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Tribunal Officer, Secretariat
Canadian Nuclear Safety Commission
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RE: Ontario Power Generation Request for an Amendment to the Power Reactor Operating Licences for Darlington and Pickering Nuclear Generating Stations (CMD: 17-H109)

CELA takes this opportunity to review and comment on the Ontario Power Generation's (OPG) request for amendments to Power Reactor Operating Licences for Darlington and Pickering Nuclear Generating Stations (PROL-licences) as described in *CMD: 17-H109*.

It is CELA's understanding that OPG is applying for an amendment to the PROL-licences for the Darlington Nuclear Generating Station (NGS), *PROL 13.00/2025*, and the Pickering NGS, *PROL 48.03/2018*, to allow the import and export of nuclear substances.¹ OPG has also requested amendments to allow OPG to possess, transfer, package, manage, store and export nuclear substances at the Pickering NGS from the Western Waste Management Facility (WWMF).

It is furthermore CELA's understanding that these import and export activities are already taking place, and that it has been permitted by a Temporary Possession Licence (TPL) with the licence no. 12861-15-19.1 (hereafter the TPL-licence).² CELA has a number of procedure-related comments as well as certain substantive comments related to the proposed amendments to the PROL-licences as well as the existing TPL-licence, which will be set out below.

The existing licence is invalid - wrong type of licence

OPG refers to the existing TPL-licence as a type-918 licence.³ CELA's research, however,

¹ See *Ontario Power Generation - Request for an Amendment to the Power Reactor Operating Licences for Darlington and Pickering Nuclear Generating Stations*, CMD: 17-H109.

² While reference is made to Licence no. 12861-15-19.0 in CMD: 17-H109, this licence has, however, been superseded by licence no. 12861-15-19.1. CELA will therefore refer to this licence in its submission.

³ It is made clear in the Written Submission from Ontario Power Generation on the Licence Renewal Application for the Western Waste Management Facility, that the licence in question is indeed a type-918 licence: <http://www.opg.com/generating-power/nuclear/nuclear-waste-management/Documents/W-CORR-00531-01258.pdf> – see page 76 of this document (page 82 of the pdf) referring to Licence no. 12861-15-17 as a type 918 licence. Licence no. 12861-15-19.1 is apparently a renewed version of Licence no. 12861-15-17.

suggests that type-918 licences were never intended to cover import and export of nuclear substances.

In *REGDOC-1.6.1, Licence Application Guide: Nuclear Substances and Radiation Devices* (April 2017), the following definition is given of type 918-licences:

Use type number	Use type name	Description	Risk ranking
918	Temporary possession – no use	Possession of nuclear substances and radiation devices for storage only; no use, typically for trustees and others with limited understanding of radiation protection. Temporary possession less than one year.	Medium

From this description it would appear that the existing TPL-licence, which OPG is currently relying on when importing and exporting nuclear substances, could not and should not have been issued as a type-918 licence, and that an error has been made when issuing this TPL-licence. A type-918 licence does not appear to be the proper type of licence to issue when allowing imports and exports, as imports and exports likely fall outside the scope of this type of licence. It is therefore CELA's view that the TPL-licence should be considered invalid, as type-918 licences and the associated reporting requirements⁴ are clearly not drafted to regulate issues related to import, export and transport of nuclear substances.

If this finding is correct and the existing licence appears to be invalid, CELA requests that all import and export activities under the existing TPL-licence (licence no. 12861-15-19.1) (and the WWMF licence mentioned below) cease immediately given the lack of a valid licence.

CELA furthermore requests that the current application that proposes to continue these activities by permitting them as part of the PROL-licences should be halted and started anew once a review of the possible invalidity of the existing TPL-licence has been carried out. It is CELA's position that the likely invalidity of the existing TPL-licence leads to the conclusion that the proposed amendments in the PROL-licences to allow for import and export cannot be

⁴ See the Annual Compliance Reporting Form for type-918 licences, which clearly does not address many important considerations related to import/export and transport of nuclear substances: http://www.cnsccsn.gc.ca/eng/pdfs/918_e.pdf.

considered as mere administrative changes.⁵ If the existing TPL-licence is indeed invalid, these amendments must be considered as new proposals.

