1 Q. Reference: Long-Term Supply for Southern Labrador - Revision 1 - Schedule 2 - Long-Term 2 Supply for Southern Labrador - Evidence Supporting the Revised Application Reference page 8, lines 4-8. 3 4 a) Please provide copies of any communication from the Government of Canada acknowledging that available technologies do not enable the transition to fully 5 6 renewable power systems in isolated communities and indicating that these systems 7 may be exempt from the Clean Electricity Regulations standards. 8 b) Please detail the anticipated CO2-related costs to Hydro arising from this proposed 9 project in the event that isolated communities associated with this project are not 10 exempt from the Clean Electricity Regulations. 11 12 a) The "Proposed Frame for the Clean Electricity Regulations ("CER")" webpage on the 13 A. Government of Canada website states: 14 15 Units operating in areas not connected to an electricity system regulated by the North American Electric Reliability Corporation ("NERC") would be exempted 16 17 [from the CER performance standards]. These areas are predominately remote, Northern or on federal lands.1 18 19 Further, in its published responses to questions posed during the CER Webinars of 21 & 22 20 July 2022, provided as PUB-NLH-059, Attachment 1, the Government of Canada stated 21 that: 22 Given the ambitious timelines of the CER and the lack of near-term options 23 suitable for providing reliable baseload power to remote communities, there are 24 more appropriate federal measures than the CER to support the clean energy 25 transition for remote communities. For example, there are existing programs

<sup>&</sup>lt;sup>1</sup> Government of Canada, "Proposed Frame for the Clean Electricity Regulations," <a href="https://www.canada.ca/en/environment-climate-change/services/canadian-environmental-protection-act-registry/publications/proposed-frame-clean-electricity-regulations.html">https://www.canada.ca/en/environmental-protection-act-registry/publications/proposed-frame-clean-electricity-regulations.html</a>.

offered by NRCAN,<sup>2</sup> CIRNAC<sup>3</sup> and ISC<sup>4</sup> to support clean electricity projects in the north/remote communities.<sup>5</sup>

**b)** This response has been provided by Midgard Consulting Inc. ("Midgard").

Please refer to Table 1 wherein Midgard notes the incremental future per Litre fuel cost associated with carbon pricing assumed for the "Southern Labrador Communities – Integrated Resource Plan" ("Midgard IRP"),<sup>6</sup> filed with the Board of Commissioners of Public Utilities on March 31, 2023,<sup>7</sup> and the resultant annual incremental fuel cost for the preferred alternative (stated in un-escalated \$2023).<sup>8</sup>

**Table 1: Incremental Fuel Cost and Assumed Carbon Cost** 

		Annual Assumed
	\$/L incremental	Carbon Cost
Year	fuel cost	(\$2023)
2023	0.17	\$747,464
2024	0.21	\$800,938
2025	0.25	\$953,497
2026	0.3	\$1,144,197
2027	0.34	\$1,296,756
2028	0.38	\$724,658
2029	0.42	\$800,938
2030	0.46	\$877,218
2031	0.46	\$877,218
2032	0.46	\$877,218
2033	0.46	\$877,218
2034	0.46	\$877,218
2035	0.46	\$877,218
2036	0.46	\$877,218
2037	0.46	\$877,218
2038	0.46	\$877,218

<sup>&</sup>lt;sup>2</sup> Natural Resources Canada ("NRCAN").

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<sup>&</sup>lt;sup>3</sup> Crown-Indigenous Relations and Northern Affairs Canada ("CIRNAC").

<sup>&</sup>lt;sup>4</sup> Indigenous Services Canada ("ISC").

<sup>&</sup>lt;sup>5</sup> "Responses to questions posed during the Clean Electricity Regulations (CER) Webinars of 21 & 22 July 2022," pp. 1–2 of 9.

<sup>&</sup>lt;sup>6</sup> "Southern Labrador Communities - Integrated Resource Plan," Midgard Consulting Inc., March 28, 2023.

