

MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES

BRIEFING NOTE FOR INFORMATION

PREPARED FOR: Honourable Bruce Ralston, Minister of Energy, Mines and Petroleum Resources.

ISSUE: Meeting with United Steelworkers President Steve Hunt

BACKGROUND:

The United Steelworkers (USW) is the largest private sector union in North America with more than 225,000 members in Canada and more than 850,000 members continent-wide. Steve Hunt has been the Director of USW District 3 (Western Canada) since April 2004. A significant amount of the employees working at British Columbia's mines are represented by USW. USW also represented workers at the Quinsam Coal Mine which is currently in receivership.

Over the past several years USW has been engaged with the Ministry of Energy, Mines and Petroleum Resources (EMPR) on significant Ministry policy initiatives including two representatives appointed to the Mining Jobs Task Force and two representatives appointed to the Code Review Committee (Attachment 1: Cliff # 106471). USW has identified other priority items they would like to discuss with the Minister including:

- Supporting Canadian industries and workers through government procurement.
- Ensuring that the ministry's promotion of mining does not compromise its role as a regulator particularly when it comes to matters of health and safety.
- Support of the industry, including expansion and extension of Teck mines, tied to investment in the province, its communities and workers.

DISCUSSION:

USW Engagement regarding Health, Safety and Enforcement

EMPR has ongoing engagement with USW regarding the restructuring and investments in Budget 2019 that separated accountabilities for health, safety and enforcement away from those responsible for efficient permitting and competitiveness.

The Chief Inspector of Mines has established three specialized units within the Health and Safety Branch and added eight new health and safety inspectors across the province over the last year to increase oversight. EMPR achieves health and safety objectives through proactive and reactive inspections, serious incident and fatality investigations, mentoring and training programs.

The Mines Investigation Unit (MIU) undertakes investigations into serious incidents and alleged breaches of the *Mines Act*, Health, Safety and Reclamation Code and permit conditions. Work of this unit has resulted in the first prosecutions and convictions under the *Mines Act* in over two

decades. The MIU met with USW local representatives in 2019 to support an increased understanding of the MIU investigative process.

The Mine Audits and Effectiveness Unit (Audit Unit) conducts audits to evaluate the effectiveness of the regulatory system in protecting workers, the public and the environment. The Audit Unit has been engaged with USW regarding the creation of the unit, to seek input into the ongoing audit regarding protecting workers in mobile equipment operator cabs, and to gather audit topics to inform the 2020/21 audit planning process.

EMPR will continue to work with USW to ensure that health and safety remains at the forefront as the Province continues to respond to COVID-19 and plans to reopen the economy.

Mining Reform

The Minister of EMPR's mandate letter, includes a provision to work with Cabinet colleagues on the Environment and Land Use Committee on regulatory efficiency initiatives with a focus on expedited permit processing and reconciliation initiatives within the mining sector. This builds on one of the significant issues identified by the Mining Jobs Task Force regarding barriers to sustaining and growing the mining sector which is to address regulatory complexity.

To provide oversight and governance of this initiative, we have established a Deputy Ministers' Board. The Board is focused on:

- Delivering more efficient and effective mine related permitting to create quality economic growth opportunities for British Columbians;
- Enhancing environmental sustainability and outcomes; and
- Implementing the Province's reconciliation goals by partnering with key Indigenous Nations on mining related opportunities.

EMPR is committed to undertaking these initiatives in partnership with industry, First Nations and labour. One of the pilot areas in this project will be the in Southeast to address issues with respect to timeliness of authorizations.

KEY MESSAGES:

- Health and safety continues to be at the forefront of the Ministry's response to COVID-19 and the Ministry's regulation of the sector.
- The Ministry is committed to continuing to work with USW on these important initiatives to grow and sustain new mining sector investment.
- I look forward to continuing to engage with USW to understand your perspectives and suggestions regarding growing mining investment in British Columbia.

Attachments:

1. CLIFF #106471 BN

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Nathaniel Amann-Blake, ADM,
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Peter Robb, ADM MCAD✓

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MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES
BRIEFING NOTE FOR DECISION

I PREPARED FOR: Honourable Michelle Mungall, Minister of Energy, Mines and Petroleum Resources

II ISSUE: Committee membership for the Standing Code Review

III BACKGROUND:

The Health, Safety and Reclamation Code for Mines in BC (Code) provides the detailed regulation and standards for mining in BC. With the exception of the changes made to regulate tailings storage facilities and limited health and safety sections completed in the previous review, the Code has not been updated in most sections.

To review the Code, the Minister appoints members to the Code Review Committee (Committee) under section 34 of the *Mines Act*. The Chief Inspector of Mines, or designate, chairs the Committee and is responsible for making recommendations to the Minister. It is the Minister's decision to bring any suggested amendments of the Code to Cabinet for consideration of an Order in Council.

In past Code reviews, the Committee has been comprised of an equal number of representatives of mine operations' management (2 representatives) and mine labour unions (2 representatives). In 2016 Indigenous peoples were first included as full partners in the review process bringing the membership up to six members.

IV DISCUSSION:

Standing Committee structure and recruitment:

Ministry of Energy, Mines and Petroleum Resources (EMPR) is proposing the Standing Code Committee to be made up of four representatives each from Indigenous peoples, labour and industry for a total of 12 members. The increase in membership from the previous reviews is to provide for wider representation from all parties.

Recruitment for membership to the Code Review Committee started in fall 2018 with letters sent out to interested parties asking for nominations. The package contained information on the Standing Committee, expectations for time requirement and qualifications needed in order to adequately participate on the Committee.

Thirty letters were sent directly to Indigenous nations with mining within their traditional territories along with a direct request to the First Nations Energy and Mining Council (FNEMC). Letters were also sent to labour unions with locals involved in mining and industry associations

including the Mining Association of BC, the Association of Mineral Exploration and the BC Stone, Sand and Gravel Association.

Submissions were received in late fall 2018 from industry, labour and the Citxw Nlaka'pamux Assembly. FNEMC were invited several times (by letter, email and phone) to submit candidates for consideration. EMPR received no formal response from FNEMC other than a brief in-person discussion at a placer mining forum where FNEMC representatives indicated they would likely not be nominating a candidate. In that discussion, FNEMC representatives indicated support for Nalaine Morin who had been already nominated by the Citxw Nlaka'pamux Assembly.

Standing Committee commencement of work:

Once the Code Review Committee membership has been approved, initial meetings will be scheduled to further define structure and process and set a priority schedule for the review. Each member is appointed to the Committee for a three-year term.

As the Code is technical in nature and broad in scope, the Committee will rely on the advice and technical expertise provided by sub-committees. These sub-committees will be struck to address a specific focus once the priority topic review schedule has been determined by the Code Review Committee. Membership for these sub-committees will be determined through the Chair of the Code Review Committee with assistance and recommendations from Committee members as appropriate.

It is anticipated that sub-committee may include, for example:

- Workplace Hazardous Materials Information System and threshold limit values for asbestos and diesel
- Autonomous mining
- Blasting

Budget 2019 provides \$500,000 annually for the standing Code Review. This amount covers staff in the Code Review secretariat, research contracts, as well as travel and facility rentals when required. The recommended committee membership is attached (1) as well as the Terms of Reference for the Committee (2).

I OPTIONS:

Option 1: Approve committee membership and Terms of Reference

Pros:

- The Code Review Committee is able to be convened and start work on its review during Mining Month (May 2019).

Option 2: Revise the proposed membership and/or Terms of Reference prior to appointing the committee

Pros:

- Ensures any changes or required clarifications are made

Cons:

- Code Committee may not be convened during Mining Month if there is a substantial delay in appointments

V RECOMMENDATION: Option 1

Approve committee membership and Terms of Reference

Approved/Not Approved



Honourable Michelle Mungall,
Minister of Energy, Mines and Petroleum Resources

DRAFTED BY:

Michelle Hynes
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APPROVED BY:

Al Hoffman, Executive Director ✓
Nathaniel Amann-Blake, ADM ✓
Dave Nikolejsin, DM ✓

Attachment 1: Committee members and bios

Attachment 2: Terms of Reference

Attachment 1: Committee members and bios

Overview:

	Candidate Name, organization
Labour	Steve Hunt, United Steelworkers Union
	Dean Lott, United Steelworkers Union
	Brett Chapman, Union of Operating Engineers
	Dave Williams, UniFor, Myra Falls
First Nations	Nalaine Morin, Arrowblade Consulting
	Jennifer Swarbrick, Highland Valley Copper
	Kyle Penner, BCIT mining engineering student
	Charlie Allison, Upper Similkameen Indian Band Councillor and Copper Mountain Mine
Exploration	Rob Stevens, Association for Mineral Exploration
Sand and Gravel	Dani Miller, Mainland Construction
Major Mines	Richard Tremblay, Gibraltar Mine
	Ian Anderson, Fording River Coal

Bios:

Steve Hunt, United Steelworkers Union, Director, District 3 – Western Canada

s.22

Dean Lott, United Steelworkers Union, Staff Representative

s.22

Brett Chapman, Senior Business Representative, Union of Operating Engineers
s.22

Dave Williams, Unifor, Myra Falls Mine
s.22

Nalaine Morin, Principal, Arrowblade Consulting
s.22

Jennifer Swarbrick, Operations Supervisor, Highland Valley Copper
s.22

Kyle Penner, BCIT mineral resource and mining engineering program student
s.22

Charles Allison, Councillor, Upper Similkameen Indian Band and Copper Mountain Mine
s.22

Dr. Rob Stevens, Vice President Regulatory and Technical Policy, Association for Mineral Exploration

s.22

Dani Miller, Compliance Manager, Mainland Construction Materials

s.22

Richard Tremblay, Vice President and General Manager, Gibraltar Mine

s.22

Ian Anderson, General Manager, Fording River Coal

s.22



DRAFT Terms of Reference

**Health, Safety and Reclamation Code for Mines in
British Columbia**

Code Review Committee

DRAFT – April 16, 2019

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1. Background

The Health, Safety and Reclamation Code for Mines in British Columbia regulates the mining industry and provides the foundation for the daily operational activities such as inspections, compliance and enforcement for the Ministry of Energy, Mines and Petroleum Resources (EMPR).

Previous reviews of the Health, Safety and Reclamation Code for Mines in BC (Code) were completed in 1996, 2003, 2008 and 2016/2017. Recent reviews were to address specific and limited sections within the Code in response to events.

In order to review the Code, the Minister appoints members of the Code Review Committee (CRC) under section 34 of the *Mines Act*. The Chief Inspector of Mines, or designate, chairs the committee and is responsible for making recommendations to the Minister. It is the Minister's decision to bring any recommended amendments to the Code to Cabinet for consideration.

In past Code reviews, the CRC members have been comprised of an equal number of representatives of mine operations' management and mine labour unions. It was in 2016 that Indigenous Nations were first included as full partners in the review.

