



Oral Presentation

Exposé oral

**Submission from the
Society of United Professionals**

**Mémoire de la
Society of United Professionals**

In the Matter of

À l'égard de

**Ontario Power Generation Inc.,
Pickering Nuclear Generating Station**

**Ontario Power Generation Inc.,
centrale nucléaire de Pickering**

Request for a ten-year renewal of its Nuclear
Power Reactor Operating Licence for the
Pickering Nuclear Generating Station

Demande de renouvellement, pour une période
de dix ans, de son permis d'exploitation d'un
réacteur nucléaire de puissance à la centrale
nucléaire de Pickering

Commission Public Hearing – Part 2

**Audience publique de la Commission –
Partie 2**

June 2018

Juin 2018



SOCIETY *of*
UNITED PROFESSIONALS

Submission To The

Canadian Nuclear Safety Commission

For

Ontario Power Generation Inc.,
Pickering Nuclear Generating Station Operating
License Renewal

May 7, 2018

Executive Summary

The Society of United Professionals (“the Society”) seeks to intervene at the Canadian Nuclear Safety Commission’s (“CNSC”) public hearing in respect of Pickering Nuclear Generating Station application to renew its Power Reactor Operating License - PROL 48.04/2018. The current Power Reactor Operating Licence, expires on August 31, 2018.

The Society believes that Pickering Nuclear Generating Station has made the necessary provision for the protection of the environment, health and safety of persons and maintenance of national security and measures required under section 24(4)(b) of the Nuclear Safety and Control Act. The Society is in a position of concurrence with the conclusions of CNSCs CMD: 18-H6 dated March 5, 2018 namely to:

- (1) Renew the Pickering licence to authorize OPG to carry out the activities from September 1, 2018 to August 31, 2028 with:
 - Continued commercial operations to end of 2024;
 - Stabilization period (fuel and water removed from reactors); and
 - Start of safe storage by 2028.

- (2) Authorize OPG to operate Pickering Nuclear Generating Station Units 5-8 up to a maximum of 295,000 EFPH.

Introduction

The Society of United Professionals (formerly known as The Society of Energy Professionals) represents more than 8,300 employees working for 14 employers in the energy and legal industry in Ontario. Some of our employers include AMEC-Nuclear Safety Solutions, Brookfield, Bruce Power, Electrical Safety Authority, Hydro One, Independent Electricity System Operator, Inergi, Kinectrics, New Horizon System Solutions, Nuclear Waste Management Organization, Ontario Power Generation, Ontario Energy Board, Toronto Hydro and Legal Aid Ontario. At Ontario Power Generation there are approximately 3,200 Society members (regulars) of which 2,100 are employed in our nuclear divisions. Pickering Nuclear Generating Station (PNGS) employs about 1,200 members and Darlington Nuclear Generating Station (DNGS) employs about 900 members.

Our members are employed as first-line managers and supervisors, Control Room Shift Supervisors, Simulator Trainer / Examiners, professional engineers, scientists, information systems professionals, economists, auditors and accountants, lawyers as well as many other professional, administrative, and associated occupations. We are problem solvers, experts, and innovators. Our principles are the beliefs that guide our decisions and are the backbone of all of our actions and communications. As a union, we stand behind our members' professionalism, integrity, and commitment to excellence in all areas, particularly workplace safety, public health and environmental sustainability.

Our members bring a strong independent voice that is part of the broader labour movement and civil society, where we leverage our expertise and resources to create meaningful change in our workplaces and our communities. Our independence is bolstered by membership in Canadian Labour Congress, Ontario Federation of Labour, and various labour councils, the Canadian Nuclear Workers Council, and the International Federation of Professional and Technical Engineers. Just as importantly, our leadership have forged regular, direct communication with CNSC Staff at each Nuclear Facility.

At PNGS our members provide technical expertise in areas of engineering, conventional health and safety, radiation safety, emergency preparedness and environmental protection. Society-represented safety sensitive occupations include ergonomists, safety specialists, industrial hygienists, safety officers, health physicists, and emergency managers, environmental scientists.

Approximately 90% of our membership hold post-secondary degrees and diplomas, with 70% of our members having degrees at the Bachelor's, Master's or Ph.D. levels. Society members are knowledge workers who take great pride in exercising their civic, social and professional responsibilities. Recently, nuclear power has become the backbone of low-cost, clean and reliable electricity Ontario.

The expertise of our members was acknowledged in Ontario's 2017 Long Term Energy Plan wherein it was stated:

For more than four decades, Ontario's electricity sector labour unions have been key partners in Ontario's nuclear industry. Today, Power Workers' Union and Society of Energy Professionals [as we were known then] together represent more than 23,000 employees in Ontario's electricity system, including our nuclear plants and supply chain companies. OPG and Bruce Power will continue to rely on their skills and expertise to refurbish our nuclear fleet and ensure safe operation for decades to come.

In accordance with section 19 of the CNSCs Rules of Procedure the Society appreciates the opportunity to comment on PNGS' application to renew its Power Reactor Operating License. This is appropriate as the Society has intervened in CNSC license hearing at Bruce Power, Darlington Nuclear and Pickering Nuclear. We have also been intervenors for the proposed Deep Geological Repository by Ontario Power Generation and comment on proposed CNSC regulations as required. In short we feel compelled to intervene as we regard ourselves as a holder of the public trust and as significant stakeholders in Ontario's nuclear stations.

It is in this spirit that the Society wishes to comment in the areas of: Nuclear Safety, Labour Relations, Employee Involvement and Engagement, Emergency Preparedness, Conventional and Radiological Safety, Environmental Protection, and Diversity and Inclusion, and Social Licensing as we support PNGS request and the CNSCs staff recommendation to: (1) Renew the Pickering Nuclear Operating License for a period starting September 1, 2018 to August 31, 2028 (2) Authorize OPG to operate PNGS Units 5-8 up to a maximum of 295,000 Effective Full Power Hours.

Nuclear Safety

We have conducted internal inquiries with many of the members who have worked on key elements of the Periodic Safety Review (PSR) and the Probabilistic Safety Assessment (PSA) and members stand behind the accuracy and integrity of the review and assessments.