<sup>&</sup>lt;sup>7</sup> "Long-Term Supply for Southern Labrador – Phase 1 – Midgard Consulting Inc. Report," Newfoundland and Labrador Hydro, March 31, 2023.

<sup>&</sup>lt;sup>8</sup> There was a typographical error in Table 37 of the Midgard IRP. The revised average value of diesel, assuming the application of the stated carbon pricing, should have been stated as \$1.58 (2023 \$); however, it was reported in error as \$1.68 (2023\$). There is no impact on Midgard's analysis and conclusions.

	\$/L incremental	Annual Assumed Carbon Cost
Year	fuel cost	(\$2023)
2039	0.46	\$877,218
2040	0.46	\$877,218
2041	0.46	\$877,218
2042	0.46	\$877,218
2043	0.46	\$877,218
2044	0.46	\$877,218
2045	0.46	\$877,218
2046	0.46	\$877,218
2047	0.46	\$877,218
2048	0.46	\$877,218
	TOTAL	\$23,135,583

It is noted that the incremental cost of over \$23 million, spread over 25 years, remains less than the incremental cost of the two predominantly hydroelectric alternatives (i.e., Scenario G and H in the Midgard IRP). Otherwise all other viable alternatives would be subject to  $CO_2$  costs which results in a higher Net Present Cost for all.

The preferred alternative allows for the deployment of more efficient gensets, which will use less diesel, and allows for a potential deeper penetration of renewable generation sooner than other alternatives. Both these considerations reduced the "lifetime" use of diesel which insulate Hydro from potential future costs should remote community generation become no longer exempt from the Clean Electricity Regulation.

These considerations confirm the conclusion drawn in Midgard's sensitivity analysis.

# Responses to questions posed during the Clean Electricity Regulations (CER) Webinars of 21 & 22 July 2022

This document contains responses (with additional detail in some cases) to questions posed during the CER webinars held on the 21<sup>st</sup> and 22<sup>nd</sup> of July 2022, including those which were not answered then due to time constraints. For clarity, this document does not include comments received during the webinars. Additionally, it is possible that not all questions asked during the webinars are reflected in this document. Questions not reflected herein are those to which a response would need to reference elements of the proposed regulatory approach that are still under active consideration. In this context, ECCC remains committed to early and frequent engagement on the CER and continues to welcome views and questions at ECD-DEC@ec.gc.ca.

# **Emergency Generation**

How will emergency generation be defined? Who will decide what counts as an emergency? Will emergency generators that burn fossil fuel for an industrial facility regulated through ECCC OPBS be subject to the CER performance standards?

A: ECCC will be responsible for enforcing the CER, including determining if instances of application of the emergency exemption were valid.

Emergencies would be defined as "extraordinary, unforeseen and irresistible." This is the same definition currently used in the coal and natural gas regulations. To qualify for emergency generation, a regulatee must demonstrate that they have met these criteria. In the case that these criteria are met, a regulated unit would be exempted from the performance standard in relation to the emissions covered by the CER and associated with operating the unit during the period of emergency. A unit having capacity above a certain threshold (still to be determined) and that both combusts fossil fuel to generate electricity, and, offers electricity for sale to a NERC-regulated electricity system will be regulated by the CER.

#### Remote Communities

Will the same requirement apply in remote areas of Canada?

A: Units operating in areas not connected to an electrical system regulated by the North American Electric Reliability Corporation ("NERC") would be exempt. These areas are primarily remote, Northern or on federal lands.

Given the exemption of remote communities from the CER, how is it being ensured that remote communities are not left out of Canada's clean energy transition?

A: The Government of Canada is committed to supporting remote communities as they transition away from diesel generation. Given the ambitious timelines of the CER and the lack of near-term options suitable for providing reliable baseload power to remote communities, there are more appropriate

federal measures than the CER to support the clean energy transition for remote communities. For example, there are existing programs offered by NRCAN, CIRNAC and ISC to support clean electricity projects in the north/remote communities. ECCC has heard about the challenges for Indigenous-led clean energy projects and that remote communities do not want to be left behind. That said, ECCC is engaging with Indigenous partners to ensure that their input is heard and fully considered in the design of the CER.