The previous Code Review Committee members from labour, industry and Indigenous Nations and the Mining Jobs Task Force made recommendations that the Code Review continue as a regular function of EMPR. This will ensure that the mining industry remains relevant and is able to address the changing needs of the industry, the environment, Indigenous Nations and all British Columbians.

2. Scope

The Code requires an ongoing review to bring all sections up to current standards and introduce new sections as determined. Initial scoping will occur with Indigenous Nations/industry/labour representatives to establish priorities and specific topics to be reviewed. Work planning will occur on an annual basis with the CRC members and then appropriate technical sub-committees will be appointed to provide support and review, including obtaining the necessary research and data.

In establishing priorities for review, the CRC will consider the Professional Reliance Review Report's recommendations 103, 104 and 105 which are specifically related to the Code.

Consultation

Each year, shortly before the end of each fiscal the Secretariat will canvass each of the members of the Code Review Committee to work with their stakeholders to provide a list of review items to ensure BC's mining sector's regulations are kept relevant and timely. This consultation process along with input from EMPR's inspectorate will form a proposal that outlines the regulatory work to be completed over the coming year.

A slate of code review topics for three years should be reviewed and added to a schedule to ensure the appropriate on-site research is being completed so that data can be brought forward for the technical sub-committees and Code Review Committee to process.

The three-year scheduled slate of review topics should be reviewed and updated annually, to ensure continuity and availability of data to support regulatory conclusions for the development of the Order in Council to enact the proposed amendments. It is expected that members of the CRC consult with their stakeholder and partners to determine areas of interest and review to bring forward for the CRC for consideration and inclusion in the schedule. Once determined, a slate of topics for review for three years will be brought forward for approval, and, where possible, a consensus decision by the CRC is encouraged. Should there be no consensus achievable for the review schedule the Chair will have final decision based on urgency, and the outstanding review topics will be scheduled for the next year.

In undertaking the review the CRC may choose to hold a 60 day public comment period depending on the topic material being reviewed. These periods may be chosen by the CRC and submissions will be reviewed for consideration for inclusion in the Code and will be made publically available on the Code Review website.

3. Committee Structure

The *Mines Act* speaks to appointing a Code committee to prepare a code dealing with all aspects of health, safety and reclamation in the operation of a mine. In practice, this singular committee relies on the advice and technical expertise provided by sub-committees or working groups.

An ongoing review will be better able to address outstanding review topics from previous Code Reviews and ensure that industry is provided guidance for the changing needs of the mining industry, worker safety and environmental protection.

3.1 Membership of Code Review Committee

Members must be suitably qualified to consider and make recommendations on technical matters related to the operation of a mine. Members will apply their professional knowledge, experience and judgment in considering the need for and justification of proposed changes to the Code. Each member is appointed for a three-year term.

The Code Review Committee is comprised of the following:

Chair: Al Hoffman, Deputy Chief Inspector, Executive Director Code Review, EMPR

Industry Labour Representatives:

- Steve Hunt, United Steelworkers Union
- Dean Lott, United Steelworkers Union
- Brett Chapman, Union of Operating Engineers
- Dave Williams, Unifor

Indigenous Nations Representatives:

- Nalaine Morin, Principal, Arrowblade Consulting
- Jennifer Swarbrick, Operations Supervisor, Highland Valley Copper
- Kyle Penner, BCIT mineral resource and mining engineering program student
- Charles Allison, Councillor, Upper Similkameen Indian Band and Copper Mountain Mine

Major Mines Representatives:

- Richard Tremblay, Gibraltar Mines
- Ian Anderson, Fording River, Teck

Exploration Representative:

- Rob Stevens, Association for Mineral Exploration

Sand and Gravel Representative:

- Dani Miller, Mainland Construction

The CRC membership may be reviewed from time to time and no later than every three years as requested by the Chair, Minister or as membership requires. Members may be nominated from unions, industry, or Indigenous Nations through an invitation process.

3.2 Roles and Responsibilities

3.2.1 Chair

The Chair is responsible to ensure the effective functioning of the CRC to fulfil its review mandate as outlined in these Terms of Reference (ToR). Through the Secretariat, the Chair will arrange and chair all meetings and will facilitate dialogue to reach consensus wherever possible. The Chair will guide the CRC to determine the recommendations to be made to the Minister and will ensure that proper records of the CRC's activities are kept and maintained. Should the Chair be unavailable for a meeting, he/she will designate an appropriate alternate.

The Chair is ultimately responsible for making any recommendations for changes to the Code and will note details of dissenting opinions, if any. The Chair will provide rationale and justification of support for his recommendations based on ensuring the health and safety of workers, the environment and the public.

3.2.2 Secretariat

A Secretariat will be provided by the Ministry to act as recording secretary, liaison and legislative manager for the CRC and/or sub-committees to ensure the appropriate work is being completed. The secretariat will coordinate and manage meetings, ensure effective information dissemination, develop agendas in coordination with the Code Review Standing Committee Chair and will ensure that the committees are kept on task, and minutes and a formal record of the proposed Code revisions are kept and coordinated with Legislative Counsel and appropriate Ministry executive members.

The Secretariat will be supported by an administrative support and researcher who will take minutes, coordinate logistics, travel and meeting spaces, and perform research tasks as determined by the scheduled slate of review topics.

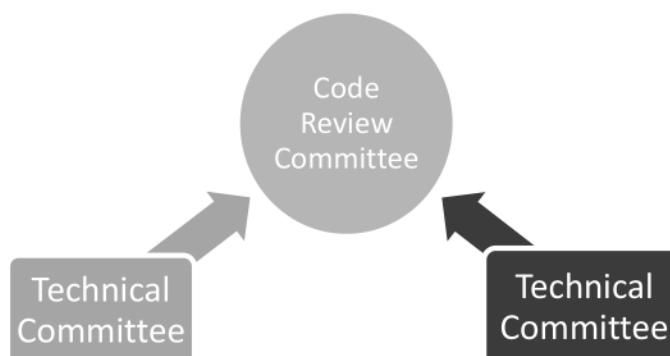
3.2.3 Members

Each member will attend all meetings of the CRC as arranged by the Chair. Members will apply their professional knowledge, experience and judgment in considering the need for and justification of proposed changes to the Code.

4. Sub-Committees

Sub-committees or working groups with specific focuses will be formed to review the technical aspects of the proposed Code revision or the adoption of technical standards. The role and purpose of sub-committees is to conduct in-depth and more detailed technical study of specific areas requiring potential change to the Code and to bring recommendations back to the CRC together with supporting rationale justifying the change.

Sub-committee roles and responsibilities will generally mirror that of the main CRC. The Chair of each sub-committee will be responsible for bringing and proposing recommendations to the CRC. Membership of each of the sub-committees is technical in nature and will be determined by the Chair in consultation with the relevant sub-committee chair, once appointed.



5. Procedures

5.1 Meetings

5.1.1 Frequency and Quorum of Meetings

The CRC will confirm meeting dates to accomplish their mandate in the desired time frame as outlined. It is expected that this will require meetings on a monthly basis as necessary. Each meeting must have attendance from all members, should a member unable to attend, an alternate must be designated and approved by the Chair prior to the meeting. Meetings will only proceed as long as there is at least one representative available from industry, Indigenous nations and labour; should this not be achievable the meeting will proceed at the Chair's discretion.

A typical agenda will include: introductions, confirm agenda, review actions from previous meeting, reports from sub-committees, discussion of specific clauses of the Code, any other business, and the date of the next meeting.

5.1.2 Record of Meetings

The Secretariat will coordinate a recording secretary and/or a technical advisor as needed for the Committee(s) who shall ensure that an agreed written record of each of the meetings is made and presented for acceptance at the next meeting. In addition they will ensure that the outcome of all discussions on proposed changes to the Code is recorded.

5.1.3 Attendance

The Chair is required to attend all meetings of the CRC. Other members are also expected to attend all meetings; however, if they are unable to attend they will be represented by their designated Alternate to ensure minimal absence (which would only be justified in unusual circumstances, such as illness).

5.2 Resources

Unless otherwise arranged, attendance at the committee and subcommittees will be on an in-kind basis with no compensation paid for members' time spent on Code Review business or related expenses. The Ministry will supply meeting rooms and refreshments, as required.

5.3 Amendments

These Terms of Reference may be amended at the Minister's discretion.

6. Schedule

It is expected the Standing Code Review will take place such that priority revisions to the Health, Safety and Reclamation Code for Mines in BC may be put forward on an annual basis. In order to achieve this, specific and focused work by each of the appointed sub-committees will be required in order to determine appropriate changes to put forward. Recommendations will then be provided to the Code Committee for consideration.

MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES

BRIEFING NOTE FOR DECISION

PREPARED FOR: Honourable Bruce Ralston, Minister of Energy, Mines and Petroleum Resources

ISSUE: Timing for Introduction of BC Hydro Comprehensive Review Phase 2 Legislation

BACKGROUND:

The BC Hydro Comprehensive Review Phase 2 (Phase 2) is a transformational review to position BC Hydro for enduring success within a rapidly changing global energy sector. On February 13, 2020, the Priorities and Accountability Committee (P&A) approved three policy recommendations flowing from Phase 2:

1. Implement a 100% Clean Electricity Standard

A clean electricity standard mandates that a certain proportion of retail electricity sales within a jurisdiction on the integrated power system must come from clean sources over a given delivery period. Implementing a 100% Clean Electricity Standard in British Columbia (B.C.) would support CleanBC by making more clean electricity available to utility customers within the province. It would also increase the likelihood of reaching understandings regarding reciprocal clean electricity trade with external trading partners who have implemented their own clean electricity standards. The ability to trade a premium product with other jurisdictions is crucial to maintaining affordable and reliable electricity service within B.C.

2. Eliminate Self-sufficiency Requirement

The *Clean Energy Act* (CEA) indicates that achievement of electricity self-sufficiency is one of B.C.'s energy objectives and required BC Hydro to achieve self-sufficiency by 2016. Self-sufficiency is defined as 'holding the rights to an amount of electricity that meets BC Hydro's domestic electricity supply obligations solely from electricity generating facilities within the Province'.

Eliminating the requirement for self-sufficiency would allow BC Hydro to consider out-of-province options when it plans to meet its future supply obligations. This should give BC Hydro the ability to serve its customers at lower cost because it:

- gives BC Hydro greater flexibility to use lowest cost electricity resources; and
- may encourage BC Independent Power Producers to be more competitive in their pricing.

3. Allow BC Hydro to Pursue Opportunities for the Burrard Thermal Site

As a response to government's 2002 Energy Plan, the CEA contains a number of provisions that were designed to ensure that the benefits of BC Hydro's existing low-cost generation assets would accrue to ratepayers. This includes a provision that prohibits BC Hydro from selling, leasing or otherwise disposing of heritage assets, except in limited circumstances. BC Hydro has been approached by a number of parties to lease a portion of the Burrard Thermal site, but has been unable to further consider these opportunities because Burrard Thermal is a heritage asset.