The PSR is an assessment of the current state of a nuclear plant compared with 74 modern codes and standards. Arising from the assessment are reasonable and practicable safety enhancements which will enable the plant to operate safely over the next licensing period per CNSC REGDOC 2.3.3. The Society is confident with the rigor in which the PSR has been done as a great many of our members have contributed to the work done on the Safety Analysis and the arising safety improvements. There were approximately 63 actions documented in the Integrated Implementation Plan (IIP) which will be executed at PNGS with defined completion dates by the end of 2020. The PSR considered all aspects important to continued safe operation and confirmed that the plant can be safely operated through to the end of commercial operation in 2024. With the post-Fukushima implementation of emergency mitigation equipment (EME) during the past license term

PNGS has provided additional barriers for the extremely unlikely event of a beyond design basis accident by providing additional ways to cool the fuel thereby reducing the potential for a large offsite releases to the public. Our members working in this area inform us that in addition to safety benefits which EME provides, the safety enhancements identified in the IIP ensure that PNGS will be even safer during the next licensing period. One of our members who worked on the PSR commented:

[My belief] is that the PSR has been conducted in accordance to the CNSC guidelines and provides tremendous value in determination of plant condition and work required to reach end of commercial operation. [As a resident] of Pickering I feel safe in the work that has taken place to ensure safe operation of PNGS.

Our members have also expressed satisfaction in the rigor with which PNGS conducted its PSA per CNSC REGDOC 2.4.2. The PSA, which accounts for the impact of both internal and external events, is a tool that facilitates risk-informed decision-making with respect to plant operations and specifically in assessing online and outage maintenance activities. The PSA provides the means to quantify the risk impact of station activities, and empowers employees to optimize strategies to effectively mitigate overall station risk on a daily basis. Hence, the PSA is of vital importance as it provides an added measure of confidence that our members are safe at work. When one of our members was asked about the efficacy of the PSA process the following was stated:

I am confident with the robustness and quality with which PNGS has conducted the PSA. We have used industry best practices in accordance with the CNSC regulations and standards and have incorporated them throughout our PSA.

The Society accepts CNSCs staff recommendation to operate fuel channels up to a maximum of 295,000 Effective Full Power Hours. This is premised on PNGS having adequate Life Cycle Management Plans (to manage aging components), inspection results, Control Room policies and procedures to monitor for leaks from pressure tubes, industry operating experience that demonstrate fitness for service of Fuel Channels, and the development fracture toughness models sufficient for safe operation of pressure tubes.

The Society expects its members avail themselves to free and open discussions on technical and nuclear safety issues and endeavor to resolve differences of professional opinion through discussions with co-workers, immediate supervision, and the management chain. While discussion regarding differing viewpoints is preferable between individuals within the chain of command, if those discussions cannot resolve the differences a formal process called '*Resolution of differing Professional Opinions*' can be invoked to resolve technical differing opinions.

Essentially, a member who has a concern with a technical nuclear safety and / or regulatory compliance issue can identify that concern to their supervisor and if discussions are not able to resolve the issue a Station Condition Record (SCR) can be filed. The SCR process allows for the adverse condition to be adequately documented, its cause determined,

corrective action to be implemented, and is a tool which prevents the recurrence or reduce the risk of recurrence of a similar adverse condition. By doing so, lessons learned can be incorporated into best practices which drives improvements and ensures the ongoing safety of the workers, plant equipment, the public and the environment under normal and accident conditions. Lessons learned are communicated to other nuclear facilities in the industry. Moreover, in the case of Professional Engineers, it would be considered professional misconduct if they did not report a technical situation that they thought endangered the safety or welfare of the public, the employees or the environment.

The Society was pleased to hear from the licensee at the Part 1 hearing that PNGS has evolved to nuclear safety levels that are comparable to modern new build requirements. We have confidence in the evidence presented by the licensee and are further assured that CNSC staff will report on the status of all commitments made to the Commission through Regulatory Oversight Report for Nuclear Power Plants.

Labour Relations

The Society is the legal bargaining agent for the employees at OPG covered by the Society Collective Agreement, as provided by the Ontario Labour Relations Act (OLRA). Specifically,

All employees employed in Ontario Power Generation, including Ontario Power Generation Inc. - Nuclear, hereinafter known as OPGI, in the Province of Ontario employed as supervisors, professional engineers, engineers-in-training, scientists, and professional, administrative and associated employees.

On behalf of over 3,200 members, the Society actively protects the rights of our members under their collective agreement, the OLRA, the Ontario Occupational Health and Safety Act and other legislation. Ensuring the safe, efficient and proper operations of PNGS and DNGS is a prime objective of the Society on behalf of our members and the citizens of Ontario. As part of our ongoing efforts, the Society works closely with OPG on a number of Joint Health and Safety endeavors, ensuring a balance of representatives, trained as required by law, to ensure the workplace safety of our members and the safe operation of the nuclear plants.

Both the Society and OPG go to great efforts to ensure safety is a priority. The Society, through its elected officers such as the Local VP, Unit Directors and Delegates interact with OPG management when representing Society members on numerous issues. The Society investigates member concerns, reviews the collective agreement for related provisions and then enters into discussions with OPG management to find solutions.

Making informed decisions and taking decisive actions are an important aspect of the work we do on behalf of our members. From time to time the Society requests OPG to disclose relevant or arguably relevant material/data related to a labour relations issue in dispute. Most often OPG cooperates and provides such material/data, but if there is no agreement

to provide the material requested, the Parties may put the matter before a mediator/arbitrator. In the event the Parties cannot reach resolution on the interpretation of the collective agreement and how it impacts our members, the issue may also be brought before a mediator/arbitrator, who has authority under the OLRA to assist the Parties.

Negotiating/renewing the collective agreement between the Society and OPG is an important function of the Union. Our current collective agreement expires December 31, 2018 and the Parties have already agreed to meeting dates in June and July 2018 in an effort to secure a renewed collective agreement.

Overall there are many informal and formal meetings between the Parties with the Joint Society Management Committee (JSMC) being the highest level committee that meets quarterly, where leaders from the Society and OPG discuss the workplace, our members, share information and work to resolve issues.

Ontario Energy Board:

At the 2013 CNSC relicensing hearing for PNGS, the Society made submissions with respect to the Ontario Energy Board (OEB) decision related to the funding of OPG. The Society advised that the OEB seemed more concerned with saving rate payers money than supporting the high safety standards at PNGS as advocated by the CNSC. The OPG submission supported the need for high safety standards at PNGS, but the OEB ultimately determined to reduce funding to OPG so in the end, OPG had lower profitability to ensure a high safety focus.

The pattern of the OEB's interference with OPG's operations continued when on December 28, 2017 the OEB released its 2017-2021 rate decision for OPG stating,

Of particular note, the OEB has determined that the appropriate comparator for the nuclear authorized segment (and all segments) should be the 50th percentile. The nuclear authorized segment is composed of staff working in a nuclear plant environment with specialized nuclear skills and that is the very reason they were chosen as comparators.