When considering which communities will be treated as "remote," what about communities in load pockets that are technically connected to the grid but cannot reliably import their energy?

A: ECCC is proposing that the CER, through a stringent performance standard, would regulate CO<sub>2</sub> emissions from fossil-fired units that are i) above a certain generating capacity (MW) threshold and ii) offer electricity for sale onto a NERC-regulated electricity grid. In this context, it is important to remember that issues of transmission adequacy are outside of the federal mandate and the scope of the CER. As envisioned, the CER will provide parties responsible for transmission systems with upwards of 10 years to plan and take action to ensure that clean electricity can flow to the places that need it.

Could you please explain the rationale to limit applicability of the CER to facilities under NERC?

A: The Government of Canada's 2030 Emissions Reduction Plan is an ambitious and achievable roadmap that outlines a sector-by-sector path for Canada to reach its emissions reduction target of 40 percent below 2005 levels by 2030 and net-zero emissions by 2050. As part of the Plan, Canada is committed to a net-zero electricity system and the CER would be one part of a suite of federal measures aimed to achieving this goal. In this context, the CER intends to address emissions sources that are highly specific to the generation of electricity; as these sources are generally connected to a NERC-regulated grid, the CER is proposed to include NERC-connectivity in its regulatory scoping criteria. There are other electricity generating units that are likely to not be covered by the CER; however, many of these units may be covered by other initiatives considered under the Emissions Reduction Plan. However, the Government of Canada notes that it may at a later date revisit the scope of the CER and at that time, if deemed warranted for the purposes of achieving its emission reduction targets, include all electricity generating units under the CER, i.e., include units that are and are not connected to a NERC regulated grid.

# Forward plans

Will the CER apply to power imported from the United States?

A: The CER will, in general, apply to a unit within Canada that generates electricity that is offered for sale onto an electricity system regulated by NERC. The CER would not apply to power imported from outside Canada.

How do the CER and OBPS interact? How will the OBPS standard for electricity evolve to support the CES?

A: The treatment of electricity under the OBPSR is being actively considered as part of the CER development process with the goal of having the two regulations aligned in their treatment of electricity generation. Achieving this goal may require an evolution of the OBPSR's treatment of electricity, but it is too early in the process to understand what this evolution may entail.

Will there be pancaking with provincial systems or would they be expected to mimic the CER in their regulations? Will CER override provincial regulations if CER is more strict, what if less strict? Will the CER Framework consider proposing regulatory changes to the provinces? Will it be possible for a province to pursue equivalency with parts of the CER?

A: ECCC is proposing that the CER, through a stringent performance standard, would regulate  $CO_2$  emissions from fossil-fired units that are i) above a certain generating capacity (MW) threshold and ii) offer electricity for sale onto a NERC-regulated electricity grid. As a federal regulation, the CER will be applicable across Canada, which is why ECCC continues to engage with all parties, including provinces and territories, to ensure that the CER is well placed to meet the challenge of net-zero electricity. As part of ensuring that the CER is well placed, section 10 of the *Canadian Environmental Protection Act*, 1999 (CEPA) gives authorization to ECCC to stand down a federal regulation in a province or territory that has in place laws that achieve equivalent (or better) emissions outcomes than the federal regulation. This may be done at the request of the applicable province or territory, subject to certain conditions, and can be in effect for no more than 5 years.

As some provinces have their own carbon pricing systems, how will the financial compensation from the EPR be applied?

A: This issue is currently under analysis.

#### Performance standard

Without any new performance standards or regulations for unabated fossil generation before 2035, will there be a strong enough signal to not build any new unabated fossil generation after 2035?