Alternate uses of the Burrard Thermal site by third parties could provide a variety of benefits, including: fostering innovative technologies, supporting CleanBC objectives and Provincial mandates, maximizing value and/or reducing costs for ratepayers, and furthering relationships with Indigenous Nations and local government. Closure of the generation plant has been financially challenging for the City of Port Moody, as BC Hydro no longer pays an electricity generation grant in lieu of taxes to the municipality. Before it was discontinued, this annual grant payment was approximately \$1.3 million and represented approximately 2% of the municipality's total tax revenue.

s.12; s.13

Amendments to the CEA and the UCA have been drafted to implement these three recommendations. s.12; s.13

s.12; s.13

DISCUSSION:

s.12; s.13

s.12; s.13 BC Hydro is proposing to approach the BCUC to delay its IRP filing for 6 to 12 months due to delays in Phase 2 and difficulty conducting the required Indigenous and stakeholder engagement. In particular, response to the possibility of virtual consultation has been mixed from Indigenous Nations: feedback has been provided that the use of virtual tools may be considered a barrier to participation. In addition, many Indigenous Communities have diverted resources to their own COVID-19 response so capacity to engage at this time is limited and IRP consultation has lower urgency than the other demands on their time. Similar concerns have been raised by Indigenous Communities with regard to Phase 2 consultation.

The results of the IRP are used to inform decisions on long-term capital plans, electricity purchase agreements and other expenditures that may be tied to policies developed in response to the new IRP, and therefore an IRP is an important foundational document for both BC Hydro and the BCUC. If the timelines for the IRP were extended significantly beyond February 2022, which is one year after the original planned filing date, there is a risk that the BCUC could delay other regulatory decisions in the absence of a current IRP. The BCUC has noted in several recent proceedings the lack of a current IRP, which has resulted in more detailed analysis of issues than would otherwise be the case.

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Withheld pursuant to/removed as

s.12 ; s.13

RECOMMENDATION:

s.12; s.13

Approved / Not Approved



Honourable Bruce Ralston
Ministry of Energy, Mines and Petroleum Resources

May 20, 2020

Date

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MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES

BRIEFING NOTE FOR INFORMATION

PREPARED FOR: Honourable Bruce Ralston, Minister of Energy, Mines and Petroleum Resources

ISSUE: Requested Tax Incentive Relief Measures for Mineral Exploration

BACKGROUND:

The economic disruption resulting from the COVID-19 pandemic has impacted British Columbia's (BC) mining sector. From January 1 to the end of April 2020, prices for BC's primary mining products, metallurgical coal and copper, have fallen by 20 percent and 16 percent respectively, resulting in a higher level of perceived investment risk for these commodities. Supply chain networks have been shaken and social distancing guidance has limited field activity. This has been felt acutely by the mineral exploration sector and the nearly 600¹ exploration companies located in the Province.

The Association for Mineral Exploration of BC (AMEBC) has noted that, since the start of March 2020, equity financing for mineral exploration has declined significantly. Exploration companies are concerned that they may not complete field work this summer due to a combination of health concerns in rural areas and fundraising constraints. AMEBC is actively gathering further details on the impact of COVID-19 on its members and is in regular dialogue with Ministry of Energy, Mines and Petroleum Resources (Ministry) staff.

AMEBC has proposed both short- and long-term relief measures, which include several modifications of existing tax incentives and other measures to address this need to attract equity financing.

DISCUSSION:

AMEBC has requested that the Province consider a range of fiscal interventions regarding the BC Mining Exploration Tax Credit (METC) and the BC Mining Flow-Through Share Tax Credit (MFTS) to offset the impact to financing caused by COVID-19. Based on the Ministry's analysis on the current state of companies active in the BC mining sector, this note provides information on the proposed temporary increases to the METC and MFTS. AMEBC indicates that this action will improve access to financing for the exploration sector during this challenging time.

METC

Businesses and individuals that conduct grassroots exploration in BC may be eligible to receive a refundable tax credit equal to 20 percent of non-flow-through funded, eligible mineral exploration expenditures (like drilling, prospecting, and digging test pits) via the METC. An

¹ Number of BC exploration companies listed on the TSX Venture Exchange

enhanced rate of 30 percent is available for grassroots exploration undertaken in prescribed Mountain Pine Beetle (MPB) affected areas. The BC METC was made permanent as part of BC's 2019 budget.

As with most tax incentive programs, BC's Ministry of Finance has an agreement with the Canada Revenue Agency to administer both the MFTS and METC programs. The *BC Income Tax Act* also relies on the provisions contained in the *Federal Income Tax Act* related to tax incentives for mineral exploration.

MFTS

The MFTS incentivizes significant investment in mineral exploration by providing a 20 percent non-refundable tax credit to individuals who invest in flow-through shares associated with BC flow-through mining expenditures. The mining companies must spend the financing from the flow-through shares within 24 months.

The MFTS was made permanent as part of *Budget 2019*. The MFTS is completely harmonized with the federal Mineral Exploration Tax Credit for flow-through shares.

Flow-through shares offer investors benefits in terms of tax deductions and credits. Over the past few years an increasing number of financial firms have entered into agreements with mining companies, individual investors and charities to use flow-through shares as a mechanism to reduce the cost of charitable donations. This can increase the exposure of the MFTS program to the public, providing funding that can be targeted to local charities and does not reduce the amount going to support exploration. A recent example of this was \$33.3 million raised by Skeena Resources for drilling programs in BC's Golden Triangle, it is estimated that it could result in \$20 million being donated to charity.

Tax Incentive Relief Measures

AMEBC's recommendations focus on short-term relief options that will help explorers get in the field this summer. Recommendations on increases to the MFTS and METS are as follows:

Exploration Tax Incentives

Measure	Rationale	Benefit to Industry in 2020/21	Fiscal Plan Impacts in 2020/21
Increase MFTS Tax Credit rate to 60% for one year beginning June 2020 (from existing 20%) followed by a three-year increase to 35% in 2021/22	Supports increased economic activity and investment in the province via mineral exploration. Any cost associated with the tax credit are a result of mineral exploration spending.	Up to \$33M in first year with future year impacts of up to \$12.86M/year	Up to \$33M in first year with future year impacts of up to \$12.86M/year
Increase BC METC to 60% for one year beginning June 2020 (from existing 20% or 30% in MPB-affected areas) followed by a three-year increase to 30% in 2021/22	Supports increased economic activity and investment in the province via mineral exploration. Any cost associated with the tax credit are a result of mineral exploration spending.	Up to \$26M in first year with future year impacts of up to \$3.08M/year	Up to \$26M in first year with future year impacts of up to \$3.08M/year

Further analysis is required to gauge what increase to the MFTS and METC would be appropriate to achieve the desired result of attracting financing to the exploration sector to mitigate COVID-19 impacts. Ministry analysis conducted (pre-COVID-19) on the recommendations put forward by the BC Mining Jobs Task Force showed that increasing the MFTS from 20 percent to 35 percent and the METC from 20 percent to 30 percent could result in an increase in exploration activity between \$30M and \$50M.

Note that any increases to BC's exploration tax credits must be compared to any potential relief measures taken by Ontario, Quebec and Saskatchewan, BC's primary mining competitors that would increase their current tax credits (Table 1). Any relief measures provided to the exploration sectors of these provinces would impact the effect of changes in BC. Other Canadian jurisdictions are understood to be evaluating options, but details won't be available until they are announced.

Table 1: Current MFTS and METC rates in Canadian Jurisdictions

	MFTS rate	METC (or similar)
BC	20%	20% (30% in MPB affected areas)
Manitoba	30%	N/A
Quebec	20%	38%
Saskatchewan	10%	N/A
Ontario	5% (refundable)	N/A

NEXT STEPS:

- The Ministry can work with AMEBC and Ministry of Finance tax policy to prepare further analysis in support of a submission.
- Initial options could be limited to one year and focus on:
 - i) AMEBC proposed increase to 60 percent for both MFTS and METC; or
 - ii) Mining Jobs Task Force recommended increases MFTS to 35 percent and the METC to 30 percent.

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MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES

BRIEFING NOTE FOR DECISION

PREPARED FOR: Honourable Bruce Ralston, Minister of Energy, Mines and Petroleum Resources

ISSUE: COVID-19 Relief and Stimulus Opportunities for the Mining Sector

BACKGROUND:

The economic disruption resulting from the COVID-19 pandemic has impacted the B.C. mining sector. Since January 1, 2020, commodity prices have fallen significantly, with B.C.'s two primary mined products, copper and metallurgical coal, dropping 16.1% and 8.4%, respectively, as of April 17, 2020.

According to the Mining Association of BC (MABC), the sector is facing challenges maintaining liquidity and cash flow as access to markets for goods and services, as well as B.C.'s mineral products, has been disrupted. Without short- and medium-term relief, operating mines face pressure to maintain operations and employment levels as margins continue to shrink. Without relief and recovery measures, the sector will be challenged to meet the vision of the Mining Jobs Task Force as the backbone of an inclusive, progressive, and low carbon economy.

The Association for Mineral Exploration of BC (AME BC) has noted that, since the start of March 2020, equity financing for mineral exploration has been significantly reduced. Exploration companies are concerned that they may not work at all in summer 2020 due to a combination of health concerns in rural areas and fundraising constraints.

The British Columbia Stone, Sand and Gravel Association (BCSSGA) has indicated that negative impacts to their members from COVID-19 have been limited, to date, and members are ready to supply materials for shovel-ready projects to support B.C.'s economic recovery.

DISCUSSION:

While the mining sector is appreciative of the COVID-19 recovery measures implemented by B.C., to date, industry has identified further actions to support the sector for the Province's review and consideration.

Both MABC and AME BC are currently prioritizing immediate tax relief items that will provide their members with increased liquidity, certainty, and flexibility during the pandemic. The three associations have also put forward a series of policy, expenditure, and tax-related measures to support longer-term economic recovery and stimulus. This note provides the Ministry of Energy, Mines and Petroleum Resources (Ministry) recommendations related to the suite of industry-requested measures.

Appendix A outlines priority recommendations for short-term industry relief. The first three measures are sufficiently advanced to support potential announcements and communications with industry stakeholders in May 2020. In addition to the items in Appendix A, the Ministry has also identified four tax-related items requested by AME BC that are within federal jurisdiction. A draft letter has been prepared for the Minister to advocate for these measures with the federal Ministers of Natural Resources and Finance.

