level staff from DNGS will jointly participate in advanced incident command exercises as part of this training. All programs will be designed to improve the working level relationship between Clarington staff and DNGS staff.

Additional training for CFS staff and recruits in dealing with fires in nuclear power plants is mutually beneficial. OPG will make the Wesleyville Fire Training Field Site available to CFS annually on mutually agreed dates subject to availability of the training facility.

OPG and Clarington also agree that other specialized training other than fire may be needed for CFS. This training will be evaluated and mutually agreed to by OPG and CFS. Examples of non-fire training courses are listed below.

- HAZMAT

- High Angle Rescue
- Station Systems Training for Fire fighters
- Orange Radiation Protection Qualification Training
- Plant Layout Training

- Fires involving radioactive materials
- Electrical fires

A5. Access to Fire Marshal's Office Curriculum for DNGS Fire Fighters

It is mutually agreed that approved standard approaches and techniques for firefighting will benefit both fire fighting forces. CFS will assist OPG in qualifying a master/trainer facilitator for DNGS and CFS will assist DNGS in acquiring access to OPG officer development courses.

A6. Mutual Aid Arrangements

Both Clarington and DNGS have substantial firefighting and emergency response resources at their disposal. It is acknowledged that the combined resource is a significant force that should be made available to help safeguard the community in the event of a major incident. It is also recognized that a major incident, either on-site or offsite, will tax the resources of the respective fire and emergency crews either at DNGS or at Clarington.

In the event of a major off-site incident, OPG agrees to provide assistance to Clarington if requested, and within the limitations of the Station Operating License. This assistance may include personnel (e.g. drivers for OPG vehicles), equipment and supplies to support Clarington in their efforts to control and/or mitigate an emergency. Notwithstanding the foregoing, OPG personnel will not engage in active firefighting activities off OPG property but will provide assistance in a support capacity.

DNGS is staffed with full-time NFPA 1081 qualified emergency response personnel available 24 hours a day, seven days a week. Nonetheless, CFS will be called to all fire events at DNGS to provide assistance as required. DNGS shall provide clearly marked access routes for responding emergency vehicles and shall provide a security escort from the Brock Road guardhouse.

A7. Equipment and Supplies

It is recognized that if equipment and supplies are to be shared as agreed above, then such equipment and supplies should be fully compatible.

It is agreed that, to the extent practicable, equipment and supplies purchased and used at DNGS shall be fully compatible with equipment and supplies used by CFS.

Every commercially reasonable effort will be made by OPG to ensure full compatibility with equipment used by CFS. Self-contained breathing apparatus shall be the same and air cylinders shall be interchangeable. All fire hose threads and fittings shall be compatible or adapters purchased to ensure that all CFS hoses, nozzles and related equipment are interchangeable.

Where the purchase of a new item of equipment may be mutually beneficial

consideration shall be given to the joint purchase of such equipment to limit the cost to both parties.

A8. Community Emergency Management Program

Pursuant to the *Emergency Management and Civil Protection Act,* R.S.O. 1990 c.E9 and Ontario Regulation 380/04, Clarington maintains a CEMP, as described in Appendix C of this MOU.

As a host municipality to DNGS, Clarington has an increased level of responsibility in dealing with potential emergency situations at DNGS. The additional requirements associated with hosting a nuclear facility therefore greatly enhance the demands that are placed upon a community.

DNGS and CFS staff also recognize that it would be mutually beneficial to schedule annual meetings to review the emergency management programs.

A9. Conclusion

In summary, the MOU provides for a high level of mutual aid between the parties and will assist in providing a strong foundation for continued productive working relationships between Clarington and OPG. More importantly, it provides the local community with access to additional resources from OPG to deal with major incidents, improved training for emergency response staff and confidence that public safety is assured at all times.

The signatures below constitute agreement on the joint work plan for the duration of the MOU.

ONTARIO POWER GENERATION INC.

By:	Sample		
Name	e:		
Title:			

THE MUNICIPALITY OF CLARINGTON

By:	Sample		
Name	e:		
Title:			

Appendix C Municipality of Clarington Emergency Management Program

Introduction

This Appendix is intended to provide an overview of the Clarington Community Emergency Management Program (the "**Program**").

The Program

The Program was designed and is maintained to ensure that, should any type of community emergency occur, the Mayor, City Council, and staff are prepared and able to effectively oversee large-scale emergency response activities and services.

A community emergency is a significant event that affects a large portion of a community including its people, property, infrastructure, economic stability, and environment. Community emergencies include, but are not limited to, events that involve natural, technological, and human-caused hazards such as extreme weather conditions, major transportation accidents, nuclear emergency, or a large-scale act of terrorism.