A: Under the CER, new units would be considered those built on or after January 1, 2025. Although the CER does not propose to include interim standards before 2035, the 10 years between 2025 and 2035 is not enough time to fully recoup capital costs of new, unabated projects. When this is considered in the context that the CER will apply stringent performance standard to new units starting on January 1, 2035, and that meeting the performance standard will require the use of abatement technology, it is unlikely that project proponents would deem new units without abatement technology to be financially viable.

Is there a choice between either meeting the performance standard directly, or by paying the financial compliance on emissions released beyond the performance standard?

A: Regulatees would NOT be able to choose between the performance standard and financial compliance. Both regulated requirements will apply concurrently. The performance standard prohibits units from operating above a certain emissions intensity over a period of time. Regulatees must comply with the performance standard or face enforcement action under CEPA. However, the flexible design proposed for the CER will result in low levels of residual emissions. These residual emissions must be addressed through financial compliance requirements. Residual emissions are expected from existing units, new units that operate between zero and the near-zero performance standard, and units operating in a back-up capacity. The latter will be heavily constrained by limits on hours per year and emissions per year.

Will the limits for unabated generation (kWh/y and KT/y) be the same across the country? Or would there be some variation between regions?

A: ECCC is not proposing regional variations to the performance standard across Canada.

#### Is ECCC considering assessing performance standards over a multi-year average?

A: ECCC is exploring the implications of assessing the performance standard over a single-year or over a multi-year averaged period. The multi-year averaging is not currently being considered for units that have reached their prescribed end of life and continue operating under the backup provisions listed in the CER, which would likely be assessed over a single year.

The Proposed Frame refers to the possibility of "fleet averaging." What is the current potential for this option?

A: Fleet averaging is being considered as a potential compliance flexibility for the CER. ECCC encourages those parties interested in fleet averaging to submit their views to <a href="ECD-DEC@ec.gc.ca">ECD-DEC@ec.gc.ca</a>.

# What are the criteria you are considering to define the value of the performance standard?

A: The adoption of abatement technologies and non-emitting fuels can allow operators of regulated electricity generating units to make significant progress towards achieving net-zero emissions. The performance standard would be set at a stringent, near-zero value in line with direct emissions from well-performing, low-emitting generation technology such as geothermal or combined cycle natural gas with carbon capture and storage (CCS).

For mixed combustion (biomass and fossil fuel co-firing), will CER apply to the fossil fuel portion of this co-firing? Will co-firing biomass and fossil fuels have an impact on the performance standard for these units?

A: ECCC is proposing that the CER, through a stringent performance standard, would regulate CO2 emissions from fossil-fired units that are i) above a certain generating capacity (MW) threshold and ii) offer electricity for sale onto a NERC-regulated electricity grid. In this context and as currently envisioned, the CER proposes to cover units that combust *any* amount of fossil fuel but does not propose specific treatment of units that combust biomass. Moreover, the CER is not proposed to cover the  $CO_2$  emissions that arise from the combustion of biomass. Note that this treatment of biomass is in line with existing ECCC regulations that apply to the electricity sector.

Will the proposed value for the performance standard be published soon, and will that be open for comment as well?

A: The proposed value for the performance standard will be appearing in the draft regulation upon publication in *Canada Gazette, Part I* (CGI). Following publication in CGI, there will be at *minimum* a 60-day public comment period for all interested parties to submit comments to ECCC. All received comments will be reviewed and considered.

# **Existing units**

How will "new" and "existing" units be defined? Please expand on what you consider "Existing units"? Does this include units built before 2025?

A: For the purposes of the CER, an existing unit is proposed to be one that is commissioned before 2025. New units would be those commissioned on January 1, 2025, and thereafter.

Will the end of prescribed life be a single number of years applicable for all facilities?

A: The end of prescribed life approach being considered is a set value of years following the date of a unit's commissioning.

What will be the value of the period that existing units can continue operating following their commissioning date? When does the concept of End of Prescribed Life apply?