The final item in Appendix A proposing increases to provincial mining tax credits. Analysis of this proposal is led by the Ministry of Finance, with support from the Ministry of Energy, Mines and Petroleum Resources. Any changes to mining tax credit percentages would require a decision by the Minister of Finance and an amendment to the provincial *Income Tax Act*, which makes it challenging to complete in time for the 2020 field season.

Appendix B outlines industry-requested relief measures that the Ministry does not recommend, including the supporting rationale.

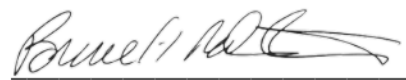
Appendix C outlines requests for measures that require further Ministry analysis, including extending relief measures that are already in place (e.g., BC Hydro bill deferrals) and longer-term measures to support economic recovery and stimulus.

RECOMMENDATION:

Direct the Ministry as follows:

- Pursue the recommended actions outlined in Appendix A.
- Do not pursue the actions outlined in Appendix B.
- Continue to evaluate the measures identified in Appendix C and return with options for consideration, as developed.

Approved / Not Approved



Minister Ralston
Ministry of Energy, Mines and Petroleum Resources

May 26, 2020

Date

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APPENDIX B

Relief Actions Not Recommended

Request	Source	Reason Not Recommended	Benefit to Industry in 2020/21	Fiscal Plan Impact in 2020/21
<p>Ensure mines can benefit from the six-month tax deferrals (Carbon Tax, Motor Fuel Tax, PST) announced in B.C. COVID-19 Action Plan, and extend the tax deferrals for an additional three months.</p> <p>Note: current structure provides relief to suppliers, not end-users.</p>	MABC	<p>FIN has determined that to ensuring end-users benefit would require a change to provincial legislation to modify the tax collection process. It would also be challenging to administer and create additional liability for the Province.</p> <p>FIN will work with the Ministry to explain the intent of the measures and why it is not feasible to implement the request.</p>	\$74.25M over nine months (liquidity benefit)	-
Reintroduce prospector grants to incentivize and support field-based and desktop prospectors.	AME BC	B.C.'s previous prospector grant program was cancelled after review due to administrative burden and low value/effectiveness.	\$0.5M (direct savings)	\$0.5M
General extension of timelines associated with annual reporting and routine deliverables under existing <i>Mines Act</i> and <i>Environmental Management Act</i> permits.	MABC	<p>The Ministry has extended annual reporting by one month and has told the mining sector that case-specific requests for further extensions will be considered.</p> <p>A blanket approach to extending timelines carries risks that hazards could go undetected. This would also set a potentially unmanageable precedent for other provincial agencies and sectors.</p>	Time and potential cost savings	-
Suspend the introduction of all new legislation, regulations, policies, or programs that increase costs or complexity on existing or planned mining operations through the end of 2021.	MABC	Deferring key regulatory work may impede the Province's ability to effectively regulate industry and ensure the protection of the public, workers, and the environment. The Ministry is currently ensuring industry engagement and regulatory work is	Industry certainty	-

		<p>targeted to high-priority areas, with limited additional costs to industry.</p> <p><i>Mines Act</i> changes to formalize the separation of permitting and health and safety, and to establish an audit function, are set to be introduced. Audits are focused on regulatory effectiveness and will not inherently add costs to industry.</p>		
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MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES

BRIEFING NOTE FOR INFORMATION

PREPARED FOR: Honourable Bruce Ralston, Minister of Energy, Mines and Petroleum Resources and Honourable Scott Fraser, Minister of Indigenous Relations and Reconciliation

ISSUE: Follow-up meeting with David Morton to discuss the Final Report of the British Columbia Utilities Commission's Inquiry Respecting the Regulation of Indigenous Utilities

BACKGROUND:

Public utilities run by local governments are excluded from regulation by the British Columbia Utilities Commission (BCUC); however, utilities run by Indigenous governments are currently subject to BCUC oversight. Some Indigenous nations view this as an unfair discrepancy, which adds cost and process for their communities.

As part of its commitment to reconciliation with Indigenous people, and to provide potential business opportunities for Indigenous communities, government asked the BCUC to conduct an inquiry into the regulation of Indigenous utilities (the Inquiry). The BCUC established the Inquiry on March 19, 2019.

The BCUC released its Final Report from the Inquiry on April 30, 2020 (https://www.bcuc.com/Documents/Proceedings/2020/DOC_57958_2020-04-30-BCUC-IUR-Inquiry-Final-Report-Web.pdf). The Final Report includes 35 recommendations. Some of these recommendations are directed at the BCUC, while others are directed at the Province. Some of the recommendations fall outside the terms of reference for the Inquiry established by Cabinet, which asked the BCUC to advise on the appropriate nature and scope, if any, of the regulation of indigenous utilities. A summary table of the recommendations, including information on those which fall outside of the terms of reference for the Inquiry, is included as Appendix A.

DISCUSSION:

s.13

EMPR will engage with colleagues in other Ministries (including staff within the Ministry of Indigenous Relations and Reconciliation the Ministry of Attorney General's tribunal transformation group, and legal counsel), BC Hydro and other utilities, and Indigenous people to review the feasibility of each recommendation and alignment with government policy before making final recommendations on which of the BCUC's recommendations could be adopted by the Province. Further engagement would likely then be required to develop implementation strategies, including any proposed legislative or regulatory changes.

EMPR staff suggest that the follow-up meeting with David Morton be used as an opportunity to:

- ask targeted follow-up questions on the Final Report; and
- provide an overview of anticipated next steps.

Possible follow-up questions

1. Can the BCUC make any recommendations regarding the regulatory requirements, if any, that should apply to Indigenous utilities?

Currently under the *Utilities Commission Act* (UCA), unless otherwise exempted, all public utilities must comply with a number of regulatory requirements. Among other things, public utilities must:

- provide adequate, safe, efficient, just and reasonable service (section 38);
- provide suitable service without undue discrimination or undue delay (section 39);
- not discontinue service without approval of the regulator (section 41);
- provide information to the regulator when requested (section 42); and
- not charge unjust, unreasonable or unduly discriminatory or preferential rates (section 59).

The Final Report does not include recommendations regarding the regulatory requirements that should apply to Indigenous utilities, if any. Some "best practices" are listed in the text of the Final Report, but these appear to be best practices to guide the regulator of an Indigenous utility, rather than the Indigenous utility itself. BCUC staff suggested that the arm's length regulator could determine the regulatory requirements that should apply to an Indigenous utility, based on best practices of ratepayer protection.

In the opinion of EMPR staff, this is a fundamental question that will need to be further explored before many of the other recommendations from the Final Report can be considered or implemented. To facilitate this work, it would be helpful if the BCUC could provide recommendations in this regard based on what the Panel heard during the Inquiry.

2. Can the BCUC confirm that an Indigenous utility would continue to be regulated as a public utility under the UCA in respect of any services it delivers off of reserve or modern treaty lands?

Although it could be implied from the wording of several of the other Final Report recommendations, it would be helpful to have the BCUC confirm that the definition of an

Indigenous utility would apply only in respect of services provided on the reserve or treaty lands of that Indigenous Nation, similar to how municipal utilities are regulated.

3. Can the BCUC provide any further information regarding how it views the distinction between/interaction of an arm's length dispute and complaint resolution process, an arm's length regulator, and an appeal body?

Various recommendations refer to either an "arm's length complaint and dispute resolution process" or an "arm's length regulator." For other public utilities, the BCUC (as the arm's length regulator) has the power to hear and inquire into complaints and it would seem appropriate for an arm's length regulator to fulfill a similar role for Indigenous utilities. However; it appears that the BCUC is recommending that another separate arm's length body exercise a complaint and dispute resolution role. Clarity on this point would be useful.

Generally, "appeal" bodies have responsibility for reviewing decisions of an administrative tribunal or lower court. Recommendations 8 and 9 seem to suggest that the recommended body would instead play a dispute resolution or mediator role. It would be helpful to clarify the role that the BCUC envisions for this body. BCUC staff suggested that the appeal body could have a role to play both as a mediator and as a more formal "appeal" body.

4. Is the BCUC of the opinion that BC Hydro's Open Access Transmission Tariff (OATT) can't be used to provide transmission service to a distribution utility?

BC Hydro's OATT sets out the BCUC-approved terms and conditions for BC Hydro's transmission service. Currently, under the OATT, BC Hydro allows distribution utilities, such as the City of New Westminster, to wheel electricity over its transmission system that will be sold to that distribution utility's customers. On page 77 of the Final Report, the BCUC states that they "interpret Direction 8 to preclude the use of BC Hydro's transmission system to wheel electricity to any customer who will directly consume that electricity in BC, whether it is a customer of BC Hydro or another public utility." This has called into question BC Hydro's ability to continue to offer this service under the OATT. Clarification of the BCUC's position on this issue would be helpful, not only in the context of the Inquiry, but within BC's broader public utility context as well.

5. The BCUC made three recommendations to enhance involvement of Indigenous people in Commission matters, institutional practices with the Commission, and help build the capacity of Indigenous people to regulate Indigenous utilities. Can you elaborate further on what the BCUC may do to implement these recommendations; and, on the type of funding BCUC would like the Province to make available to Indigenous Nations for this purpose?

In the next steps section of the Final Report, the BCUC expresses the hope that many of its final recommendations will resonate with policy makers, and public utilities, who can provide assistance to emerging Indigenous utilities. At the same time, the BCUC notes that it is important for the BCUC to show initiative to advance reconciliation with Indigenous Nations, and prepare for implementation of the *Declaration on the Rights of Indigenous Peoples Act* (DRIPA) by adapting its policies, procedures and relationship with Indigenous people.

Recommendations to the BCUC include increasing representation of Indigenous people in staff positions and Commissioner roles; involving Indigenous representatives with expertise in First Nations governance and other matters to participate on applications involving Indigenous utilities.

Some of this work, especially with respect to capacity building on regulation of Indigenous utilities may be complementary to work the Province or others may wish to undertake with Indigenous people to build capacity to:

- explore the economic feasibility of energy utility opportunities;
- develop business and implementation plans;
- finance and construct/acquire the necessary infrastructure; and
- operate utility services to provide safe, reliable services to their ratepayers and earn a fair economic return.

It would be helpful to learn more about the BCUC's ideas and timing for implementation of its recommendations to itself, to inform future discussions on coordination of BCUC and Provincial efforts, where applicable.

Further, the BCUC has recommended the Province make funding available to First Nations where necessary for the implementation of the BCUC's recommendations. It would be helpful to hear the BCUC's perspective on a framework for funding this activity.

6. What is the best way for government staff to seek further information/clarification as they work through the recommendations in the report?

EMPR staff have had one follow-up conference call with BCUC staff, which was very helpful in confirming or clarifying some of the recommendations. EMPR staff recognize that BCUC staff have limited ability to speak to matters that are not captured in the Final Report, but believe that engagement on the staff level would continue to be helpful as government considers its response to the Final Report.

