

## **Comments by the Society of Energy Professionals on REGDOC-2.2.1 Regarding Worker Fatigue and Hours of Work**

### **INTRODUCTION**

The Society of Energy Professionals (the Society) represents more than 8,300 employees working for 13 employers in the electricity industry in Ontario, including Ontario Power Generation, Hydro One, Bruce Power, Nuclear Waste Management Organization, AMEC-Nuclear Safety Solutions, the Independent Electricity System Operator, and the Ontario Energy Board, among others. Approximately 3,500 Society members are employed in nuclear generation at Bruce Power and at the nuclear division of Ontario Power Generation (OPG).

Our members 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. Society members provide technical expertise in areas of conventional health and safety, radiation safety, emergency preparedness and environment. Society represented safety sensitive occupations include ergonomists, safety specialists, industrial hygienists, safety officers, health physicists, emergency managers, environmental scientists and environmental engineers.

Approximately 90% of our membership hold post-secondary degrees and diplomas, with 70% holding degrees at the Bachelor's, Master's or Ph.D. levels. Society members are knowledge workers, working to the best of their abilities, 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.

The Society is a strong proponent of having the most up-to-date and effective safety measures in place at nuclear generation facilities, and we applaud the CNSC for using this consultation process to allow the Society and other stakeholders to raise issues and questions around worker fatigue and hours of work. We believe we can add value by helping to inform this process and accordingly we have some specific questions and concerns which we hope the CNSC will consider and take guidance from when finalizing the REGDOC.

### **THE NEED FOR HARMONIZATION AND ALIGNMENT**

We see from the CNSC study and its Executive Summary that the starting point for the research group from Human Factors North Inc. (HFN) was to ask and answer the question: "Are the hours of work and mandatory rest periods aligned with current science and benchmarking?" The answer given by HFN was a qualified yes, with exceptions set out in Section 1, (a) to (f) of the report's Executive Summary.

The report raises important questions such as how to harmonize the CNSC fatigue-limiting proposals with other regulations, legislation, policies and binding documents which are potentially at odds with one another. As the exclusive bargaining agent for professional employees at OPG and BP, we have negotiated legally binding terms and conditions of employment with these employers, including those

dealing with our members' obligations and rights as they pertain to hours of work, shift work, overtime, time off provisions and other topics related to worker safety issues addressed in REGDOC-2.2.1.

The language in our collective agreements came from negotiations that were informed by an intimate knowledge of the workforce, the workplace and its complexities, as well as the balancing of interests which characterizes all collective bargaining. That is to say that the terms and conditions that the parties have arrived at are not arbitrary and both parties have a legal right to expect they will be adhered to. Any attempt to alter such provisions outside of the realm of negotiations in a way which could be perceived as advantaging or disadvantaging either party, without appropriate consultation and consent, would likely be met with objection, resistance and legal challenge. This should be scrupulously avoided given the importance of stakeholder buy-in to any safety program.

We are optimistic that by appropriately consulting and working with the parties toward mutually agreeable consent to any changes, rather than seeking to impose them in a top-down manner, the CNSC could avoid such an eventuality. Should such consensus and consent prove impossible to achieve, we believe the CNSC's approach should be governed by the basic principal in labour law that parties to a collective agreement cannot contract "outside the law". That is to say parties to an agreement are free to negotiate conditions which are superior to legislated or regulated floors or minimums, however any agreement that provides conditions below legislated or regulated minimums is neither binding nor enforceable and the superior standards prevail.

Another potential area which may be out of alignment with the proposed CNSC measures is found in the legislation under the Ontario Health and Safety Act (OHSA) and the Ontario Employment Standards Act (ESA). It is not clear at this time that such a conflict exists, but should one be identified, it raises the question of which provisions prevail, those of the Ontario OHSA/ESA or the provisions the CNSC proposes. This is made further unclear due to the 1993 decision to delegate the labour -related issues for Ontario Hydro, now OPG and BP, to the province from federal jurisdiction.