A: ECCC is considering a prescribed life concept to be applied to existing units. An existing unit would become subject to the CER performance standard at the latter of the end of its prescribed life, or January 1, 2035. As currently proposed, units that have reached their end of prescribed life could meet the CER's stringent performance standard, or, choose to operate subject to strict limits placed on both the number of hours of operation AND the amount of emissions that could be released per year. The prescribed life would be defined as a period of time (i.e., years), measured as starting with the date of a unit's commissioning; the actual duration of the prescribed life has not yet been decided, but a proposed value for the prescribed life will be appearing in the draft regulation upon publication in CGI. Following publication in CGI, there will be at *minimum* a 60-day public comment period for all interested parties to submit comments to ECCC. All received comments will be reviewed and considered.

For clarity, new units would be subject to the CER's performance standard starting in 2035.

Can you clarify if the end of life concept will apply to fossil fuel generators that have abatement technology added and are meeting the performance standard?

A: It is proposed that any unit can continue to operate at any time if it meets the CER's stringent performance standard.

# Financial compliance

Is the Financial Compliance system going to be distinct from the Output-Based Pricing System and fuel charge? Will offsets created under the federal GHG Offset Credit System Regulations or under Voluntary Offset Protocols be recognized under the CES?

A: The CER will establish a physical performance standard, and all continued electricity sector emissions will be subject to a financial compliance requirement. The form of the financial compliance is still under consideration. ECCC will ensure that the chosen financial compliance mechanism aligns with the treatment of electricity under OBPSR.

Will the Financial Compliance only begin in 2035 for units commissioned before 2035?

A: The selected financial compliance approach would be implemented beginning in 2035. However, the electricity sector is currently subject to carbon pricing via federal and provincial regimes and this is not proposed to change.

Can credits be earned by early adoption of technology pre-2035 for use after 2035? For entities that produce electricity with a carbon intensity lower than that required by the CER, will they receive financial compensation for the period 2025-2035?

A: ECCC is not currently considering credit generation under the CER.

Will the emissions produced by existing units be subject to financial compliance under the CER? A: ECCC is considering a prescribed life concept to be applied to existing units. In this context, the residual emissions arising from existing units, to the extent that they operate through to the end of their prescribed life, would be subject to financial compensation requirements.

#### Threshold

Would units below the capacity threshold be subject to carbon price through the purchase of their fuel?

A: The CER would apply to units with a capacity above a specified minimum capacity threshold. Units below this minimum capacity threshold may still meet the requirements of other carbon pricing programs separate from the CER.

What is the proposed Small Generation threshold and does it apply to individual units or is it aggregated for a facility that has multiple units?

A: The Small Generator threshold under consideration will look to reduce the regulatory burden on units under a certain capacity size threshold. The purpose of the threshold, to be measured in MW of electricity generating capacity, is to ensure the coverage of the majority of emissions while not imposing undue administrative burden on smaller units, as the sum total of emissions from such units do not have a notable contribution to the national total emissions from the electricity sector. The MW threshold is proposed to apply to individual units. The proposed definition of "unit" and the value of the MW threshold will be appearing in the draft regulation upon publication in CGI. Following publication in CGI, there will be at *minimum* a 60-day public comment period for all interested parties to submit comments to ECCC. All received comments will be reviewed and considered.

## Industrial generation

How will industrial units (including cogeneration) be treated by the CER?

A: Industrial generation units that offer any electricity for sale onto an electricity system regulated by NERC, and that meet the MW capacity size threshold requirement, would be subject to the same proposed CER performance standard as all other emitting units.

What are the proposed quantification methods that will be used to determine emissions and exported electricity from industrial (including cogeneration) generation?

A: Quantification methodologies are still being developed and input on this topic is welcome at <a href="ECD-DEC@ec.gc.ca">ECD-DEC@ec.gc.ca</a>.

Why revisit industrial generation, including cogeneration, treatment in the future?