The impact of this OEB decision is that funding for PNGS nuclear licensed staff is not funded in the top quartile of their field; as is the current practice. The OEB reviewed and did not accept the compensation benchmarked by OPG. The result was the OEB decided to fund staff at only the 50% quartile of their field, resulting in OPG making less net income after they pay the rate they agreed to pay in the Collective Agreement. In a mediation-arbitration award for the 2011-2012 Collective Agreement, Arbitrator Burkett determined all nuclear employees should be paid at the 75% quartile. The Society agrees with the OPG benchmark data confirming the pay for nuclear workers should be at the 75% quartile.

Pickering Nuclear Generating Station:

The Society's submissions in the 2013 CNSC relicensing hearing included the following comments:

"The need for plant closure agreements.

As part of the record of proceedings during the license granted to OPG for the Pickering A station on May 21, 2010, the CNSC wrote:

55.	<i>In their intervention, the Power Workers' Union (PWU) expressed concerns in regards to staffing and noted their ongoing discussions with OPG in this regard. The fact that the Pickering station would be closed within a decade creates an additional issue for the PWU since many of the workers are expected to start seeking employment in other areas, which could create additional operational and safety problems as the projected end-of-life approaches.</i>
56.	<i>The Commission sought more information on OPG's plans for retention and recruitment of highly-qualified personnel as the end-of-life of Pickering stations approaches, and on potential impact of this issue on the safe operation of the plant during its last decade. OPG responded that they were committed to prepare a detailed operational plan and submit it to the CNSC by the end of 2011. CNSC staff noted that they expect that OPG would address this issue in their end-of-life plan.</i>

The Society strongly believes that, as part of the 2013 license to be granted to the Pickering nuclear generating station, the CNSC must more specifically require OPG to deal with the issues surrounding the human resources aspect of plant closure, since there has been little progress on this topic over the last 3 years.

The Society includes, as part of this submission, at Appendix 6, the current letter of understanding for the coal closure or refuelling plants on which the Society and OPG reached agreement in October 2005, and which forms part of the current collective agreement between the parties. This agreement was required when the provincial government ordered the coal burning plants to be closed by 2014.

We also wish to bring to your attention that the Power Workers Union has a similar provision in their collective agreement for workers at coal plants when the plants refuel or close.

These are examples of the type of agreement which can be reached when concerned parties sit down and agree to deal fairly with the difficult issues which plant closure entails.

In the case of coal closure, legislated closure of coal-fired generating stations resulted in a need to address a wave of increasing departures of talented staff who were facing the certainty of an end to their current roles at those OPG facilities.

OPG addressed this issue by negotiating with the Unions, agreements which would directly alleviate the fundamental concerns, by providing guarantees for employment continuity at remaining facilities in the generation fleet and support locations.

Accordingly, staff remained focused on work and attrition rates returned to normal. It is essential to have employees in OPG facilities that are fully engaged and focused on the detailed tasks which form much of their daily work activities. It is a well-known and established certitude that distracted employees are more error-prone and that workplace confusion can contribute to productivity and work quality issues.

Further, given the backdrop of employment coming to an end, the additional impact on the workplace of employees departing unexpectedly to pursue other employment opportunities, results in yet further workplace stresses when the work of those leaving must be reassigned to those remaining.

As the end of life for the (Pickering) plant is still almost 8 years away, these issues have not yet begun to emerge, however this sort of agreement is required soon.”

Such agreements would ensure that employees at the Pickering station clearly understand what will happen when the plant closes. These employees will be asked to remain at these plants until the last day of operation to ensure the safe and reliable running of the plant. It is only fair and reasonable that these employees be assured of their rights and obligations as the plants wind down and eventually close.

It continues to be the view of the Society that a PNGS staffing strategy between the Society and OPG is required and would ensure that employees at PNGS clearly understand how they will be impacted when the plant closes. As part of an overall retention strategy employees will be asked to remain at the plant until the last day of operation to ensure the safe and reliable running of the plant. It is important these employees be assured of their rights and obligations as PNGS winds down and eventually closes.

We anticipate that the PNGS staffing strategy will be of central focus when we meet with OPG in June and July for two-party negotiations. Adequate staffing at PNGS over the 10 year relicensing period can only be achieved through a cooperative effort between the Society and OPG. It is critical OPG keep staffing levels at the approved business plan for headcount number each year ensuring the PNGS will continue to run safely, reliably and cost effectively until it ends operations at the end of 2024.

“Just transition rights” is an accepted term used when describing how change is applied to workers as a result of economic, environmental or technological change. This concept was

applied in the agreement reached between Pacific Gas and Electric (PG&E) and IBEW Local 1245 in respect to the pending closure of the Diablo Canyon Nuclear Plant in Avila Beach, CA. The agreement reached included an annual retention bonus paid to encourage workers to remain working until the plant closed in 2024, retraining and redeployment opportunities and generous voluntary severance packages for those electing to leave at the agreed to time.

This agreement was reached because PG&E was committed to the expectation employees continue their high quality work securing safe efficient operations and proper shut down of Diablo Canyon Nuclear Plant. The concept of retention payments and a commitment to retraining and redeployment ensures that workers will continue their high quality and safe operations until their services are no longer required. The PG&E agreement stands as a good framework from which the Society and OPG can develop our own staffing strategy for PNGS.

The Society believes that sufficient, qualified staff are maintained until the Pickering End of Commercial Operations and safe shutdown is completed. As existing staff retire and new staff comes in to replace them, it is crucial the new staff receive proper orientation and training so they can deliver the high quality work of their predecessors.

Employee Involvement and Engagement

There has been palpable improvement in plant performance during the last licensing period in part due to the contribution, commitment and engagement of our members to all facets of plant operation. In 2017, PNGS made operational improvements and efficiency gains which resulted in historical performance record runs for Units 1 (622 days) and Unit 5 (632 days). Unit 4 also enjoyed a record run prior to shutting down for a planned maintenance outage on March 7, 2018. Moreover, the forced loss rate performance for the last three years has been the best ever for PNGS.

Our Operations Front Line Managers (FLMs) are focused on human performance improvements such as adhering to internal process and procedures and following World Association of Nuclear Operator process models which are benchmarked against industry best practices. Maintenance FLMs are Society members who focus on improvements in equipment overhaul and repairs. Our Operations and Maintenance Engineers work assiduously to increase the quality of parts, play a vital role in resolving equipment issues in a timely manner and forensically examine failed equipment in an effort to find the root cause of events.