As well, given the highly-regimented nature of nuclear power generation, there are also many internal OPG/BP policies, procedures and programs which are found outside the collective agreement and the legislative framework, which may also bring to bear other contradictions and conflicts.

As such, we believe that the CNSC must consider the potential for conflicts and seek ways to find harmonization between collective agreement provisions, the legislated provisions of the OHSA and ESA, and the measures now being proposed by the CNSC.

The potential impacts flowing from the actions of other regulatory tribunals, such as the Ontario Energy Board (OEB), must also be considered. The primary role of the OEB, as it pertains to nuclear generation, is to set rates which compensate a rate regulated licensee (in this case OPG) based on their reasonable and appropriate expenditures. It is the opinion of the Society that in recent years the OEB has greatly overstepped that role, making poorly informed pronouncements on appropriate staffing levels in nuclear safety sensitive positions such as Radiation Protection Technicians. As part of the 2011 decision on rates for OPG, the OEB essentially attempted to dictate nuclear staffing levels to a licensed nuclear operator by imposing punishing financial sanction via disallowance of a great deal of compensation for

nuclear staff from being included in that rate base. Given a constant amount of work to be done, increasing rest periods and time away from work is going to increase the number of workers required for safe operations, somewhat increasing staffing costs. The Society believes that is a reasonable price to be paid for enhanced safety. We do not believe that it should be within the purview of a rate tribunal to dictate safety sensitive staffing decisions like how many Radiation Protection Technicians a licensed nuclear facility requires, and yet that is exactly what they have attempted to do. We are wary that the OEB might similarly make a poorly informed decision to financially penalize any increase in staffing levels owing to changes coming out of this current process, and believe that should any changes be made that the CNSC must clearly communicate and explain them to the OEB.

#### THE EFFECT OF 'BUSINESS TRANSFORMATION' AT OPG

OPG has been undergoing a cost-cutting process since January 1 2011. The process, dubbed Business Transformation (BT) is intended to reduce costs by reducing staff and realigning resources. According to OPG, staffing reductions resulting from BT will be through a managed process of transfer of work, reassignment and attrition.

The effect of this is that long-service workers who meet the retirement rules are leaving, as are some younger workers with lesser service who are concerned about the long-term future of the company. At the same time, OPG is not replacing many of those retirees or quits with new hires. As a consequence, there are fewer workers left to do the required work.

In many cases, this means that the remaining workers have to do more with less and may have to put in more hours to deal with their workload. We are concerned that the staff complement reductions accompanying Business Transformation may have an impact on operations if a remaining reduced complement of employees have their work-time further circumscribed by the mandatory time off being proposed by the CNSC in this hours of work discussion paper.

#### CONTRACT EMPLOYEES

In the context of an operation like a nuclear generating station, certain work just has to get done, regardless of any other constraints, to ensure safe operations. Considering the additional restrictions on the hours of work the CNSC provisions would create, we have a concern that OPG, after the Business Transformation staff reductions, will not have enough full-time, on-going regular employees to do the work required and increasingly rely on contract employees to fill the gap. Although Bruce Power is not undergoing the same sort of process at this time, there are often similar trends to increase the amount of work that is contracted out to non-Bruce workers.

Monitoring and regulating the hours of work and mandatory rest time is a relatively simple task with respect to those directly employed by a licensee. The fact that they are spelled out in our collective agreements and deviations are trackable means that the Society itself has an ability to monitor this. The Society is concerned that the hours of work, overtime, shift scheduling and time off provisions of our collective agreement and, in our view, the safety norms of OPG and BP, do not apply to the

employees of contractors, nor do we have any way, as a legislated partner in safety, of monitoring or verifying that contractors are respecting hours of work restrictions.