Lack of public hearing on the TPL-licence – a violation of requirements in the *Nuclear Safety and Control Act*, S.C. 1997, c. 9⁶ (NSCA)

The use of a type 918 licence is not the only reason why the proposed approach of replacing the TPL-licence by amending the PROL-licences likely cannot be carried out as proposed. An apparent lack of public hearing on the existing TPL-licence also appears to stand in the way of carrying out the proposed amendments.

On July 28, 2017, CELA requested information on any public hearings regarding the issuance of the existing TPL-licence. On July 28, 2017, CNSC staff replied that no public hearing has been conducted on the existing TPL-licence. CNSC staff added that there is no requirement to hold a public hearing on this type of licence. CNSC staff made the following comments in this regard:

The applications for Nuclear Substances and Radiation Devices Licences are not dealt with in the context of a public hearing. More information is available on our website: <http://nuclearsafety.gc.ca/eng/nuclear-substances/licensing-nuclear-substances-and-radiation-devices/licensing-process/index.cfm>.

The Commission makes decisions on the licensing of major nuclear facilities, including uranium mines and mills, through a public hearing process. The other decisions can be delegated to a Designated Officer.

CELA does not agree with this view, and this position is also directly contradicted by the present hearing on the amendments to the PROL-licences. As previously pointed out in CELA's letter to Commission Secretary Mr. Marc Leblanc, dated June 21, 2017, it is CELA's view that s. 40 (5) of the *NSCA* requires that a public hearing be held whenever a licence is issued, renewed, suspended, amended, revoked or replaced. This requirement would appear to include the renewal/issuance of the existing TPL-licence.

On the question of the need for public hearings, s. 40(5) provides as follows:

(5) The Commission shall, subject to any by-laws made under section 15 and any regulations made under section 44, hold a public hearing with respect to

(a) the proposed exercise by the Commission [...] of the power under subsection 24(2) to issue, renew, suspend, amend, revoke or replace a licence; and

⁵ As described below, the proposed inclusion of tritium in the PROL-licences is another reason why the amendments to the PROL-licences cannot be considered as simply administrative.

⁶ <http://laws.justice.gc.ca/eng/acts/N-28.3/FullText.html>.

(b) any other matter within its jurisdiction under this Act, if the Commission is satisfied that it would be in the public interest to do so.

It is thus clear from s. 40 (5)(a) that when renewing a licence, a public hearing must be held. It should, however, also be noted that s. 40(5) of the Act states that the public hearing requirement is subject to any by-laws made under section 15 and any regulations made under section 44.

CELA has reviewed the relevant by-laws and regulations issued under the NSCA. From this review, CELA has found that only the Rules of Procedure, SOR/2000-211⁷, contain rules on hearings that might be relevant.

S. 3(1) of the Rules of Procedure provides that "*[t]he Commission or, where applicable, a designated officer may vary or supplement any of these Rules, in order to ensure that a proceeding be dealt with as informally and expeditiously as the circumstances and the considerations of fairness permit.*"

However, as the requirement to hold public hearings is contained in the Act and not in this regulation, this power to vary does not allow the Commission to deviate from the requirement in the Act to hold public hearings.

Additionally, s. 31 (3)(c) of the Rules of Procedure would seem to suggest that the Commission may re-determine a matter "*by way of public hearing or written submissions or by another manner that will enable the Commission to determine the matter before it in a fair, informal and expeditious manner*". S. 31, however, only deals with redeterminations on the Commission's own initiative. For that reason it cannot be relied on here, as we are dealing with an application to renew a licence, not simply a redetermination of a matter.

Similarly, s. 35 of the Rules of Procedure deals with the appeal or redetermination of an order, and allows the Commission to not provide a public hearing. It is thus clear that s. 35, like s. 31(3)(c), does not apply an application to renew a licence, and s. 35 can therefore not be relied upon to avoid a public hearing in the present case.