EMPR's Proposed next steps

s.12; s.13

MINISTRY RESPONSE:

- We thank the BCUC for the time and effort it dedicated to the Inquiry. We'd also like to commend the BCUC for using the Inquiry as an opportunity to consider how to enhance its own relationship with Indigenous people and move forward in the spirit of DRIPA.
- It will take some time before government is able to formally respond to the recommendations from the Inquiry. Further consideration of the recommendations, and internal and external consultation, is required.
- For some of the recommendations, further information from the BCUC could assist with that work. We hope that EMPR staff can continue to engage with BCUC staff for that purpose as they consider the recommendations from the Inquiry.
- Alternatively, similar to the Site C Inquiry, the Deputy Minister could submit a letter to the BCUC requesting clarity on the questions posed in this note.

Attachments: Appendix A - Recommendations Summary Table

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Appendix A – Recommendation Summary Table

	Recommendation	Within Scope of Terms of Reference?	Consistent with existing Government policy?
1.	An Indigenous utility be regulated by a competent arm's length regulator.	Yes	s.13
2.	The regulator of an Indigenous utility follow best practices of ratepayer protection for all ratepayers.	Yes	
3.	An Indigenous utility be defined as a “public utility” for which, as the owner or operator, an Indigenous Nation has de facto or de jure control.	Yes	
4.	When a First Nation no longer controls an Indigenous utility, the utility will at that point become a public utility as that term is defined in the UCA, and regulated by the BCUC.	Yes	
5.	First Nation notify the BCUC when it enters into any agreement that results in a change of control of an Indigenous utility, such that the utility is no longer an Indigenous utility.	Yes	
6.	A First Nation determine the means of regulation of an Indigenous utility providing services on that First Nation’s reserve land. Any BCUC oversight ceases when that First Nation notifies the BCUC that it no longer requires BCUC regulation and demonstrates, as further described in the Complaints and Appeals recommendations, that there is an arm’s length complaint and dispute resolution process to protect all ratepayers.	Yes	

	Recommendation	Within Scope of Terms of Reference?	Consistent with existing Government policy?
7.	A panel or body composed of Indigenous people and others with specialized knowledge, such as First Nations governance, assess a First Nation's complaint and dispute resolution process in the context of public utility regulation as it is practiced in Canada and also within the specific context of that First Nation, prior to that First Nation's Indigenous utility law coming into force.	Yes	s.13
8.	First Nations collectively develop a province-wide appeal body that can be available to customers of Indigenous utilities who are unable to resolve their complaints.	Yes	
9.	The BCUC serve as an appeal body until such time as a First Nation operated body can be established and operational. Further, the BCUC provide any assistance that the First Nation operated body may request in order to become fully operational.	Yes	
10.	The BCUC ensure that it include Indigenous people, in both staff and Commissioner roles, especially for matters that directly affect First Nations.	Yes	
11.	The BCUC include Indigenous representatives with expertise in such matters as First Nations governance, on BCUC panels where applications of Indigenous utilities are being considered.	Yes	
12.	The BCUC modify its regulatory policies and procedures to better reflect the objectives of reconciliation in its proceedings.	Yes	

	Recommendation	Within Scope of Terms of Reference?	Consistent with existing Government policy?
13.	The UCA be amended to exclude from the definition of public utility, any utility recognized under Nisga'a law as a Nisga'a utility in so far as its services relate to the Nisga'a Lands or a Nisga'a Village within Nisga'a Lands.	Yes	s.13
14.	The UCA be amended to exclude from the definition of public utility, any Indigenous utility providing services within Tsawwassen treaty lands.	Yes	
15.	A modern treaty First Nation, other than Tsawwassen First Nation and Nisga'a Nation, determine the means of regulation of an Indigenous utility providing services on that First Nation's former reserve lands. Any BCUC oversight ceases when that First Nation notifies the BCUC that it no longer requires BCUC regulation.	Yes	
16.	Future modern treaties include explicit provisions with respect to the First Nation's authority to regulate Indigenous utilities providing services within treaty settlement lands.	No	
17.	A historic treaty First Nation determine the means of regulation of an Indigenous utility providing services on that First Nation's reserve lands. Any BCUC oversight ceases when the First Nation notifies the BCUC that it no longer requires BCUC regulation and demonstrates that it has an arm's length complaint and dispute resolution process to protect all ratepayers.	Yes	

	Recommendation	Within Scope of Terms of Reference?	Consistent with existing Government policy?
18.	Westbank First Nation determine the means of regulation of an Indigenous utility providing services on Westbank Lands. Any BCUC oversight ceases when Westbank First Nation notifies the BCUC that it no longer requires BCUC regulation and demonstrates, as further described in the Complaints and Appeals recommendations, that it has an arm's length complaint and dispute resolution process to protect all ratepayers.		s.13
19.	The Sechelt Indian Band determine the means of regulation of an Indigenous utility providing services on Sechelt lands. Any BCUC oversight ceases when the Sechelt Indian Band notifies the BCUC that it no longer requires BCUC regulation and demonstrates, as further described in the Complaints and Appeals recommendations, that it has an arm's length complaint and dispute resolution process to protect all ratepayers.		
20.	The BCUC retain jurisdiction with respect to approval, compliance and enforcement of MRS applicable to any entity that may impact the Bulk Electric System in the province, regardless of who owns or operates the infrastructure.	Yes	
21.	A First Nation determine the means of regulation of safety with respect to an Indigenous utility. If the First Nation delegates authority to the BCUC to regulate safety, the applicable portions of the UCA governing safety will remain in force for that First Nation.	Yes	

	Recommendation	Within Scope of Terms of Reference?	Consistent with existing Government policy?
22.	The Government of BC review and revise policies that, in restricting an Indigenous utility's access to BC Hydro's transmission system, may result in an undue barrier to the First Nation's pursuit of economic self determination.	No	s.13
23.	Direction 8 be reviewed to reflect the intention regarding the prohibition on retail access, namely, whether that prohibition is limited to only customers of BC Hydro or to customers of any public utility. In addition, the BCUC review transmission and distribution tariffs to reflect Direction 8 and/or any amendments to Direction 8.	No	
24.	If an incumbent utility acquires energy from an Indigenous utility, when setting rates for that incumbent utility on that First Nation's reserve, modern treaty First Nation's former reserve land, or Nisga'a or Tsawwassen lands, the UCA be amended to require the BCUC to consider the cost of that energy, even if the resulting rate differs from the rate that would otherwise be set.	No	
25.	The Government of BC consider mechanisms to encourage the development of further economic partnerships between incumbent utilities and First Nations.	No	
26.	As the modern treaty process is the accepted means of clarifying Indigenous rights on Traditional Territories, the modern treaty process should address the issue of utilities regulation and the rights of both incumbent utilities and Indigenous utilities to operate in those territories.	No	

	Recommendation	Within Scope of Terms of Reference?	Consistent with existing Government policy?
27.	As an incremental approach to the entry of Indigenous utility operation on Traditional Territory, the UCA be amended to require the BCUC to consider UNDRIP and the economic development needs of a First Nation applying for a CPCN to operate an Indigenous utility on Traditional Territory.	Yes	s.13
28.	The Government of BC reconsider the Standing Offer Program (SOP) program along with the cap for that program and any other provision that places undue economic barriers on potential participants. If the program is restructured and reintroduced, it should be based on market electricity prices, so that Indigenous utilities are provided meaningful competitive economic opportunities while ensuring that all BC Hydro ratepayers are not harmed.	No	
29.	Assistance be provided to Indigenous utilities seeking to export energy to customers outside of British Columbia.	No	
30.	The BCUC develop, in collaboration with Indigenous representatives, a strategy to build First Nations' capacity in utility regulation and a strategy to reduce barriers to the recruitment and placement of Indigenous people in advisory, staff, and Commissioners roles in the BCUC.	Yes	
31.	Where necessary for the implementation of these recommendations, the Government of BC consider making funding available to First Nations.	Yes	

	Recommendation	Within Scope of Terms of Reference?	Consistent with existing Government policy?
32.	The UCA be amended to provide the BCUC jurisdiction to consider regulatory principles enacted by the First Nation when the BCUC adjudicates Indigenous utility complaints and disputes.	Yes	s.13
33.	The UCA be amended to enable the BCUC to determine, in a public proceeding, fair compensation for an incumbent utility, if the operations of an Indigenous utility materially impact that incumbent utility.	Yes	
34.	Section 52 of the UCA be amended to require the BCUC to consider UNDRIP and the economic development needs of a First Nation seeking to acquire public utility assets.	Yes	
35.	The UCA be amended to require the BCUC to consider the principles of UNDRIP when considering the Clean Energy Act energy objective to “foster the development of first nation... communities...”.	Yes	

MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES

BRIEFING NOTE FOR DECISION

PREPARED FOR: Honourable Bruce Ralston, Minister of Energy, Mines and Petroleum Resources

ISSUE: Evolgen's request for retail access to wheel surplus energy from its Powell River Energy Inc. facility to Paper Excellence's Crofton and Port Alberni mills

BACKGROUND:

Retail access is the use of BC Hydro's transmission system to facilitate the direct sale of electricity to end-use BC Hydro customers, by a supplier other than BC Hydro. BC Hydro does not currently offer this service, and Direction 8 to the British Columbia Utilities Commission ("BCUC"), made following Phase 1 of the Comprehensive Review of BC Hydro ("Phase 1"), currently prohibits the BCUC from ordering BC Hydro to provide it, unless BC Hydro requests approval to do so.

The Powell River Pulp Mill (Mill), owned by Paper Excellence's subsidiary, Catalyst Paper Corporation ("Catalyst"), is partially served by two hydroelectric facilities. The generators have a combined capacity of 83 megawatts (MW) and produce an average of 540 gigawatt-hours (GWh) of electricity annually,¹ which represents 40% of the Mill's needs. The remainder of the Mill's electricity supply is from on-site Catalyst biomass cogeneration (20%) and power purchased from BC Hydro (40%) by Catalyst.

Prior to 2001, the hydroelectric facilities were owned by the Mill. In 2001, Brookfield Asset Management, an Independent Power Producer (IPP) based in Gatineau, Quebec, purchased 50% ownership of the hydroelectric assets from the Mill and formed Powell River Energy Inc. (PREI). In 2013, Catalyst, then an independent company, sold the remaining hydroelectric ownership interest to PREI as part of a plan to emerge from creditor protection.

The transfer of the power facility ownership from the Mill to Brookfield and the sale of electricity by PREI back to the Mill brought PREI into the definition of a public utility under the *Utilities Commission Act* (UCA). To facilitate the initial (2001) sale, Brookfield requested an exemption from BCUC oversight. The need for BCUC oversight with respect to power purchase agreements (PPAs) between two sophisticated parties like Catalyst and Brookfield is negligible, and so the then-Minister made a Ministerial Order under s.22 of the UCA for this purpose in 2001. In 2016 the PPA was renewed for a 5-year term, ending January 31, 2021, to be extended in successive 1-year terms unless either party issues a termination notice. At Brookfield's request, the then-Minister updated the Ministerial Exemption Order in 2017 ("the 2017 MO") (Attachment 1), and this MO is in effect until January 31, 2021. Concurrently, Cabinet approved a BCUC request to make a similar exemption order under s. 88 of the UCA ("the BCUC Order").