The Program is based on requirements of the Ontario Emergency Management and Civil Protection Act and its regulations

Clarington has developed and maintains the following Program components:

- Community Emergency Management By-law;
- Community Emergency Management Plan;
- Community Emergency Supporting Plans;
- Other supporting internal and external plan, procedures, lists, etc.;
- Community Emergency Management Program Committee;
- Community Emergency Management Coordinator;
- Municipal Emergency Operations Centre (MEOC) and the Alternate MEOC;
- Municipal Control Group (MCG), Support and Technical Staff;
- Staff Education and Training;
- Public Awareness, Education, and Preparedness;
- Cooperation and sharing with other governments, organizations, agencies, etc.;
- Emergency Response Capability; and
- Annual Program Review and Report.

During a community emergency, the Municipal Emergency Control Group would assemble at the MEOC. At that location, they would strategically manage and support the on-scene response activities of emergency responders.

FIRE PROTECTION AND COMMUNITY EMERGENCY MANAGEMENT

COMMUNITY EMERGENCY MANAGEMENT FUNCTION OVERVIEW OF DUTIES AND RESPONSIBILITIES

The Community Emergency Management functions are the responsibility of the Community Emergency Management Coordinator (CEMC), being the Fire Chief or Deputy Fire Chief - CFS. The CEMC reports to Clarington's Chief Administrative Officer. Contact with the Mayor and Council together with corporate staff is also a routine part of the working arrangement.

The Community Emergency Management function includes CEMC development and maintenance of the Clarington program documentation, including the Community Emergency Management By-law, Community Emergency Management Plan, various supporting plans, procedures and other related Program documentation. Corporate education and training is an ongoing duty to ensure that the Mayor, Council, staff, and others associated with the Program have the required knowledge and skills for managing a potential community emergency. The CEMC maintains the Municipal Emergency Operations Centre in a constant ready state. Public awareness and educational services are also provided by the CEMC on an ongoing basis via Clarington's website, literature development/distribution, and public presentations.

The function requires considerable contact work with external officials and organizations such as Emergency Management Ontario, Durham Emergency Management Office, other Durham area municipalities, non-governmental organizations, OPG, etc. Maintenance of those relationships is a vital aspect of how Clarington prepares itself for a major emergency event.

In addition, the CEMC routinely liaises OPG staff on various local issues. License renewal applications and matters of public affairs that Clarington and the community are examples of issues that require Clarington staff members to attend to on a frequent basis. The most common situation involves addressing issues that arise from OPG Public Interest Notifications and other events that occur at DNGS.



Appendix D

Certificate of Insurance

No.: 2019-42

Dated: July 11, 2019

This document supersedes any certificate previously issued under this number

This is to certify that the Policy(ies) of insurance listed below ("Policy" or "Policies") have been issued to the Named Insured identified below for the policy period(s) indicated. This certificate is issued as a matter of information only and confers no rights upon the Certificate Holder named below other than those provided by the Policy(ies).

Notwithstanding any requirement, term, or condition of any contract or any other document with respect to which this certificate may be issued or may pertain, the insurance afforded by the Policy(ies) is subject to all the terms, conditions, and exclusions of such Policy(ies). This certificate does not amend, extend, or alter the coverage afforded by the Policy(ies). Limits shown are intended to address contractual obligations of the Named Insured.

Limits may have been reduced since Policy effective date(s) as a result of a claim or claims.

Certificate Holder:	Named Insured and Address:
	Ontario Power Generation Inc. 700 University Avenue, H18-J18 Toronto, ON M5G 1X6

This certificate is issued regarding:

FIRE PROTECTION AND COMMUNITY EMERGENCY MANAGEMENT

Type(s) of Insurance	Insurer(s)	Policy Number(s)	Effective/ Expiry Dates	Sums Insured Or Limits of Liability	
UMBRELLA • Self Insured Retention Amount is \$10,000,000	Associated Electric & Gas Insurance Services Ltd	XL5129808P	Jul 01, 2019 to Jul 01, 2020	Third Party Liability Including Products / Completed Operations	USD 25,000,000
				General Aggregate	USD 25,000,000 Aggregate Limit of Liability for the Policy Period
AUTOMOBILE	Zurich Insurance Company Ltd	9993609	Apr 01, 2019 to Apr 01, 2020	Bodily Injury and Property Damage Liability	CDN 2,000,000

Additional Information:

The Municipality of Clarington is added as Additional Insured but only with respect to liability arising out of the operations of the Named Insured.

Waiver of Subrogation is in favor of The Municipality of Clarington, as required by written contract.

Notice of cancellation:

Should any of the policies described herein be cancelled before the expiration date thereof, the insurer(s) affording coverage will endeavour to mail 60 days written notice to the certificate holder named herein, but failure to mail such notice shall impose no obligation or liability of any kind upon the insurer(s) affording coverage, their agents or representatives, or the issuer of this certificate.

Marsh	Canada	Limited
-------	--------	---------

120 Bremner Boulevard Suite 800 Toronto, ON M5J 0A8 Telephone: 1-844-990-2378 Fax: certificaterequestscanada@marsh.com

	Marsh Canada Limited
By:	MAL
	Matthew Pullep