Based on this, it is CELA's position that neither the NSCA itself nor the relevant by-laws and regulations give the CNSC the authority to deviate from the requirement in s. 40(5)(a) of the NSCA to hold a public hearing when an application to renew a licence is being considered by the Commission.

⁷ <http://laws.justice.gc.ca/eng/regulations/sor-2000-211/FullText.html>.

If this finding is correct, then it is clear that the existing TPL-licence (no. 12861-15-19.1) and any preceding licences such as licence no. 12861-15-17 and any superseding licence (i.e. the WWMF licence, which is mentioned below) have been issued in contravention of the important procedural requirements on public hearings.

CELA therefore requests that the Commission provide the legal authority which the Commission has relied upon when deciding not to hold public hearings for the existing TPL-licence (and related licences).

If the Commission is unable to provide a legal basis for its decision not to hold a public hearing, CELA requests that the Commission inform OPG that their licences to import and export nuclear substances are invalid as they have been issued in contravention of important mandatory procedural requirements.

Again, due to the lack of a valid licence, CELA requests that any and all import and export activities under the existing TPL-licence cease immediately.

CELA further requests that the present review of amendments to the PROL-licence be halted to permit a full review of the issues related to the existing TPL-licences.

Aboriginal Consultation

Section 2.3 in CMD: 17-H109 states:

The common law duty to consult with Aboriginal groups applies when the Crown contemplates actions that may adversely affect established or potential Aboriginal and treaty rights. Based on the information provided in the application, CNSC staff have determined that the activity is administrative in nature and will not cause an adverse impact on potential or established Aboriginal or treaty rights. Therefore, the duty to consult has not been raised.

CELA submits that, given the above submissions, the amendment is not just administrative in nature and thus the duty to consult is triggered. The transportation of unspecified amounts of tritium across the border could impact a number of Aboriginal communities both in Canada and across the border. CELA requests that consultations be done with all Aboriginal groups in the transportation corridor if a renewed licence application is considered at a future date, or alternatively during the current public hearing, should the Commission decide to proceed, despite CELA's comments.

A PROL-licence was never intended to include an import/export licence

A final procedural point that CELA would like to raise is the issue that import/export activities should never be included in PROL-licences. In line with the comments made regarding the

improper use of a type-918 licence, a PROL-licence, which is intended to govern the operation of a nuclear generating station, is a poor fit for a licence dealing with import/export activities.

Indeed, the proposed superficial amendments to the PROL-licences result in uncertainty as to what requirements actually apply to the import/export activities. Furthermore, the existing requirements in the PROL-licences, which govern things such as emergency planning and response, safety of workers, safety of the public, risks related to hostile actions, management, etc. are not tailored to import/export activities, but to the operation of a generating station. There are several fundamental differences between these two types of activities, which a combined licence is not suited to address.

CELA therefore requests an explanation of how the inclusion of import/export activities in a PROL-licence (i.e. a licence that contains requirements not tailored to import/export activities) can provide equal or better protection with regards to emergency planning and public safety etc., despite the issues of vagueness seen in the proposed amendments.

If a satisfactory explanation cannot be provided, which demonstrates why a combined licence is preferable to separate licences from an emergency planning and safety perspective, CELA requests that the Commission require all applications for import/export activities to be submitted in a separate licence-format that is tailored to this type of activity. Alternatively, CELA requests an explanation as to why a less safe and vaguer licencing structure should be accepted.

Substantive issues in licence no. 12861-15-19.1, and in the proposed amendments to the PROL-licences

In addition to the above mentioned procedural issues, CELA also has certain comments regarding the contents of the proposed amendments to the PROL-licences as well as the existing TPL-licence.

First, it is unclear from the comments made by the CNSC how detailed a review it has carried out, including how it has confirmed whether the PROL-licences contain provisions covering all regulatory requirements governing import and export in particular, but also those related to transport of nuclear substances.