OPG and BP do not require all contractors to record all the hours worked. Rather, a contractor doing managed -task work only advises OPG and BP of its total costs of all items. Total labour costs are not broken out, let alone hours worked. It would not be possible to track the hours worked of contractor's employees under the current processes and they must be changed to ensure the rules applied to OPG and BP employees under REGDOC-2.2.1 are also applied to contract workers.

It is our experience that there are dozens of contract employees who work in short-term or contracted periods tied to the length of a construction or outage project. These people are stationed in the same buildings as our members, but report to the contract supervisor, not to an OPG or BP manager for the area in which they are working. For work that is defined as 'owner only' OPG and BP have no oversight of the safety and tasks performed by contract workers because that is the sole responsibility of the contractor.

We would expect the CNSC to apply its new norms on restrictions to hours of work equally to contract employees and to regular OPG and BP employees. Moreover, we would expect that the CNSC would need to oversee implementation of a credible monitoring and compliance regime for which both the contractor and the licensee must be jointly accountable.

In the last paragraph of the summary of the fatigue study, the question is asked: "Using evidence from bench-marking and research, what fatigue management provisions, including hours of work limits and mandatory rest periods, are appropriate during construction of a facility that will require high reliability operations, such as a nuclear power plant?". The answer given is that construction workers "**should**" be covered (our emphasis added) under the same CNSC hours of work as regular OPG and BP employees. The Society is of the opinion that the definition of construction must also include the work performed during outages or projects at the nuclear plants.

Contract workers should be covered by the hours of work limits but, based on our experience, we remain to be convinced that contract employees will be held to the same standard of fatigue management measures as direct employees of the licensee. This is a significant issue because we believe there are likely to be some 500 to 1,000 contractors at any time doing work for OPG and BP at the Pickering, Darlington, and Bruce plants which, during outages, jumps to well over 1,000 contract workers. The CNSC needs to make clear that the standard to which contract employees will be held is the same as that of direct employees of the licensees.

The Society is of the opinion that given the number of employees at OPG and Bruce Power who would be impacted by the application of the CNSC's proposed limits, a slight increase the number of employees needed to ensure safe operation of the plants would be required. To make sure that any changes resulting from this REGDOC continue to ensure safe operations, we would propose that there be an increase to the current minimum complement below which the employers could not go. It is also important to build in sufficient buffer to be able to deal with all situations; adding staff to the minimum compliment would help do that.

Another factor which is not currently considered in the discussion paper, but which needs to be included, is travel time. Travel time needs to be accounted for when calculating the current 60-hour per week limit. When a person is travelling it takes away from rest time and the minimum rest periods between shifts. The current REGDOC does not consider that a minimum rest period of 8 hours can be significantly reduced if the person has to travel 1 to 2 hours home and the same back to work, thus reducing the true rest time a person may have between shifts.

We are of the opinion that any conditions under which the 60-hours of work per week limit, mandated by the existing ESA legislation in Ontario, could be exceeded should be explicitly spelled out. At the present time, the 60 hour limit per week can be exceeded in extreme situations but the way the limit is described in the discussion paper, it reads as though the 60 hours cannot be exceeded under any circumstances. Similarly, we would want to know what, if any, conditions would apply to the 2400-hour limit of work hours per year being proposed by the CNSC, how it will be tracked, and whether or not it can be exceeded under any circumstances.

#### REST PERIODS

The Society is in agreement with the authors of the REGDOC that rest periods should be made an official part of the fatigue reduction program. Currently, some areas of OPG and BP allow for rest periods to take place, even though such rest periods do not form part of official company policy. We are concerned the unofficial status of rest periods lends itself to confusion whereby some are permitted to take part and others may risk being accused of sleeping on the job and thereby subject to discipline. This might discourage some from exercising appropriate use of rest periods. A better approach would be to formalize the inclusion of rest periods into the fatigue reduction program and set out the rules under which such rest periods would be acceptable.

If rest periods were adopted to combat fatigue, we would also propose that there be appropriate designated facilities for the purpose with flat surfaces, sufficient darkness and freedom from noise or distraction.