¹ Annual generation is variable and typically ranges from 500 – 580 GWh, based on hydrology.

The 2017 MO and BCUC Order exempt PREI from Part 3 (BCUC oversight) and section 71 (BCUC approval of power purchase agreements) of the UCA with respect to electricity generated by PREI and sold for use at the Mill. The BCUC Order also exempts the sale of surplus PREI power to other public utilities or wholesale customers (e.g. power marketers like Powerex or Morgan Stanley, and/or export markets).

Among other clauses, the PPA required the Mill to provide Brookfield (now rebranded as “Evolugen”, pronounced e-VOL-u-gen) at least 180 days’ notice that it expects a temporary, but material reduction, in its load (“Material Reduction in Load”). In this event, the 2017 MO requires Evolgen to provide notice to the Minister, including the cause of the load reduction, and an indication of how long the situation is expected to persist, and Evolgen’s plans with respect to the sale of the power that otherwise would have been consumed by the Mill. This condition was placed within the MO to provide the Ministry with the opportunity to ensure that the load reduction is real and that neither party is colluding or engaging in arbitrage to take advantage of the sale of power at higher market prices at BC Hydro ratepayers’ expense.

On April 15, 2020 Paper Excellence announced that Catalyst’s Crofton and Powell River operations would be curtailed until “mid-summer”, citing “*an exceptional intersection of events has negatively impacted (its) operations including: a material shortage of economic forest fibre on BC’s coast²; a significant external malware attack which rendered its paper business enterprise systems inoperable for a period of time; and COVID-19 which has materially impacted the supply chain for many of the paper products that Catalyst manufactures.*” The company’s news release also indicated it intends to service its core paper customer base from its Port Alberni operation during this period, along with intermittent manufacturing runs at Crofton as opportunities permit. Catalyst considers these events to represent Force Majeure.

Accordingly, on the same day, Catalyst served Evolgen with an open-ended notice of Force Majeure, effective immediately. It also served an overlapping notice of Material Reduction in Load, covering October 12, 2020 to January 31, 2021. The two notices collectively advised Evolgen of almost a complete absence of load at Powell River for the remainder of the PPA.

On April 24, 2020 Evolgen followed through with its obligations under the 2017 MO and formally notified the Ministry that Catalyst had issued a notice of Material Reduction in Load (Attachment 2). In its letter, Evolgen advises that it wishes to sell the resulting surplus power to Catalyst’s Crofton and Port Alberni operations, and requested from government “the approvals necessary to effect that solution.” Evolgen noted that its request would provide an important support for Catalyst, assisting the company to retain jobs and contribute to the regional economy during and following the COVID crisis.

In a subsequent meeting with ADM Les MacLaren on April 30, 2020, a Catalyst executive expressed support for Evolgen’s request and confirmed that the requested approvals would be for retail access. In Catalyst’s view, retail access would be needed temporarily (i.e., from now until the end of July 2020). Catalyst would perform planned maintenance at the Mill in August, with the intent to subsequently resume operations by September. Should Mill operations remain suspended after the maintenance period because of market conditions or other reasons (as

² largely due to the Western Forest Products strike

foreshadowed by the notice of Material Reduction in Load for the fall) Catalyst signalled that retail access may be desired for a longer period.

DISCUSSION:

Why Evolgen and Catalyst are seeking retail access

The extended curtailment at the Powell River Mill has coincided with very low export energy market prices. This combination has created commercial tension between Catalyst and Evolgen, with Evolgen having perhaps the highest stake in the outcome.

Under the PPA, Catalyst purchases all the energy PREI can generate at a price (currently ~\$55/MW) that is at a small discount to BC Hydro's prevailing industrial rate, inclusive of demand charges (~\$65/MWh). The agreement includes "take-or-pay" provisions. These provisions require Catalyst to pay for the energy that could have been delivered, even when the Mill does not need or consume it, with certain exceptions. These exceptions include Force Majeure, and interruptions due to Mill maintenance periods of less than 5 days in duration, and no more than once per year.

When Catalyst provides Notice of a Material Reduction in Load, the PPA also requires Catalyst and Evolgen to *"work together in good faith to identify commercially reasonable opportunities to reach a mutually agreeable modification to the supply arrangement to relieve Catalyst from the obligation to purchase energy in excess of Powell River's load, or to otherwise allow Catalyst to consume all of PREI's generation. Such modifications may include securing approvals to allow Catalyst to use the surplus energy at other Catalyst facilities in BC."* The PPA also allows Evolgen to terminate the agreement, should the parties fail to find a mutually acceptable modification within 30 days of the first day covered under the notice of Material Reduction in Load (i.e. by November 12, 2020). Should Evolgen terminate the PPA, Catalyst advises it would be required to pay Evolgen about \$1 million (M) in compensation.

It is unclear if Evolgen will accept Catalyst's Force Majeure claim. If it does, its next best alternative under the current regulatory framework would be to sell PREI's surplus power to a marketer, such as Powerex or Morgan Stanley, or directly into the export market, at a net price expected to be materially lower than its current PPA with Catalyst, especially once the cost of wheeling the power to the Mid-Columbia market plus line losses are factored in³. Export prices are generally depressed during the spring freshet period, and this year, due to COVID-19 and other factors, prices have been as low as \$US 4 – 12/MWh. Prices are expected to increase as the West moves in to the summer period and building cooling demands rise; however, most pre-COVID long-term market forecasts estimated future prices to range between \$US 25 – \$40/MWh. Selling the surplus power to Crofton and Port Alberni instead would enable Evolgen to realize its projected pricing for PREI power over the requested Force Majeure period; and potentially following the start of the Material Reduction in Load.

³ EMPR understands Evolgen as already begun these exports, likely through marketer Morgan Stanley.

Assuming Catalyst was enabled to use an estimated 129 GWh of the lower cost PREI energy at other sites, the paper company could realize savings of roughly \$1.29 M⁴ over the 3-month period between May 1 - July 31, 2020. This assumes Evolgen would be willing to bear approximately the approximately \$0.260 M (20%) in related fees and charges BC Hydro could charge if a retail access tariff was put in place for the physical wheeling of the energy. To avoid this potential cost, Catalyst has proposed that the surplus PREI energy volume simply be deducted from its aggregated BC Hydro energy billing arrangement that covers all three Catalyst sites. BC Hydro is not supportive of this proposal, as it would essentially shift even more lost revenues from Evolgen to BC Hydro.

Alternatively, if Evolgen rejects Catalyst claim of Force Majeure, and is unable to secure retail access, Catalyst advises it might redirect production from Port Alberni or Crofton to Powell River to avoid take-or-pay charges and capitalize on the lower priced PREI energy. It is unclear if this strategy would be feasible, as there are material differences in the products made at each site. Regardless, it is unlikely that either this scenario, or retail access for Evolgen, would materially enhance chances of the survival of Catalyst's operations or save jobs in and of themselves.

s.13

As noted at the beginning of this note, retail access is the ability for load customers to secure electricity from a third-party provider rather than its local utility (such as BC Hydro) and to use a utility's open access transmission tariff to wheel the electricity to their site. Interest in retail access fluctuates with electricity market prices. Customers are typically interested when open market prices are lower than local supply, and not interested when market prices are higher than local supply.

Some Canadian jurisdictions allow retail access, while others do not. In those jurisdictions where retail access is allowed, the public utility commission sets the terms and conditions of the access. This usually includes exit and entry provisions for coming back to the utility, so that other utility ratepayers do not bear the risk of stranded asset costs.

s.13

⁴ Based on BC Hydro record of historical 2-year (F2018 and F2019) generation by PREI in the months of May, June and July (about 129 GWh) times the \$10/MWh differential. One of PREI's two generators is presently down, so actual generation/savings may be lower. Assumes all of the power is sold to the Port Alberni, with no impact on Port Alberni's BC Hydro demand charge. Also assumes negligible energy consumption by Powell River during this period.

Page 050 of 117 to/à Page 053 of 117

Withheld pursuant to/removed as

s.13

RECOMMENDATION:

s.13



Honourable Bruce Ralston, Minister
Ministry of Energy, Mines and Petroleum Resources

May 20, 2020

Date

DRAFTED BY:

Katherine Rowe, Dir, GRB

APPROVED BY:

Paul Wieringa, ED, EPR ✓

Les MacLaren, ADM, EAED ✓

Dave Nikolejsin, DM ✓

Attachment 1: January 27, 2017 Minister's Order ("The PREI Exemption Regulation")

Attachment 2: April 24, 2020 Letter from Evolugen

PROVINCE OF BRITISH COLUMBIA
REGULATION OF THE MINISTER OF ENERGY AND MINES
AND MINISTER RESPONSIBLE FOR CORE REVIEW

Utilities Commission Act


Ministerial Order No. M 039

I, Bill Bennett, Minister of Energy and Mines and Minister Responsible for Core Review, order that

- (a) Ministerial Order 26/2001 is repealed, and
- (b) the attached PREI Exemption Regulation is made.

January 27th, 2017

Date



Minister of Energy and Mines and Minister
Responsible for Core Review

(This part is for administrative purposes only and is not part of the Order.)

Authority under which Order is made:

Act and section: *Utilities Commission Act*, R.S.B.C. 1996, c. 473, s. 22

Other: _____

December 16, 2016

2/R/541/2016/27

PREI EXEMPTION REGULATION

Definitions

1 In this regulation:

“**Act**” means the *Utilities Commission Act*;

“**Brookfield Power**” means Brookfield Power Services Inc. and its successors and assigns;

“**Catalyst**” means Catalyst Paper Corporation and its successors and assigns;

“**mill**” means the Catalyst Powell River Mill;

“**power facilities**” means the hydroelectric generation and transmission facilities on Powell River and at Lois Lake, British Columbia;

“**power purchase agreement**” means the power purchase agreement entered into between PREI and Catalyst, effective on February 1, 2016, and any amendments to that agreement;

“**PREI**” means Powell River Energy Inc. and its successors and assigns;

“**PRELP**” means Powell River Energy Limited Partnership and its successors and assigns;

“**qualifying affiliate**” means a qualifying customer that is an affiliate, within the meaning of the *Business Corporations Act*, of PREI;

“**qualifying customer**” means a person who is not a public utility and who purchases electricity either

(a) for the purpose of resale, or

(b) for the person’s own use, if the person is an industrial customer;

“**surplus power**” means the amount of electricity produced by the power facilities that is in excess of

(a) the electricity required by Catalyst for the operation of the mill, or

(b) if Catalyst forecasts a material reduction of load at the mill, the electricity required by Catalyst for the operation of the mill according to that forecast.