CELA therefore requests that CNSC provide a more detailed explanation of their review of the licences, which explicitly states how each regulatory requirement related to the proposed import, export and transport activities are met by the amended PROL-licences, before any such amendment is approved. This review should list all current regulatory requirements and explain how they are proposed to be met by requirements set out in the PROL-licences. Generic

statements suggesting that the proposed amendments to the PROL-licences are satisfactory are insufficient.

CELA furthermore requests that this review include an examination to determine if the PROL-licences include all the licence requirements currently found in the TPL-licence.

Failure to meet reporting requirements regarding the controlled substance Tritium?

Perhaps the most serious issue identified by CELA is a possible failure to provide sufficient information about the import/export of a controlled nuclear substance.

In CMD: 17-H109, page 1 (page 6 of PDF), it is stated that the import/export activities “*will be limited to contaminated materials other than controlled nuclear substances, as defined in the Nuclear Non-proliferation Import and Export Control Regulations **with the exception of low quantities of tritium***” (emphasis added). While CMD: 17-H109 states on page 3 that the maximum amount of tritium will be 10 GBq, it fails to set out whether this is for the entire duration of the licence period, per shipment or per some other interval. It also fails to specify the exact amount of tritium, or indeed what calculations led to the figure of 10 Gbq.

The documents from OPG requesting the PROL-licence amendments state, on more than one occasion, that no controlled substances are imported or exported.⁸ However, from the mention of tritium in CMD: 17-H109 we now know that is incorrect. This failure to report tritium exports raises a number of issues.

Firstly, it brings into doubt the assessment of the total amount of tritium being 10 GBq. If OPG’s own submissions fail to even identify tritium amongst the nuclear substances being shipped – and without any statements regarding the exact quantities of laundry, packaging, shielding or equipment – how can we trust these findings? In this regard it is worth noting that the shipments are already taking place, and yet no documentation appears to have been provided. And yet, the fact that shipments are already taking place should have yielded some data for the Commission to review. CELA requests the release of such data to allow for a proper determination of the proposed export of tritium.

Secondly, according to s. 3(1)(b) of the Nuclear Non-proliferation Import and Export Control Regulations, SOR/2000-210, the following requirement must be met when applying for a licence to import or export a controlled nuclear substance: “*a description of the substance, equipment or information, including its quantity and the number of the paragraph of the*

⁸ See paragraph two of OPG’s letter to Mr. Leblanc, dated April 10, 2017, re. “*Request for Amendment to Pickering Power Reactor Operating Licence PROL 48.03/2018*”, as well as paragraph two of OPG’s letter to Mr. Leblanc, dated March 17, 2017, re. “*Darlington NGS - Application for Darlington Nuclear Generating Station Power Reactor Operating Licence PROL 13.00/2025 Amendment*”.

schedule in which it is referred to". Tritium is listed as a controlled substance in section A.1.5. of the Schedule to the regulation and is thus subject to the requirements of the regulation, including the requirement to list the quantity of tritium that will be shipped.

The mention of a limit of 10GBq, without setting out an exact quantity, without specifying how this limit will apply (per shipment?), and without showing how it will be measured or verified likely does not meet the requirements of s. 3(1)(b) of the Nuclear Non-proliferation Import and Export Control Regulations.

On page 3 of CMD: 17-H109 it is said that *"With respect to tritium, CNSC staff have determined that low quantities of tritium found in contaminated laundry presents a negligible risk of proliferation."* CELA has not been able to find any exceptions, which allows for unlicensed export of controlled substances, simply because the quantities are labelled as *"negligible"*.

CELA therefore requests unambiguous information on the quantity of tritium that will be imported and/or exported, how OPG proposes to measure the exact amount of tritium and how CNSC proposes to verify this amount given OPG's failure to identify tritium in more than one application to the CNSC. Alternatively, CELA requests an explanation as to why the requirement in s. 3(1)(b) would not have to be met here.