The Society believes that our members in the areas of Work Management and Work Control contributed to operational improvements and efficiency gains at the station. This was achieved by the Work Management group (those responsible for preparing work) importing best practices from peers in the nuclear industry and by removing barriers and successfully execute work in the field. Two “Blitz Weeks” were embarked on where work

was reprioritized in order to maximize the execution of crucial work as a means of improving the health of the station. Work Control (those responsible for field execution) acted as the conscience of the station by providing real time metrics of the work being done in the station. Field execution was a successful in part due to establishing the “Innage Control Center”, a Cross-functional team involving all departments with the mandate to clear barriers to execute work in the field. On January 1, 2017 PNGS had 116 priority maintenance Work Orders per unit and on January 1, 2018 the number had decreased to 25.2 Work Orders per unit. This significant decrease in maintenance backlogs combined with increased oversight and attention on equipment reliability issues has contributed to improved plant performance which is currently at the best it has ever been.

Complementing the foregoing, our members are involved in the X-Lab project innovation center which has been leading innovation at OPG by enabling employees to come with innovative ideas to improve the safety and reliability of the station. X-Lab engages employees from all areas of the organization including but not limited to Engineering, Operations, Work Control, Maintenance, and Finance. This wide range of employee representation leverages the experience and expertise from every level of the organization. Currently, the X-Lab portfolio is very diverse, including the following on-going projects: Wireless Battery Monitoring (enhanced monitoring of station batteries and improvement of preventative maintenance), Heads-Up Display (increased employee safety through visual alerts), Location Tracking (tracking of tools to decrease amount of time to find tools in the plant), Virtual Reality (enhanced training for employees by making tools more accessible remotely), and Communication Boards (improved communication to all employees about station priorities).

These innovations improve safety, effectiveness and efficiency in many areas of station operations. The Society envisions that innovation will be an ongoing theme during the next licensing period and expects that it will drive station performance to the next level. When asked about the value which X-Lab brings, one member commented:

X-Lab has provided a significant contribution to OPG’s push forward in Innovation. Through product and application development, 3D printing, virtual reality, augmented reality, and other new technologies, we have been able to work more efficiently and better understand our plant. Innovation has not only been a technical shift but a culture shift which X-Lab embraces by involving employees from all areas of the business.

Another member stated:

Since the X-Lab started, there has been a noticeable amount of increased employee engagement through project launches and generation of new ideas, increased productivity in the company through application development, the formulation of teams to develop in-house concepts and prototype sensors, as well as enhancement of skillsets amongst the employees.

Relatedly, the last Nuclear Safety Culture Assessment conducted in 2015 concluded that overall, PNGS has a healthy Nuclear Safety Culture and that nuclear safety is not compromised by production priorities. The Society has heard consistently from our members that at PNGS Nuclear Safety is an overriding priority over schedule, cost and production. Our members feel that they are free to challenge any decision if warranted without fear of retaliation.

Due in part to the contribution of our members CNSC staff found that Operating Performance of PNGS exceeded regulatory requirements and expectations. PNGS met applicable CNSC requirements and performance objectives resulting in station improving its ratings from “Satisfactory” to “Fully Satisfactory” during the license period.

Emergency Preparedness

On December 6 & 7, 2017 PNGS undertook an emergency planning exercise titled '*Exercise Unified Control*'. The exercise simulated a severe accident and tested OPG's ability to respond to extreme events, including the use of the portable emergency mitigation equipment and connections points added to the plant post-Fukushima accident. More than 30 government agencies and regional organizations participated in the exercise including the Government of Canada, the Government of Ontario, Ontario Power Generation, City of Pickering, City of Toronto and The Regional Municipality of Durham. Results of the exercise indicated that all of the objectives were met including obtaining valuable information and lessons learned which are used to update emergency plans. Along with the challenging scenario a number of new initiatives were tested and confirmed operational: the new dose assessment software (URI) used to predict projected radiological effects and provide information for protective action decision-making by the Province; interoperability using the new P25 radio system which interfaces between the OPG Emergency Response Team and Pickering Fire Services; the utilization of a new Plant Emergency Information Summary Page (PI-ESP) to obtain access to emergency information by both the CNSC and Provincial Emergency Operations Center (PEOC) without the requirement to transmit manually; and the utilization and managing of social media by Corporate communications in providing responses to simulated public communications.

Our members who were involved in the exercise inform us that as a result of the exercise, they are confident that agencies who participated can better collaborate and communicate which strengthens the response capabilities of OPG. The lessons learned from the exercise

will be used to update OPG's offsite partner response plans and reinforce the interconnections and operability of all organizations at all levels as to ensuring the health and safety of both the general public and OPG employees.

Arising from the Fukushima event of 2011, PNGS has enhanced its emergency preparedness program by putting in place Emergency Mitigating Equipment and infrastructure to ensure water and power can be supplied in an emergency situation. Measures such as these give our members, their families and neighbors in the adjoining area added confidence that PNGS will be able to respond effectively to accidents and emergency situations.

The Society has added comfort that the safety of our members, their families and neighbors is being taken seriously by the implementation of the following:

Public Education:

Our members advise that in the unlikely case of an emergency they and their families know what actions to take as OPG (in cooperation with the Durham Region, City of Toronto) have launched an educational website: <https://preparetobesafe.ca/> aimed at informing residents on what to do in the event of nuclear emergency. It provides information on KI pill distribution (households and businesses within the 10 km radius have been supplied and the website provides instructions for ordering KI pills within the 50 km secondary zone).

Public Alerting:

The Society is pleased to learn that residents are now notified via sirens, radio, television, internet, automated telephone call and social media.

The Regional Municipality of Durham conducts annual spring and fall testing of the Public Alerting System within a 10 kilometer area around the Darlington and Pickering Nuclear Generating stations. There are two types of testing: indoor notification which is an automated emergency telephone dialing system and outdoor siren activation which lasting up to one minute. This Public Alerting System is designed to warn both residents and businesses in the unlikely event of a nuclear emergency, and may also be utilized for non-nuclear events within the municipality.

Recently, OPG partnered with Durham Region, the Ontario Fire Marshall & Emergency Management, Bell Canada and the Weather Network to pilot a Wireless Public Alerting System project in Durham Region. Now being implemented on a province-by province basis, this wireless public alerting system broadcasts messages through wireless (cell phone) technology. This system design is able to reach a specific geographical area and makes the receiving of public alerts more accessible. On April 6, 2018 members of the public in Ontario now enjoy the benefit of being

alerted to a public emergency on their cellular devices similar to those received on televisions or radios.

Potassium Iodide (KI) Pill Distribution:

In 2015, there was a coordinated effort between OPG, the local municipalities and the province in pre-distributing to all institutions, businesses and residents within a 10 km distance from the PNGS site KI pills. In addition, there was a significant communications campaign related to the distribution. For people within a 50 km distance to Pickering a website <https://preparetobesafe.ca/> was created which both provided FAQs (Frequently Asked Questions) and an opportunity to order KI pills. KI pill fact sheets were developed and distributed to operators at both local and provincial health help lines and local physicians. In order to capture new people moving in the area a program was developed whereby new households and businesses are identified three times a year by Canada Post and sent information packages including KI pills.