Exemptions

2 (1) On the conditions set out in subsection (2), PREI and Brookfield Power are exempt from Part 3, except for sections 25, 38, 42 and 43, of the Act in respect of the power facilities and from Part 3 and section 71 of the Act in respect of

(a) the power purchase agreement, and

(b) the sale of surplus power to

(i) a public utility,

(ii) PRELP,

(iii) a qualifying customer, or

(iv) a qualifying affiliate.

(2) The conditions referred to in subsection (1) are as follows:

- (a) PREI provides the electricity generated at the power facilities to Catalyst for the operation of the mill to the extent required for that operation, but if Catalyst forecasts a material reduction of load at the mill, PREI provides a lesser amount of electricity in accordance with that forecast;
 - (b) if PREI receives notice from Catalyst that Catalyst forecasts a material reduction of load at the mill, PREI, within 10 days of receiving that notice, provides a report to the minister that
 - (i) specifies the cause and expected duration of the reduction, and
 - (ii) sets out PREI's intended course of action, in response to the reduction, respecting its operation of the power facilities and the management of the electricity generated from the power facilities;
 - (c) PREI notifies the minister of an amendment to or termination of the power purchase agreement within 10 days of the amendment or termination.
- (3) Catalyst is exempt from section 71 of the Act in respect of the power purchase agreement.



April 24, 2020

Les MacLaren
Assistant Deputy Minister
BC Ministry of Energy, Mines and Petroleum
Resources
PO Box 9314, Stn Prov Govt
Victoria BC
V8W9N1

Dear Mr. MacLaren,

Re: Powell River Energy Inc. ("PREI") – Ministerial Order M039 – BC Reg 26-17 – Report on Catalyst Paper Corporation's Notice to PREI of Material Load Reduction

On April 15th, 2020, Powell River Energy Inc. ("**PREI**") received notice from Catalyst Paper Corporation ("**Catalyst**") of its projected Material Reduction in Load (the "**Catalyst Notice**"). Catalyst sent a copy of that notice to your attention at the same time.

Section 2(b) of the *PREI Exemption Regulation* requires PREI to report this Catalyst Notice to the Minister and provide the following information.

- (a) the cause and expected duration of the reduction, and
- (b) PREI's intended course of action, in response to the reduction, respecting its operation of the power facilities and the management of the electricity generated from the power facilities.

Based on the available information, PREI reports as follows.

Cause and Duration of the Expected Reduction

The Catalyst Notice (attached to this letter) projects a material reduction until 31 January 2021, at which point the Power Purchase Agreement between PREI and Catalyst dated January 31, 2016 (the "**PPA**"), will terminate. Catalyst projects the following Net Seasonal loads for the site:

- (a) Season 3 (ending October 31, 2020): 0MWh
- (b) Season 4 (ending January 31, 2021): 840 MWh



Catalyst states that these estimates are based on projections of gross site load, thermal generation and planned and unplanned generation downtime.

PREI's Intended Course of Action

In accordance with section 2.7(c) of the PPA, PREI intends to request further information from Catalyst to assess the reasons for the reduction and how Catalyst arrived at its projected use numbers.

Section 2.7 (d) of PPA contemplates a solution to a reduction in demand, which is the use of PREI energy that is surplus to the load at Catalyst's Powell River facility at other Catalyst facilities in British Columbia, namely Port Alberni and Crofton.

PREI believes that this solution already contemplated in the PPA is the best course of action and would like to discuss with you the approvals necessary to effect that solution.

Based on our recent discussions with Catalyst, we believe they also favour this approach. Catalyst would benefit by continuing to procure energy under the PREI PPA to meet its contractual obligation, and could supply electricity to its other mills, at a discounted price versus the BC Hydro's industrial rate, to help maintain the viability of those mills and the local economies that they support.

For PREI, the PPA is critical to the operation of its generating facilities, which support the employment of more than 10 people in the Powell River region. As well, maintaining the economic benefit under the PPA will positively inform decisions that PREI must make in respect of significant future investments in those facilities. We recognize that PREI's infrastructure is a strategic component to the future well-being of the Powell River community and we are working towards a long-term solution.

If you require any further information at this time, please let me know.

Regards,

Simon Laroche  Digitally signed by Simon Laroche
Date: 2020.04.24 14:53:00 -04'00'

Simon Laroche
Vice President, Trading and Marketing
Evolugen

cc.

Carlo Dal Monte, Vice President – Energy & Strategic Development and
Stew Gibson, VP Operations – Catalyst Corporation

MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES
BRIEFING NOTE FOR DECISION

PREPARED FOR: Honourable Bruce Ralston, Minister of Energy, Mines and Petroleum Resources

ISSUE: Regulatory amendments to the British Columbia Low Carbon Fuel Standard to implement CleanBC policy and reduce the volumetric exemption for small suppliers

BACKGROUND:

Carbon Intensity Reduction Targets

The coronavirus outbreak is having a growing impact on the global economy. The energy suppliers servicing British Columbia (BC) have indicated that they have been significantly affected at unprecedented levels.

Compliance data and forecasts demonstrate that fossil fuel suppliers are struggling to comply with the *Greenhouse Gas Reductions (Renewable and Low Carbon Fuel Requirements) Act* (Act). COVID-19 has exacerbated this issue at the same time the Ministry intends to establish new annual carbon intensity targets to satisfy the Province's CleanBC commitment to increase the stringency of carbon intensity reductions for transportation fuels from 10% by 2020 to 20% in 2030.

The targets can be set in the current Regulation, but if they are too rigorous and many suppliers face large penalties as a result, s.14

s.14

s.14 The decline in crude oil price and COVID-19 both intensify this issue with concerns of demand destruction, potential supply disruptions in renewable fuel logistics, and shortages in low-carbon feedstocks, which will likely lead to shortages of the low carbon fuel that suppliers needed for compliance. s.12; s.13

s.12; s.13

Another consequence of the carbon intensity compliance gap is the impact it can have on consumer fuel prices. The British Columbia Utilities Commission inquiry into fuel pricing identified the Low Carbon Fuel Standard (LCFS) cost impact on gasoline prices to be three and a half cents per litre in 2018; s.12; s.13

s.12; s.13

Under normal circumstances, easing targets could send a signal to industry that would have a negative impact on planning and investment. However, COVID-19 has adversely impacted the

industry and Ministry officials recommend that support be provided through this uncertain and challenging time. s.12; s.13
s.12; s.13

Volumetric Exemption

The BC-LCFS allows fuel suppliers to claim an exemption if they supply less than 75 million litres of fuel in a given compliance period. From 2017 to 2018, ten fuel suppliers claimed exemption with the total volume of exempt fuel increasing by 10% from 156 to 171 million litres. The 2019 compliance data shows a significant increase in the volume of fuel exempted from the program, with nearly 300 million litres exempted (see Appendix A). This is an increase of 75% over the 2018 exempted fuel volume.

s.12; s.13

Many fuel suppliers and the Canadian Fuels Association have expressed concern regarding the relatively high exemption threshold and the unfair situation it creates. The number of fuel suppliers claiming exemption and the quantity of exempt fuel imported is increasing, s.12; s.13
s.12; s.13
s.12; s.13

If the exemption continues, increasing quantities of exempt fuel will enter the Province, reducing the effectiveness of the BC-LCFS and creating opportunities for unfair competition between some fuel suppliers.

DISCUSSION:

Carbon Intensity Reduction Targets

Fuel suppliers have been slow to respond to the increasingly stringent requirements of the BC-LCFS. Two fuel suppliers failed to comply with the 2019 low carbon fuel requirements, and all major fuel suppliers have used credits generated in earlier compliance periods to comply with the increasingly stringent requirements since 2017. s.12; s.13

s.12; s.13

s.12; s.13

California experienced the same issue and in 2018, when they set their 2030 target to require a 20 percent reduction, they implemented a “smoothed” target schedule with a constant annual change in the reduction targets. Fuel suppliers and other stakeholders have indicated to the Ministry that a constant annual change sends a more effective signal for change and investment than a variable annual change.

Reducing the carbon intensity target for 2020 would provide necessary economic relief to the fuel suppliers and consumers while they recover from the negative impacts of COVID-19. However, too much concession or backloaded stringencies would send a negative investment signal when the industry needs to prepare to comply with a 20% reduction in carbon intensity in 2030.

Volumetric Exemption

The BC-LCFS exemption threshold is considerably higher than it is in other jurisdictions with renewable fuel requirements or low carbon fuel policies. The existing federal renewable fuel requirements have an exemption threshold of 400,000 litres, and the same threshold level is being proposed for the federal Clean Fuel Standard. Quebec's renewable fuel requirements have an exemption threshold of just 200 litres. California's low carbon fuel standard policy does not allow exemption whereas Oregon's policy allows suppliers to claim exemption if they import less than 500,000 gallons of finished fuel (1.8 million litres) (See Appendix A, Table 2).

On July 5, 2019, the Ministry released a discussion paper to solicit comments on potential reductions in the small supplier exemption threshold. All majors responded with recommendations to significantly reduce the threshold, but no exempt suppliers responded.

All known exempt suppliers were then contacted directly in order to understand the impact of reducing the exemption limit. It is expected that these suppliers will object to the additional requirements and the associated costs if the threshold is reduced, as they will lose their price advantage over other fuel suppliers. However, this reduction is necessary to eliminate the current practice of circumventing the BC-LCFS, and to ensure a fair market for fuels supplied in BC.

Reducing or eliminating the exemption for the 2020 compliance year would immediately address the leakage and unfair competitive advantage, however, it would impose an additional regulatory burden on exempt suppliers, especially those that are small businesses, in a time of economic uncertainty. Providing a gradual reduction in the exemption threshold would progressively eliminate the unfair competitive position while giving exempt suppliers adequate time to adjust their business practices and strengthen the integrity of the BC-LCFS.

OPTIONS:

Carbon Intensity Reduction Targets (these options are illustrated in Appendix B).

