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Safety Commission

Commission canadienne
de sûreté nucléaire

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Written submission from the Society of United Professionals

Mémoire de la Society of United Professionals

Regulatory Oversight Report for
Canadian Nuclear Power Generating
Sites: 2022 and Mid-term update for
Ontario Power Generation's Pickering
Nuclear Generating Station

Rapport de surveillance réglementaire
des sites de centrales nucléaires au
Canada : 2022 et Rapport de mi-parcours
d'Ontario Power Generation pour la
centrale nucléaire de Pickering

Commission Meeting

Réunion de la Commission

December 13 and 14, 2023

13 et 14 décembre 2023



October 21, 2023

RE: CMD 23-M36 PICKERING NUCLEAR GENERATING STATION MID-TERM REVIEW

The Society of United Professionals represents over 9,000 engineers, scientists, supervisors, and other professionals in Canada's energy and legal sectors. As an organization, we have represented professionals for over 70 years.

The Society represents employees working for a dozen different employers in the electricity sector, including Ontario Power Generation, Bruce Power, Nuclear Waste Management Organization, Hydro One, the Independent Electricity System Operator, the Ontario Energy Board, Toronto Hydro, Kinectrics, and the Electrical Safety Authority.

Our members work in every aspect of the electricity industry. They are involved in generation, transmission and distribution of electricity, management of the electricity system, regulation and enforcement of standards, and management of the electricity market. They are employed as first-line managers and supervisors, professional engineers, scientists, information systems professionals, economists, auditors and accountants, as well as many other professional, administrative, and associated occupations.

The Society's members are knowledge workers who take great pride in exercising their civic, social, and professional responsibilities. 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.

Advocating for safe and healthy operation of our nuclear workplaces is one of the Society's highest priorities as a union. Our members work inside of, and in close proximity to, nuclear facilities, and they are among the first in harm's way if the highest standards of safe operation, and occupational health and safety are not adhered to. They and their families are residents of Clarington and Durham and Port Elgin and they are very conscious of the importance of ensuring a safe and healthy environment in the areas where they live.

In 2018, Ontario Power Generation (OPG) was granted a 10-year power reactor operating license (PROL) for Pickering Nuclear Generating Station (PNGS). This license is valid from August 31, 2018 to August 31, 2028. Previously, the PNGS only received licenses for 5 years. As a result of the longer



licensing period, the Society advocated for a mid-term check-in to have open discussions with the regulator and address any concerns that may arise during the extended period. Keeping this in mind, the Society is grateful for the opportunity to provide feedback on various aspects of operation at the PNGS as we approach the mid-term review.

STATION PERFORMANCE:

As a labor union, we persistently advocate for the professional growth and development of our members in their respective roles. To this end, we regularly hold meetings with station staff to propose areas of improvement in both internal and external training. Consequently, we are delighted to observe that our members' dedication has yielded favorable outcomes, as Pickering Nuclear Generating Station (PNGS) has achieved the highest equipment reliability ratings and annual production output. Notably, this achievement was accomplished by operating all six units at high power continuously for a period of 109 days. Furthermore, it is essential to emphasize that our members' unwavering commitment to excellence is evident through the fulfillment of unavailability targets for all safety-critical systems, demonstrating a low level of public risk associated with the operation of Pickering NGS.

The Society notes that the CNSC's assessment of fourteen safety and control areas (SCAs) has consistently resulted in satisfactory performance across all areas, except for below expectation ratings for security in 2021 and 2022. The Society believes that this accurately reflects the overall culture of safety that is fostered in our workplace at PNGS. Of note is the CNSC's opinion that concerns around elevated hydrogen equivalent concentration (Heq) in pressure tubes in PNGS units 5-8 have been addressed and ongoing fitness of service of the pressure tubes can be demonstrated because "there are no active degradation mechanisms for the formation of flaws that are at risk for crack initiation within the pressure tube regions where the elevated levels of Heq have been observed in other CANDU units."¹

HEALTH, SAFETY AND IMPACT ON THE NATURAL ENVIRONMENT:

Workplace safety is of paramount importance to the Society, as the union representing nuclear professionals at PNGS, and we are proud to work with OPG, and the Power Workers Union, to create a strong culture of safety in our workplace.

¹ <https://www.nuclearsafety.gc.ca/eng/the-commission/meetings/cmd/pdf/CMD23/CMD23-M36.pdf>



As a labor union, our foremost responsibility is to prioritize the health and safety of our members. We fulfill this duty by appointing dedicated individuals to serve on Joint Health and Safety Committees, ensuring a comprehensive approach to addressing workplace hazards. Additionally, we disseminate valuable information through our newsletters, reinforcing best practices and keeping our membership up to date with current health and safety legislation. Through these channels, we engage in productive discussions with management on the adoption of best practices derived from the broader labor movement, aiming to effectively mitigate workplace health and safety risks.