As has been past historical practice, KI pills continue to be available in schools, health care facilities, childcare centers, municipal services and various reception centers' designated in nuclear emergency plans.

Public Communications:

Our members are also involved in delivering the public programming for Pickering Nuclear; they staff the public Information Centers at both Pickering and Darlington Nuclear, as well as provide tours and nuclear-focused educational information at both station and the Western Waste Management Facility and field questions from the public. OPG has a strong presence in the community, often hosting community groups at the station or providing station updates at community meetings, in addition to the formal part of their program which includes hosting public information sessions annually across the community, in conjunction with staff from the Canadian Nuclear Safety Commission (CNSC), the Region of Durham, the City of Toronto Emergency Management Office, and the Office of the Fire Marshal and Emergency Management. Regular print communication is provided through the distribution of 120,000 copies of Pickering Neighbours Newsletter, distributed quarterly. As well, OPG's seasonal youth education events, such as March Break Madness and Tuesdays on the Trail, are annual highlights for many local families.

The Society is also informed that the licensee has implemented the following:

- Installed of an automated near boundary gamma monitoring system;
- Implemented a real-time automatic data transfer system to the CNSC Emergency Operations Centre (EOC) for use during nuclear emergencies;
- Developed computer capabilities used to determine public doses of projected radiological releases from a nuclear power plant during an emergency;

- Updated public evacuation time estimates with the most recently available census data. We understand the evacuation time estimates are again being updated in 2018; and
- Ensured there are adequate 72 hours of emergency supplies at site in the event of an extreme external event that would require essential staff unable to be relieved at the site.

The evolution of the emergency preparedness program at PNGS prompted one of our members to comment:

I moved to Pickering in 1999 and shortly after was accepted for a job as a Nuclear Operator at PNGS. It was my first career type job as I was only less than 2 years removed from completion of University. I then purchased my own home in Pickering about 10 years ago about 6 km from the station. Working at the station has given me a greater appreciation and knowledge of the nuclear industry and it is comforting to know the level of effort that has been made to ensure that safety to the public is always maintained.

During the last licensing period PNGS met applicable CNSC requirements and performance objectives and maintains a robust emergency preparedness program. The station received a “satisfactory” rating during all years of the licence period for emergency preparedness.

Conventional Safety and Radiological Safety

Our members and our union are uniquely embedded in the workplace and act as an additional safeguard of the public trust at PNGS and indeed, in all of Ontario’s nuclear operations. Accordingly, there is no one who can claim to have a higher stake in the safe and environmentally responsible operation of our nuclear stations than our members and their families. Research shows that nuclear, conventional and radiological goals are enhanced by the presence of unions in the workplace. Our members have more safety training, are able to foresee and proactively manage workplace hazards, are more forthcoming in reporting low level safety incidents thereby precluding more serious injuries and have fewer injuries requiring less time away from work. In short, membership in a union assures an employee that there can be no reprisal for asking probing questions or refusing to do unsafe work.

Our members have not only chosen to work at PNGS but live in Durham region with their families who drink the same water and breathe the same air as all local residents. Therefore, the workplace is an extension of their lives and they are among the first in harm’s way, which means our members maintain the highest standards of safe operation, occupational health and safety. Our occupational positions, training and experience, and our independent role on the tripartite committees have enabled us to insist without compromise on adherence to the most stringent of standards, legislative or otherwise. Our independence

allows us to disagree with proposed solutions if it is not consistent with independent research done by our representatives or experts at the Society.

At PNGS there are a number of problem identification and resolution processes available in the area of conventional safety and radiological safety. The primary resolution process available to all workers is to escalate issues to line management in an attempt to resolve problems at the immediate and lowest level in a timely manner (i.e. between the worker and supervisor). As a union we reinforce the importance of reporting inadequate process deficiencies, safety planning, near misses, incidents or accidents. Moreover, our members know that by speaking up the Society will stand steadfastly behind them. In instances where issues remain unresolved or where issues are not dealt with in a timely fashion the Society can seek recourse by referring the matter to any of the existing tripartite Committees, namely the Joint Health and Safety Committee (JHSC), Joint Working Committee (JWC) Tripartite Advisory Committee (TAC), and Joint Committee on Radiation Protection (JCRP).

The following is a brief description of the each of these tripartite Committees:

Joint Health and Safety Committee:

Under Occupational Health and Safety Act (OHSA) there is a legislative requirement for PNGS to have a JHSC. Among the many function of the local JHSC there is a responsibility to provide a formal path in resolving problems when cannot be dealt with through the Internal Responsibility System (IRS). The local Committee is tripartite in nature with representation from OPG Management, the Society of United Professionals and the Power Workers Union (PWU). The OHSA requires that there be one certified member on the JHSC from each of the tripartite parties, OPG has gone above this minimum requirement and all JHSC members are certified with this training to enable them to effectively fulfill their legal responsibilities. As a company, OPG is committed to the IRS as a system which is detailed in the policies and procedures for resolving issues internally with all the workplace parties.

The company is further committed to supporting JHSCs as champions of health and safety in the workplace. Although the JHSC is not directly part of the IRS since they do not report through the company organization structure, the JHSC is a joint advisory group of management and worker representatives in the workplace. The JHSC independently monitor how well the IRS functions within the line organization and can provide a resolution system for health and safety issues that have not first been resolved by workers and supervisors.

Functionally, the JHSC does inspections in the workplace and provides reports and writes SCRs for Management's attention where Health and Safety issues are found. Typical areas looked at are: housekeeping, condition of electrical cords, improper storage of gas cylinders, lack of lighting or burnt out lights, tripping hazards,

improper chemical storage, confirming that safety equipment is not out of date, building structure deterioration and lack of machine guarding or improper machine guarding to name a few. From time to time the JHSC may have unresolved issues/concerns that can be passed to another tripartite Committee for assistance/comment/recommendations. This Tripartite Committee is called the Joint Working Committee.

Joint Working Committee:

The Joint Working Committee (JWC) has a defined terms of reference and whose goals are: to provide recommendations to assist Corporate Health and Safety in the development, implementation and evaluation of OPG employee health and safety strategies, policy and programs; to support the implementation of the principles and fundamentals of the OPG Health and Safety Policy; to support the Health and Safety Policy Committee; and to support OPG Joint Health and Safety Committees.