#### SCOPE

The CNSC fatigue proposals do not specify exactly how and to whom they would apply.

In other jurisdictions such time limits have been applied to some workers and not others. Those to whom they apply are described as being “covered” and those to whom they don’t apply are called “uncovered.” The designation of “covered” in those jurisdictions can shift depending on the task and the department. The same employee may be “covered” for one task and department but be uncovered for a different task in another department.

The Society is interested to know more about how the CNSC sees its proposed work limits being applied. Would they apply to all workers, some workers, which ones? Is the designation of covered or uncovered fixed or can a worker be one or the other depending on different contexts and circumstances? If so, what would be the rules of applicability?

We submit that skilled workers could become frustrated by a reduced opportunity to perform in their area of expertise, similarly those trying to upgrade skills for promotion purposes may see a reduction in opportunities to gain experience. Another factor is that of hiring and retention of employees. Fewer opportunities to increase compensation through extra work hours makes work at these plants less attractive to the kind of highly-skilled workers the industry needs. Details of implementation and coverage matter here.

## CONCLUSION

Fatigue is not compatible with optimal safety, and the Society fully supports efforts to further improve our already safe nuclear operations by addressing workplace routines and structures in such a way that they reduce fatigue and its potential impacts. We do believe that such interventions must be designed and implemented with the recognition that if a group of employees are spending less time on task in an effort to reduce fatigue, some increase in staffing levels will be required to maintain productivity and efficiency in accomplishing required tasks.

There are a number of potential conflicts and roadblocks to the successful design and implementation of a new regime, and we believe that the CNSC should recognize and deal with these proactively. They include: the need to accommodate collectively bargained contract provisions in a way that respects the rights, and maintains the buy-in, of the workplace parties; the need to recognize the potential conflicts between any new regime and existing legislation related to hours of work and work scheduling; the impacts of decisions made by other regulatory bodies such as the Ontario Energy Board; the impacts of workplace restructuring efforts as exemplified by the Business Transformation program at OPG; and, the difficulty in ensuring accurate monitoring and compliance by workers not directly employed by the licensee.

We would welcome the opportunity to meet with the CNSC in order to gain a greater understanding of its reasons for proposing new and more stringent work limit rules on workers at nuclear operations and/or to respond to any questions that may be related to this submission. Some of the specific questions we have are appended and any clarity the CNSC could provide the Society as it relates to these issue would be appreciated.

All of which is respectfully submitted.

## SPECIFIC QUESTIONS ARISING FROM THE FATIGUE STUDY

1. In identifying and managing worker fatigue, whether related to temporary or on-going fatigue-related limitations, how will OPG and BP meet this requirement and, further, how will they balance this requirement with potential worker privacy issues?
2. Regarding the requirement to employ additional supervisory oversight and independent verification when the risk of fatigue is highest, how will OPG and BP determine what additional supervisory staff will be needed to cover periods of highest risk?
3. What is the empirical authority or rationale the authors of the study used to determine that hours of work should not exceed 26 hours/312 hours/2,400 hours?
4. Again, for the recovery periods cited in the study, what empirical authority or rationale was used by the authors of the study for their work shift time frames and minimum recovery periods?
5. How do the authors of the fatigue study see the work hour limits they are proposing being implemented with respect to Section 38 of the Nuclear Security Regulations which stipulate that “every licensee shall develop a supervisory awareness program and implement it on an on-going basis to ensure that supervisors are trained to recognize behavioural changes in personnel, including contractors, that could pose a risk to security at a facility at which it carries on licensed activities.”?
6. At Bruce Power, the choice of shift schedules is left to a vote by the Power Workers’ Union and employees represented by The Society of Energy Professionals are deemed to have accepted the same shift schedules chosen by PWU shift workers. Is there any reason why the CNSC couldn’t stipulate that the choice of shift (one which did not require mandatory overtime) would be made, taking into account the wishes of all the workers on the shift, regardless of union affiliation?