A: The CER would propose to only regulate industrial units (including cogeneration) that offer electricity for sale onto an electricity system regulated by NERC. The CER would not generally regulate a cogeneration unit that generates electricity for its own needs, i.e., "self-consumption" of electricity generated and consumed behind the industrial fence line. Other regulatory and pricing measures would continue to apply to those emissions. However, the Government of Canada notes that it may at a later date revisit the scope of the CER and at that time, if deemed warranted for the purposes of achieving its emission reduction targets, include all electricity generating units under the CER, i.e., include units that are and are not connected to a NERC regulated grid.

## Technology neutrality

#### What is proposed to be considered a non-emitting source of electricity?

A: The CER will not define low or non-emitting sources of electricity. Technologies that would likely meet the proposed CER physical performance standard include firing on biomass, hydrogen or other clean fuels; carbon capture and storage (CCS) systems applied to fossil fuel firing units; solar; wind; geothermal; nuclear both conventional and small modular nuclear reactors (SMRs), hydro, distributed energy systems, interties and energy storage.

# **Affordability**

How will you reconcile the overall objective of maintain affordability while having the regulatees pay for the cost of complying with the CER, e.g., retrofits?

A: The Government of Canada understands that the transition to net-zero will require major investments in clean electricity generation, storage, and grid modernization in order to meet increasing demand from electrification in other parts of the economy as grid operators simultaneously decarbonize generation, particularly in the most impacted provinces. The CER would be part of a suite of federal measures to move Canada's electricity sector to net-zero. The CER and complementary measures would encourage the use of non-emitting fuels like biomass and hydrogen; energy efficiency; demand side management, dynamic pricing; and a range of efficiency, abatement and non-emitting generating technologies such as carbon capture and storage (CCS), solar, wind, geothermal, conventional and small modular nuclear reactors (SMRs), hydro, distributed energy systems, interties and energy storage. It could also support bringing more clean power from Indigenous power producers to Canada's electricity systems. Work to date suggests that a targeted and coordinate deployment of these technologies could be done at an acceptable cost. However, the Government of Canada realizes that the transition to net zero electricity will require efforts from all levels of government. In this context, the Government of Canada has to date announced billions in programs to help in this transition. Moreover, the CER is proposed to contain a number of provisions, such as the prescribe life, MW capacity size threshold and back-up capacity rules that will help improve reliability in a cost effective manner.

# Reliability

Is there a role for new low capacity factor units for purposes of maintaining reliability in the CES?

A: The CER's back-up capacity provisions will permit units to operate at a low capacity factor to protect reliability and affordability as the electricity system transitions to non-emitting generation sources. The proposed back-up capacity provisions are:

- 1. A unit emits less than a heavily constrained amount of emissions per year; and
- 2. It operates less than a heavily constrained number of hours per year.

# Achieving net-zero

Is the objective of the CES to still achieve a net-zero electricity system by 2035?

A: The CER is part of the Government of Canada's 2030 Emissions Reduction Plan. The Plan is an ambitious and achievable roadmap that outlines a sector-by-sector path for Canada to reach its emissions reduction target of 40 percent below 2005 levels by 2030 and net-zero emissions by 2050. The CER is being designed to put Canada's electricity sector on a pathway towards net-zero as an

enabler for broader decarbonization of the economy. The design proposed for the CER would ensure that emissions reductions make significant progress towards net-zero electricity emissions while supporting efforts to have a reliable and affordable grid. However, the CER would be one part of a suite of federal measures envisioned for achieving this goal.

Why not aim for zero emissions? Offsetting should be a measure of last resort. For offsets, will you require projects to be built on Canadian soil?

A: In many parts of Canada, electricity systems rely on natural gas for power generation. The adoption of non-emitting technologies, emission abatement technologies and clean fuels all can allow utilities and others to make significant progress towards net zero emissions. However, even with the current range of these technologies, the continued use of natural gas may be necessary, especially in emergencies and in some circumstances to supplement variable wind and solar power. Despite the potential for this necessary role of natural gas, its use is expected to decline over time as competing technologies evolve. The requirement for financial compliance under the envisioned suite of net zero electricity policy, which could take the form of offsets or payments to match the minimum national carbon price, will help ensure that this is the case.