Under the JWC umbrella, there are two very important sub-committees which report to the JWC which are the Corporate Safety Rule Advisory Group (CSRAG) which deals with Corporate Safety Rules and the Corporate Code Advisory Group (CCAG) which deals with the Work Protection Code. At JWC, consensus is mandatory for approval of joint policies and highly desirable for other matters. If consensus cannot be reached, dissenting opinions are recorded and forwarded to the Health and Safety Policy Committee. The JWC will normally attempt to resolve issues of mutual interest before seeking intervention by senior management or the Health and Safety Policy Committee.

While the JWC does not address specific station issues it has the power to look at global issues across the Corporation. As an example a sub-team was set up to review processes which examine near misses make recommendations across the whole Corporation. A tripartite team has also been set up to review Live Electrical Work at Pickering with a view to importing best practices from the rest of the Corporation and make recommendations for improvement.

Tripartite Advisory Committee:

The Tripartite Advisory Committee (TAC) is also known as the Health and Safety Policy Committee and is comprised of the three Presidents (OPG Management, the Society of United Professionals and the Power Workers Union) and related senior members of each of the three parties. Unresolved issues/concerns directly from the JWC can be tabled for final resolution and decision. In addition priority health and safety items/issues can be tabled at TAC and assigned to the JWC for appropriate

action. This is the highest sitting tripartite committee in OPG overseeing tripartite Committee matters.

Although, the TAC does not handle specific station issues it ensures corporate issues/concerns are managed. As an example of this, there is a corporate initiative to look at Designated Substances and how they are managed at all locations including Pickering. There is also a corporate study on Radon where facilities throughout OPG including Pickering are being monitored to determine if there is a hazard and to what degree any hazard needs to be managed. Finally there is a third corporate study pertaining to noise at selected facilities (including Pickering). Selected work groups are being monitored to determine if any individuals are noise exposed and require placement on a hearing conservation audiometric testing program.

Joint Committee on Radiation Protection:

The Joint Committee on Radiation Protection (JCRP) provides oversight in the area of Radiation Program Management and is tasked with reviewing and questioning targets at PNGS under a number of metrics. If needed recommendations are made to senior management for improvements to its radiation protection program. The objective is to provide a forum for communications between Management and Union representatives on radiation protection topics. The scope of activities include: recommendations on improvements to the radiation safety program to the OPG Chief Nuclear Officer; reviewing performance, evaluating against targets and external standards, and recommending broad goals and performance objectives; promoting good radiation protection practice; defining overall program direction; evaluating performance, identifying problem areas and seek commitment for change as appropriate; and defining changes to the Radiation Protection Programs, supporting procedures, and associated programs.

As an example of the work which the JCRP does (both the Society/PWU) provided comments on the proposed move to Blue coveralls at Pickering and the elimination of the Brown/Green coveralls and the implications of such a move that needs to be addressed before full implementation.

Conventional Safety:

The Society is proud of the work which members have done through these tripartite Committees and the tireless work of the dedicated Society members who play an integral role in keeping our workplaces safe. In 2017 the PNGS Accident Injury Rate was 0.06 against a target of 0.22 which was acknowledged as the best safety performance in the history of the station. This reinforces the adage that safe workplaces do not happen by accident - they happen because stakeholders insist on the strictest safety rules, the best training, strong mentorship programs and forging collaborative partnerships with our employers. All of which further strengthens our existing nuclear safety culture and

reinforces our belief that zero injuries are possible. The Society notes the positive finding made by the CNSC staff per CMD 18-H6:

The conventional health and safety work practices and conditions at the Pickering NGS continued to achieve a high degree of personnel safety. OPG personnel at all levels exhibit proactive attitude towards anticipating work related hazards and preventing unsafe conditions. There continues to be a safe and efficient working environment where situational awareness and safe work practices are encouraged. OPG met requirements in this specific area during the license period at Pickering NGS. All deficiencies from on-site inspections were adequately addressed throughout the year.

Among our challenges going forward are changes in the demographics of our workplace including the many young workers who are starting and building their careers. Over the next licensing period the Society will fight to improve, update and strengthen the rules, laws and norms that govern work at the station to ensure that health and safety are always top of mind in the workplace. It also means that we need be ever vigilant by employing the most work methods that systematically put safety first. We need to hold each other accountable as we - employers, managers, supervisors and union members - have a vital role to play if we are to realize our goal of eliminating workplace injuries and fatalities.

Over the last licensing period the Society notes that the Conventional Health and Safety and Control ratings at PNGS met applicable CNSC requirements and performance objectives and the CNSC staff have assessed that OPG has a highly effective health and safety program that provides safe work practices and conditions to achieve a high level of personnel safety at the PNGS. Over the license period, OPG's performance rating improved from Satisfactory to Fully Satisfactory.

Radiological Safety:

In addition to conventional safety risks, our members are exposed to ionizing radiation hazards. Society members who work in Radiation Protection occupations pride themselves on their ability to routinely exceed regulatory standards and consistently set the bar higher in this area of nuclear safety.

Radiation Protection professionals maintain the worker doses As Low As Reasonably Achievable ("ALARA") utilizing best practices and procedures during radioactive work performance. Our members start with good planning to keep exposures ALARA and preventing unplanned exposures; assessing hazards and maintaining situational awareness to prevent unplanned exposure; once in the field the use of shielding and other barriers, administrative procedures, protective clothing, respiratory protection and controlled use of licensed radioactive devices and equipment helps to achieve low worker dose levels.

The use of robotic tools further facilitates the ALARA program. Remotely operated robotic equipment and remote monitoring of inaccessible areas complement the planning,

assessment and keeping a watchful eye on changing conditions. Our members practice and enforce contamination control to prevent the uncontrolled release of radioactive material from the site. This program ensures that contamination does not spread from the station and enter the public domain. As mentioned previously the tripartite oversight Committee, the Joint Committee on Radiation Protection (JCRP) which is described earlier focuses solely on radiation protection issues by providing recommendations on improvements to the radiation safety program with respect to employee and public health and safety.

During the licensing period, OPG implemented and maintained an effective radiation protection program at PNGS in accordance with regulatory requirements. Pickering received “Satisfactory” to “Fully Satisfactory” ratings during the license period thereby satisfying CNSC staff that the radiation protection program at PNGS is effective in maintaining doses below regulatory limits and ALARA, and protecting the health and safety of persons.

Environmental Protection

The Society is pleased that during the current licensed period, PNGS environmental performance continues to be strong in part due to its adherence to its Environmental Management System, which is ISO 14001, certified in accordance with the requirement of the Environmental Policy. PNGS received ratings of “Satisfactory” during all years of the licensing period. Our employees attest to the robust conventional and radiological effluent monitoring program, which PNGS designed to be protective of the public and the environment as well as meet regulatory requirements as prescribed under its PROL issued by the CNSC, Ontario Regulation 215/95 (Effluent Monitoring and Effluent Limits - Electric Power Generation Sector) and associated environmental compliance approvals.