Finally, CELA notes that on page 3 of the existing TPL-licence, tritium is explicitly excluded from the substances that may be exported. No exceptions to this exclusion are provided in the parts of the licence made available to CELA. It would thus seem as though the existing TPL-licence does not allow the import or export of tritium under any circumstances. The inclusion of tritium therefore appears to be a significant substantive change, which cannot be labelled as simply *"administrative"*. CELA requests an explanation of how the expansion of the licence to include low quantities of tritium can be considered as merely *"administrative"*. In this regard, it should be remembered that tritium appears to have been added by CNSC staff and not by OPG who failed to mention tritium in its applications.

Lack of compliance with transport-related information requirements?

CELA has also identified what appears to be a lack of compliance with reporting requirements in the Packaging and Transport of Nuclear Substances Regulations, 2015, SOR/2015-145.

According to s. 2(1)(a), this regulation applies to packaging and transport of nuclear substances, while s. 7 sets out requirements regarding information that an application for a licence must contain.

According to s. 7(d)(i), the application for a licence must include *"a description of the nuclear substance, including the name, chemical form and physical state, the activity — or, in the case of fissile material, the mass — of each nuclear substance in a package and the total activity or*

mass in the consignment,”. S. 7 contains several other information requirements, and CELA has merely selected this one requirement as an example.

This information does not seem to be directly included in the applications by OPG. CELA requests an explanation for this seeming lack of compliance with s. 7.

CELA would furthermore expect to find this information reflected in a licence that allows for transport of nuclear substances. The copy of the existing TPL-licence obtained by CELA (some parts were excluded as confidential), contains no descriptions of the nuclear substances by the licence, only a list of excluded (controlled) substances on page 3. The wording of the licence does suggest that a description that meets the requirements of s. 7(d)(i) may be included in an appendix to the licence. This appendix has, however, not been made available to CELA.

CELA requests that information be made available to allow for a review of whether such descriptions are included in the existing TPL-licence as well as in the proposed amendments to the PROL-licences. Should such a request be denied, CELA requests that the legal and factual basis for denying such a request be provided. Additionally, CELA urges the Commission to review and confirm whether the requirements in the Packaging and Transport of Nuclear Substances Regulations, including the information requirements in s. 7, have been met under the existing TPL-licence, and whether they will be met under the proposed amendments to the PROL-licence.

Related issues in the operating licence for the Western Waste Management Facility

Finally, it should be noted that it has come to CELA’s attention that the operating licence for the Western Waste Management Facility has recently been updated to allow for import and export.⁹ If CELA’s findings in the present submission are correct, it means that the consolidation of the existing but likely invalid TPL-licence into the WWMF operating licence is invalid for reasons similar to those stated above.

In this context, CELA would like to point out that the *Record of Decision*¹⁰ explicitly states that the import/export change to the WWMF licence authorized by the Commission was indeed a *consolidation*. To consolidate two licences, both licences must be valid at the time of consolidation. The TPL-licence was, however, not valid for the reasons stated above. CELA therefore requests that import and export activities from the WWMF also cease immediately. If these activities are to resume, a new public hearing on the amendments must take place.

⁹ See <http://www.nuclearsafety.gc.ca/eng/the-commission/pdf/2017-04-12-Decision-OPG-WWMF-e.pdf>, page 9.

¹⁰ See Record of Decision on the *Application to Renew the Waste Facility Operating Licence for the Western Waste Management Facility*: <https://www.cnsccsn.gc.ca/eng/the-commission/pdf/2017-04-12-Decision-OPG-WWMF-e.pdf>

Disclosure of all import/export authorization

CELA finally urges the Commission to disclose the full inventory of authorizations for the import/export of radioactive wastes. CELA requests this information in order to ensure that the public is given a complete picture of the extent to which such activities are taking place. Given the issues identified in the present context, including the issues related to lack of disclosure of tritium imports/exports, CELA finds that such disclosure is essential to ensuring public safety and awareness.

Yours truly,
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