In terms of units subject to the regulation and potential offsets, the regulation will only cover units operating in Canada that meet the criteria for the regulation. Specifically, ECCC is proposing that the CER, through a stringent performance standard, would regulate  $CO_2$  emissions from fossil-fired units that are i) above a certain generating capacity (MW) threshold and ii) offer electricity for sale onto a NERC-regulated electricity grid.

Have concerns been raised about the potential for a more accelerated approach to decarbonizing electricity to deter electrification in less-regulated sectors?

A: The CER is being developed to protect affordability, and reliability, so that the incentive to electrify other sectors is maintained.

#### Miscellaneous

#### What is a Regulatee? Does that mean electricity generator?

A: The regulatee would be the person responsible for a regulated unit. ECCC is proposing that a regulated unit would be on that combusts any amount of fossil fuels for the purpose of generating electricity and that is i) above a certain generating capacity (MW) threshold and ii) offers electricity for sale onto a NERC-regulated electricity grid.

#### How do you define a 'utility'?

A: The CER is proposing to regulate units that offer electricity for sale onto an electricity system regulated by NERC. In its communications, ECCC is vernacularly referring to such regulated units as 'utilities'.

Is the Federal Government engaging with provinces on the different market structures and how that will impact on the building of interties?

A: The Government of Canada is closely and frequently engaging with all Provinces, Territories and Indigenous groups throughout the CER regulatory development process. The Government of Canada will continue to convene multi-party dialogues to advance priority transmission and intertie projects and to consider the implications of different market structures.

Is it possible to point me to the legislative reference that gives the federal government the power to regulate in this sector?

A: As context, federal jurisdiction on environmental matters has been established as including taking action on substances that travel across the borders of Provinces, Territories and Canada; CO<sub>2</sub> is such a substance. The CER are proposed to be developed under the *Canadian Environmental Protection Act*, 1999. Under Section 93 of CEPA, the Government of Canada, upon the recommendation of the Minister of ECCC, may make regulations with respect to a substance specified on the List of Toxic Substances in Schedule 1 of the Act. Carbon dioxide (CO<sub>2</sub>) is specifically listed as a toxic substance under Schedule 1 of CEPA. Section 93 is broad in its scope in that it contains within itself no limits on its application to any one or collection of industrial sectors. This said, any CEPA regulation must respect other existing laws, and such a review is part of the federal regulatory making process.

About community-based renewable energy cooperatives, how do you see them under the CER? For community energy generation do you envisage a smart grid upgrade giving medium/small scale participation opportunities for distributed generation?

A: We anticipate that projects that emit CO<sub>2</sub> will be targeted by the CER. Therefore, community-based renewable energy cooperatives would not be affected by the Regulations.

Demand side management (DSM) is a strategy to reduce peak electricity demand by changing electricity use patterns. It has the potential to contribute significantly to the three pillars of the CER (i.e., reductions, reliability and affordability) by shifting electricity load to times when there are more low-carbon electricity options; this is known as peak shaving.

#### What are the roles for compliance flexibilities and what limitations will be incorporated?

A: As currently proposed, under the CER, regulatees will NOT be able to choose between the performance standard and financial compliance. Both regulated requirements will apply concurrently. The performance standard prohibits regulated units from operating above a certain emission intensity for a given period of time. Regulatees must comply with the performance standard or face penalties under CEPA. However, compliance with the performance standard allows for some residual emissions. These residual emissions must be addressed through financial compliance requirements.

Would complementary measures also include an investment tax credit for businesses that incur eligible expenditures related to carbon capture, utilization and storage (CCUS), as proposed in Canada's 2021 federal budget?

A: In Budget 2021, the Government of Canada proposed the introduction of an investment tax credit for capital invested in carbon capture, utilization, and storage (CCUS) projects.