The Society is satisfied that PNGS executes a comprehensive Environmental Monitoring Program which includes biological surveys ensuring sensitive ecological components are considered and that there are no adverse environmental impacts associated with site operations. Every 5 years, PNGS all plausible environmental impacts are documented in an Environmental Risk Assessment which gets submitted and approved in association with the PROL issued by the CNSC. The Environmental Risk Assessment informs the Effluent and Environmental Monitoring programs. Society employees regularly assist in generating reports as part of the Environmental and Effluent Monitoring Programs. Data associated with the Environmental Monitoring Program is generated from sampling which is performed on area water, precipitation, aquatic samples (including fish, sediment and sand), terrestrial samples (including animal products, vegetation and soils), external gamma radiation in air, and tritium and Carbon-14 in air, both from on-and off-site locations. Performance and Control Monitors are installed on all effluent monitoring streams to record constituents of all station discharges.

The Society was pleased to learn that the Environmental Risk Assessment and the Predictive Risk Assessment (arising from the 2024 Continued Operations) concluded that the potential risks from physical stressors and radiological and non-radiological releases to

the atmospheric, terrestrial, hydrogeological, aquatic and human environment are low to negligible. Lastly, and perhaps most importantly, electricity generation by the PNGS is 99 percent free of greenhouse gas emissions with nuclear power being an integral part of the larger low-carbon future. In 2016 Ontario produced more than 60 per cent of its electricity from nuclear power of which PNGS is a major player. The 2017 Ontario's Long Term Energy Plan stated:

The most cost-effective option for producing the baseload generation the province needs while releasing no GHG emissions is to refurbish Ontario's nuclear generating stations. Ontario is moving forward with the plans laid out in the 2013 LTEP to refurbish a total of ten nuclear units between 2016 and 2033 – four units at Darlington and six units at Bruce.

Many of our members not only work but live in the immediate surroundings of the nuclear station and as a result, have a vested interest in protecting their families and environment from any ill effects arising from operation of the plant. These members also boat, surf, fish and spend time on the many local beaches with their families, all of which are activities enshrined into their lifestyle. With this vested interest in mind, our members will be quick to identify concerns 'outside of the gate' and will have little hesitation in bringing this to the attention of the leadership at PNGS. When necessary, full assistance is rendered by our members during compliance inspections / investigations carried out by the CNSC and various regulators. Should our members witness and need to disclose less than optimum protection of the environment they can do so with little difficulty to the responsible regulator should other mechanisms fail to resolve the issue.

The Society takes note that PNGS was granted Wildlife Habitat Council Conservation Certification for its OPG Nuclear Beyond Compliance Biodiversity Program for the 3-year period 2017-2019. And unique to PNGS is the continuous work to co-habitat with peregrine falcons, a species of concern. This is the 5th year where PNGS has had a return pair nesting on site and to date, have successfully monitored and tagged with the Ministry of Natural Resources and Forestry a total of 10 falcon chicks. This is helping slowly rebound the overall population. Additionally, PNGS is doing its fair share to be a key leader in transportation electrification with many initiatives underway.

Diversity and Inclusion

The Society takes pride in having a diverse and eclectic membership where individuals can leverage all facets of their uniqueness when they report to work. We are of the belief that diversity in the workforce is a strength that unlocks innovation by creating an environment where individuals are encouraged to table novel ideas and ultimately contributes to a healthy, robust nuclear safety culture.

The value placed on Diversity is borne out under Article 3.3.6 of The Society's Constitution and By-Laws and The Society's Diversity Policy (Policy Number: Int-Equity-2016-Nov-14-SC-R02-Diversity). As stated in the policy: The Society [acts] as an advocate

and representative on behalf of its members and an active participant in the broader struggle on behalf of all people for dignity, respect and a just and inclusive society. We insist that this value be enshrined into business practices of our employers as we regard these as fundamental facets of leadership competency.

At PNGS our members sit on the Diversity and Inclusion tripartite Committee (the Committee) which is comprised of Society, PWU and Management staff members. Each group on this committee is equally represented and each has an independent voice. The Committee collaboratively make recommendations, and supports PNGS in achieving the goals defined in its Terms of Reference. In order to become a member the D&I Committees there is an application process followed by an interview and formal appointment by the OPG Local Executive Committee.

Our D&I Committee members work diligently to remove barriers for those who have faced systemic discrimination namely: women, indigenous peoples, persons with disabilities and visible minorities. The Society impresses on PNGS the importance of increasing the percentage of candidates in the four designated groups if the goal of building an employee population that is representative of the community is to be realized. Accordingly, the Society will continue our collaboration with site management to create additional programs which foster and embrace a more inclusive workplace where all of our members are empowered to succeed. This is achieved by:

- Consulting with management on key diversity and inclusion initiatives, promotes awareness of existing legislation, policies and procedures;
- Importing knowledge of best practices in labor movement, implementing and / or supporting initiatives / messages related to diversity, equity and inclusion;
- Providing a forum for discussion / advice on diversity issues / concerns brought forth to the committee;
- Seeking input from each member's respective constituency, advocacy groups and designated group members on issues related to diversity, equity and inclusion;
- Developing and recommending initiatives that support diversity, equity and inclusion;
- Communicating information related to diversity, equity and inclusion throughout the workplace; and
- Reporting to our union leadership tensions related to issues which arise in the diversity, equity and inclusion forum.

Included in the Committee's work program are campaigns to build awareness of anti-bullying, black history, youth homelessness, violence against women, assisting new immigrants to Canada with job searches and profile cultural observances of Eid, Diwali, Easter, Chinese New Year, and National Indigenous Peoples Day to name a few. Our members tell us that station management have endorsed the diversity initiative wholeheartedly. The Society is pleased to see that OPG has launched a Computer Based

Training program for its 10,000 employees on diversity fundamentals and unconscious bias. In addition, approximately 1,200 line managers are required to complete a two hour workshop on creating inclusive workplaces. This program was launched in the fall of 2017 and will continue until early 2019. A full day of training is provided to all Diversity and Inclusion Committee members for PWU, Society and Management across Ontario.

One of our members expressed his motivation for joining the D&I Committee in the following way:

I want to help the organization [to] embrace professional immigrants from around the world and eventually [have these] individuals change the status quo and influence what [the executive] leadership team looks like.