Collaborative efforts with Ontario Power Generation have yielded positive outcomes, with OPG achieving top-quartile performance among its Canadian electrical utility peers in various safety metrics. Furthermore, the Society is pleased to acknowledge that the performance targets for the Radiation Site Collective Dose Exposure have been surpassed, thanks to the input of our membership, implementation of valuable lessons learned and the adoption of new technologies.

Environmental protection is a necessary condition of maintaining the public trust in the ongoing operation of the province's nuclear generating fleet. The CNSC staff's conclusion that levels of radioactivity in the environment are low, and within the range of natural background radiation levels, and that no effects on human health are expected, is satisfactory to the Society.

Recognizing the significant contribution of nuclear power in addressing the global climate crisis, it is equally important to eliminate or minimize the impact of other forms of pollution on the natural environment. OPG's monitoring systems for radiological contaminants, noise, dust, and other factors consistently maintain levels well below established limits. This is particularly crucial as many of our members reside in surrounding communities, emphasizing the significance of maintaining a clean and safe environment for all.

EQUITY PROGRAMS:

Although the Society acknowledges the progress made in promoting diversity, we continue to urge Ontario Power Generation to enhance the representation of individuals with disabilities. This particular demographic faces systemic barriers throughout the hiring process and in maintaining meaningful employment. It is well-known that individuals with disabilities are more likely to experience poverty and social isolation. However, our members actively participate in OPG's Equity, Diversity, and Inclusion (ED&I) Committees, advocating for necessary changes. As a result, OPG has fostered a diverse workforce and an inclusive culture that enhances workplace performance. Through networking within our membership, we consistently seek input and suggestions on ways to improve the work environment. Furthermore, we support various celebratory events to ensure inclusivity. Moreover, the composition of



our OPG Local Unit Directors reflects a healthy mix of diversity, which helps eliminate potential blind spots.

EMPLOYEE FAMILY ASSISTANCE PROGRAM:

The Society places a high value on the wellbeing of its members and has demonstrated its commitment by endorsing and promoting Ontario Power Generation's Employee Family Assistance Program (EFAP). This program has provided our members with access to mental health support, which is crucial to maintaining a healthy work environment. Our Society representatives convene at least twice monthly and discuss workplace stressors and if urgent these concerns are forwarded to station leadership for immediate action. Alternatively, these concerns are forwarded to managers for immediate action. Through our members who sit on the OPG Employee Family Assistance Program Committee and the Total Advisory Committee, our members' concerns are elevated to the top-level management. As a result of this program, our members have been able to build resilience and maintain a healthy work-life balance. Additionally, proposed changes by the company are communicated to the Society, and we provide valuable feedback. It is worthy of note that the Society has provided ongoing support to members on Long-Term Disability.

INDIGENOUS ENGAGEMENT AND RECONCILIATION:

The Society places utmost importance on upholding the rights of Indigenous peoples as outlined in Section 35 of the Constitution Act of 1982, as well as honoring the 94 calls to action that highlight the need for governmental entities to address the historical injustices caused by colonization. We exercise our influence through the active participation of our members in OPG's Equity, Diversity, and Inclusion (ED&I) Committees and various Employee Resource Groups.

We are pleased to observe that during the previous licensing period, OPG has taken significant steps towards reconciliation by signing framework agreements with Curve Lake First Nation and Mississaugas of Scugog Island First Nation. We will continue to support OPG's efforts in reconciliation by promoting increased representation of indigenous peoples in the workforce through initiatives such as the Indigenous Opportunities in Nuclear (ION) program. Additionally, we will support and collaborate with Indigenous Nations businesses and explore joint venture opportunities.

The Society also calls upon OPG to continue providing financial support to Indigenous Communities. This assistance is crucial in enabling the development of skill sets that create employment opportunities

within the nuclear industry. By doing so, we can contribute to the advancement and success of Indigenous Communities while promoting diversity and inclusion within the nuclear sector.

The CNSC staff is satisfied with OPG's engagement efforts to date. The Society believes that continued, meaningful engagement with Indigenous communities should remain a top priority for OPG going forward.

OPERATING PICKERING NGS UNITS 5 TO 8 UNTIL 2026:

On September 29, 2022, the Province made an announcement endorsing the secure operation of Pickering Nuclear Generating Station until 2026. The Society aligns with this initiative, provided that Ontario Power Generation can substantiate the safe and reliable operation of the facility, and licensing approval is granted by the Canadian Nuclear Safety Commission.

The Society understands that the scope of this review is the PNGS Mid-Term Update, and that a separate CNSC hearing will be held to determine the viability of extending the life of PNGS beyond December 31, 2024. The Society will prepare a detailed intervention on the proposed life extension for the June 19, 2024 hearing.

Sincerely,



Michelle Johnston
President
The Society of United Professionals