Social Licensing

Commencing early 1970s, PNGS has provided safe, reliable low emission energy for the people of Ontario. Our members take immense pride knowing that PNGS supplies 14% of Ontario's energy supply and powers 1.5 million homes each day. The Ontario Chamber of Commerce estimates that the continued operation of PNGS to 2024 is expected to contribute over \$12.3 Billion to Ontario's GDP and an average of \$1.54 billion to Ontario's GDP per year (with 70% of this being contributed to the Durham Region). This is done by creating high-tech jobs, supporting a province-wide manufacturing supply chain, and providing baseload generation electricity. Our facility also contributes to the health care sector by producing lifesaving medical isotopes (Cobalt-60 production) used in range of beneficial industrial, medical and food processing applications.

The Ontario Chamber of Commerce opined on the social utility of continuing to operate PNGS to 2024.

If the station were to cease operation, this energy generation would need to be replaced with other sources of electricity that could be more expensive. Increasing electricity costs could result in changes in housing affordability. In these alternative generating scenarios Ontario could see increased energy costs which would see households experience on average a 0.2 percent to 0.8 percent decrease in their housing affordability.

Specifically, electricity prices will be abated as nuclear generation is one of the least expensive generating sources when compared to other forms of electricity generation, therefore providing consumers a low-cost source of power which has a positive impact on affordable housing.

In consideration of the foregoing, each and every day our members do their utmost to maintain the trust of our host community and do so by operating PNGS safely a reliably. Relatedly, our members recognize the importance of giving back to their host communities and engage in a variety of activities to serve the needs of stakeholders in the community or

raise funds to support groups and organizations. The Society notes that over the decades of operation PNGS has gained the support of the community by building social legitimacy (via engagement with the community), credibility (providing true and clear information to the public) and developing deep trust by creating opportunities for collaboration. In the past and in the future our members will continue to play a vital role in sustaining the goodwill established by participating in campaigns such as:

- Canadian Blood Services blood collection;
- Operation Clean Sweep (where volunteers come together to help seniors in the Pickering/Ajax area with yard work);
- Walk-a-Mile in her shoes (a walk held in the downtown core of Toronto to engage men and boys in ending violence against women and promote gender equality and promote healthy relationships);
- Samosa Fundraisers – proceeds support Grandview Children’s Centre the Humane Society of Durham Region;
- Yoga Day – proceeds support Reach for the Rainbow organization;
- Generating Change – gate collections go towards organizations such as St. Paul’s on the Hill Food Bank and Herizon House (home of women and children fleeing domestic violence);
- Poppy Campaign collection with local legions;
- Take Pride in Pickering tree planting initiatives;
- Great Canadian Shoreline Cleanup and 20 Minute Makeover – community litter cleanup initiatives;
- Big Brothers and Big Sisters – participation in annual bowl for kids’ sake fundraiser;
- School visits and career fairs;
- Participation in industry organizations such as Women in Nuclear and North American Young Generation in Nuclear;
- Habitat for Humanity; and
- Volunteer coaches, volunteer Girl Guide and Boy Scout Leaders.

In 2017 the PNGS Charity Campaign was chaired by a longstanding member of the Society and under his stewardship the funds raised were distributed to a number of local charities.

Our member commented:

As Charity Campaign Chair for Pickering Nuclear Generating Station for 2017, I was not only humbled by how generous my fellow employees were in donating their time and spare change to every event we held, but also to the interest and passion that our members had shown for giving back to the Community. We were successfully able to raise a collective amount across OPG of \$108,723.58. Of that amount, \$35,970.50 was raised by Pickering's Nuclear Station.

The Charity campaign showed me that OPG employees don't just talk about their care and commitment to their community but that they put their words and money into action. I am a proud and strong supporter of Pickering 2024 because we care about the diversity and support that we provide to our community by being a sustainable and reliable power company that strongly cares about the society we build for the future.

Conclusion

The Society is proud of the contribution which our members have made over the 40 plus years at the PNGS. Our members not only generate power but see themselves as building infrastructure for generations to come. We take this commitment personally and work conscientiously each and every day to maintain the trust which the people in our surrounding communities have bestowed upon us. To do anything less is in contravention of our social mandate and a violation of our core principles. Principles to maintain the highest standards with respect to Nuclear Safety, Conventional Safety, Radiation Safety, Environmental Protection, Worker Protection, and Emergency Preparedness are of utmost importance to the Society and our members. These principles manifest regularly in workplace discussions, decisions and in problem identification and resolution mechanisms.

Should the CNSC grant PNGS a 10 year license, the Society looks forward to working the OPG in developing staff plans associated with the Sustainable Operations Plan and the Stabilization Activities Plan and providing input to the annual updates required by the CNSC on these. Moreover, the Society is committed to continuing to work with OPG, the CNSC and all stakeholders to improve not only the operation of the station, but also the health and safety of workers and the surrounding community, the reliability of the units and the engagement of the workers who work at the plant. We will continue to be the watchdog ensuring PNGS meets its legal commitments and regulatory expectations.

In this spirit:

The Society believes that PNGS has made necessary provision for the protection of the environment, health and safety of persons and maintenance of national security and

measures required under section 24(4)(b) of the Nuclear Safety and Control Act. Therefore, the Society supports PNGS request to:

- 1) Renew the Pickering license to authorize OPG to carry out the activities from September 1, 2018 to August 31, 2028 with:
 - Continued commercial operations to end of 2024;
 - Stabilization period (fuel and water removed from reactors); and
 - Start of safe storage by 2028.
- 2) Authorize OPG to operate Pickering NGS Units 5-8 up to a maximum of 295,000 EFPH

The Society wishes to close with the following quote from one of our members which captures the essence of this submission:

I came to PNGS some 17 years ago after working in a variety of industries, healthcare, mining, pulp and paper, engineering consulting and law. Since arriving my experience can be best described as one of continuous learning and growth. This was enabled by the existence of a rigorous internal training program, opportunities for work rotations, and engagement in charitable activities of benefit to the host community. Coming from outside the nuclear industry I noted that the Society in tandem with OPG have made concerted efforts to import industry best practice, and to furnish its employees with the necessary tools and skills to perform at their optimum, safeguard against injury, and protect the environment. As a Society member and an employee of OPG, I feel a deep sense of commitment and pride in my work and workplace.

The Society of United Professionals would like to thank the CNSC for the opportunity to submit this written intervention in support of PNGS license application to renew its PROL. If standing is granted to the Society we will also be making an oral presentation at the Part 2 hearings in June 2018.

Sincerely,



Scott Travers
President

We are profiled on:

Facebook: <https://www.facebook.com/thesocietysays/>

Twitter: www.twitter.com/TheSocietySays

Website: www.thesociety.ca