Option 1 (Recommended): Set the 2020 target to be the same as 2019 (8.0% carbon intensity reduction), and then increase the reductions at a constant rate of 1.2% per year to reach 20% in 2030

Pros:

- Implements the CleanBC target of a 20% reduction by 2030
- Provides timely COVID-19 relief measures in a time of economic uncertainty. The fuel supply industry would avoid roughly \$174 million in compliance costs that would be passed on to consumers at about 1.9 cents/litre

- s.14

- Maintains the signal needed to encourage investment once the economy begins to recover
- Sends a strong signal to industry that government is committed to transforming the fuel market in BC
- Creates an increased demand for low carbon fuels in BC
- Mitigates potential price spikes by easing near term targets and providing a consistent, linear, reduction schedule

Cons:

- Province does not achieve the 10% reduction commitment by 2020

Option 2: 10% in 2020 with 1% constant annual decrease per year to reach 20% in 2030

Pros:

- Implements the CleanBC target of 20% reduction by 2030
- Maintains the signal needed to encourage investment
- Sends a strong signal to industry that government is committed to transforming the fuel market in BC
- Creates an increased demand for low carbon fuels in BC

Cons:

- Does not provide a COVID-19 relief measure in a time of economic uncertainty
- Without immediate easing of the targets (COVID-19 relief), suppliers will likely experience significant economic consequences. This situation may lead to compounding financial stresses that could result in businesses significantly cutting costs and postponing current low carbon initiatives and any new investments
- Consumers may see an increase in fuel costs of about 1.9 cents/litre
- s.14
- Increased possibility of price spikes due to high compliance penalties

Option 3: 10% in 2020 with annual decreases starting at .5% and increase by .25% every two years to reach 20% in 2030

Pros:

- Implements the CleanBC target of 20% reduction by 2030
- s.14

Cons:

- Does not provide a COVID-19 relief measure in a time of economic uncertainty
- Without immediate easing of the targets (COVID-19 relief), suppliers will likely experience significant economic consequences. This situation may lead to compounding financial stresses that could result in businesses significantly cutting costs and postponing current low carbon initiatives and any new investments

- Consumers may see an increase in fuel costs of about 1.9 cents/litre
- Increased possibility of price spikes due to rapid changes in the stringency under the proposed carbon intensity reduction schedule
- Could lead to supplier inaction as was seen in the early years of the LCFS, which would result in compliance issues and possible price spikes every two years when the carbon intensity stringency is increased
- Provides a weak signal that would not encourage investment by the low carbon fuel industry

Option 4: 10% 2020-2022, then 1.25% constant annual decrease starting 2023 to reach 20% in 2030

Pros:

- Implements the CleanBC target of 20% reduction by 2030
- s.14

Cons:

- Does not provide a COVID-19 relief measure in a time of economic uncertainty
- Without immediate easing of the targets (COVID-19 relief), suppliers will likely experience significant economic consequences. This situation may lead to compounding financial stresses that could result in businesses significantly cutting costs and postponing current low carbon initiatives and any new investments
- Consumers may see an increase in fuel costs of about 1.9 cents/litre
- Will likely lead to supplier inaction in the early years resulting in compliance issues and increased possibility of price spikes in later years
- Provides a weak early signal that would not encourage investment by the low carbon fuel industry

Option 5: From 8% carbon intensity reduction in 2019, decrease by 1.09% annually to reach 20% in 2030

Pros:

- Implements the CleanBC target of 20% reduction by 2030
- Maintains the signal needed to encourage investment
- Sends a signal to industry that government is committed to transforming the fuel market in BC
- Provides some COVID-19 relief measures in a time of economic uncertainty. The fuel supply industry would avoid roughly \$79 million in compliance costs that would be passed on to consumers at about 0.9 cents/litre
- Creates an increased demand for low carbon fuels in BC

Cons:

- Province does not achieve the 10% reduction commitment by 2020
- Consumers may see an increase in fuel costs of 1 cent/litre
- s.14

- Increased possibility of price spikes due to high compliance penalties

Volumetric Exemption

Option 1 (Recommended): Reduce the exemption threshold to 25 million litres in 2021, and 200,000 litres in 2022 and thereafter.

Pros:

- Strengthens the integrity of the BC-LCFS
- Aligns exemption from the BC-LCFS with other jurisdictions
- Provides exempt suppliers adequate time to adjust their business practices
- Avoids creating issues during the COVID-19 crisis, through a staged reduction in the exemption threshold
- Eliminates an uncompetitive situation within two years

Cons:

- Seven previously exempt suppliers will need to reduce their sales or comply with the Regulation in 2021
- Does not immediately eliminate an uncompetitive situation

Option 2: Reduce the exemption threshold to 50 million litres in 2021, 25 million litres in 2022, and 200,000 litres in 2023 and thereafter.

Pros:

- Strengthens the integrity of the BC-LCFS
- Aligns exemption from the BC-LCFS with other jurisdictions
- Provides exempt suppliers adequate time to adjust their business practices
- Avoids creating issues during the COVID-19 crisis, through gradual reduction in the exemption threshold
- Gradually eliminates an uncompetitive situation

Cons:

- Does not immediately eliminate an uncompetitive situation

Option 3: Reduce the exemption threshold to 200,000 litres beginning 2021.

Pros:

- Strengthens the integrity of the BC-LCFS by immediately eliminating an uncompetitive situation
- Aligns exemption from the BC-LCFS with other jurisdictions

Cons:

- Imposes an additional regulatory burden on exempt suppliers in a time of economic uncertainty
- Provides only six months' notice for previously exempt suppliers to adjust their business practices

Option 4: Status quo

Pros:

- Does not impose an additional regulatory burden on exempt suppliers in a time of economic uncertainty

Cons:

- Reduces the integrity and effectiveness of the Act
- Allows continuation of an unfair pricing situation

Appendix A: Exempt Fuel Suppliers 2017-2019

Appendix B: LCFS Reduction Targets

RECOMMENDATIONS:

Carbon Intensity Reduction Targets

Implement Option 1: Authorize Ministry staff to draft amendments to the Regulation to set the 2020 target to be the same as 2019 (8.0% reduction), and then increase the targets at a constant rate of 1.2% per year to reach 20% in 2030.

Volumetric Exemption

Implement Option 1: Authorize Ministry staff to draft amendments to the Regulation to reduce the exemption threshold to 25 million litres in 2021, and 200,000 litres in 2022 and thereafter.

Approved / Not Approved



Honourable Bruce Ralston, Minister
Energy, Mines and Petroleum Resources

May 29, 2020

Date

DRAFTED BY:

Jennifer Kroll, LCFB

APPROVED BY:

Michael Rensing, Dir LCFB ✓
Dan Green, ED EAB ✓
Les MacLaren, ADM EAED ✓
Dave Nikolejsin, DM ✓

APPENDIX A

Table 1. Exempt fuel suppliers, 2017 to 2019

Organization	2017	2018	2019
Actton Petroleum	20,245,390	24,926,205	34,597,653
AFD Petroleum Ltd.	33,189,704	29,001,921	28,563,234
BG Fuels	n/a	n/a	29,457,914
Canco Petroleum	n/a	n/a	26,939,880
Centex Petroleum (650273 Alberta Limited)	4,887,652	7,938,789	7,727,618
Chetwynd Petroleum Ltd.	19,386,428	17,950,211	20,958,450
G&B Fuels	39,260,082	45,595,262	43,359,984
Gas Plus Inc.	6,974,189	n/a	n/a
GP Fuels Inc.	n/a	6,626,705	6,359,913
Idemitsu Apollo Corp.	7,897,136	12,353,377	58,798,437
LASR North Holdings Ltd.	3,092,048	3,106,351	3,106,351 ¹
SFJ	14,700,183	15,121,711	14,548,312
United Farmers of Alberta	26,675,882	33,093,192	25,207,899
TOTAL	156,063,304	170,787,519	299,625,645²

Table 2. Exemption threshold in other jurisdictions

Jurisdiction	Policy	Exemption Threshold
California	Low carbon fuel standard	No exemption
Oregon	Low carbon fuel standard	1.8 million litres (500,000 gallons)
Canada	Clean Fuel Standard	400,000 litres
	Renewable fuel requirements	
Alberta	Renewable fuel requirements	400,000 litres
Saskatchewan	Renewable fuel requirements	No volume threshold
Manitoba	Renewable fuel requirements	No volume threshold
Ontario	Renewable fuel requirements	No volume threshold
Quebec	Renewable fuel requirements	200 litres

¹ LASR North Holdings has not submitted 2019 compliance data. However, its staff estimate they supplied a similar volume to the 2018 compliance period.

² Total exempt volume excludes 56,115,802 litres of fuel supplied by Tidewater Midstream that was exempted from the 2019 compliance period. Tidewater Midstream became a fuel supplier on November 1, 2019, after acquiring a refinery located in Prince George BC. Tidewater Midstream will not qualify for exemption effective the 2020 compliance period.

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Withheld pursuant to/removed as

s.12 ; s.13

MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES

BRIEFING NOTE FOR DECISION

PREPARED FOR: Honourable Bruce Ralston, Minister of Energy, Mines and Petroleum Resources

ISSUE: Zero-Emission Vehicles Act Regulation – Consultation Summary and Recommendations

BACKGROUND:

The Province passed the *Zero-Emission Vehicles (ZEV) Act* on May 30, 2019. While the *ZEV Act* provides the overarching framework for the ZEV requirements in the province, some of the more technical components are to be prescribed by regulation. The Ministry of Energy, Mines and Petroleum Resources (Ministry) is currently developing the ZEV Act Regulation which is anticipated to be in force in spring of 2020.

As part of the development of the ZEV Act Regulation, the Ministry has been engaging with technical stakeholders, including industry, local governments and environmental non-governmental organizations (ENGOS) since October 2019. A ZEV Act Regulation Intentions Paper (Intentions Paper - Appendix A), outlining major components of the proposed ZEV Act Regulation and inviting written feedback from technical stakeholders was posted on October 23, 2019 on the Ministry's website. In addition, a series of webinars were held to answer questions about the policy proposals outlined in the Intentions Paper. These included a November 5th overview webinar for all stakeholders, a November 19th manufacturer's session to discuss credit modelling/targets, and a November 26th credit modelling/targets webinar for all stakeholders.

DISCUSSION:

Analysis of Stakeholder Input

In response to the Intentions Paper, the Ministry received 40 individual submissions, including 12 from regulated parties and their associations, and over 150 emails (with almost identical content) from elected local government officials and members of the public as part of a coordinated campaign. Appendix B provides a summary of input received and the Ministry's comment on that input.

In general, the automotive industry is looking for more flexibility and a decrease to the regulation's ambitions. For example, industry suggested softening the ZEV requirements by not setting compliance targets until 2021/2022, delaying setting compliance targets for 2026 and beyond, and/or starting compliance targets much lower for 2020 and ramping up to 2025.

In contrast, local governments, members of the public and the ENGOS, in general, were looking for an increase to the regulation's ambitions by: increasing compliance/annual sales targets;

increasing the proportion of Class A ZEV credits required; increasing the weight threshold for the light-duty vehicle definition to regulate more vehicles; limiting the use of and phasing out purchase agreements; setting limits on banked credits; and, pursuing a ZEV mandate now for medium and heavy-duty vehicles.

There were three points of consensus across the stakeholders:

1. Commit to a formal, regular review process of the ZEV Act Regulation, to take into account market changes and adjust policy and programs as necessary.
2. Establish a dedicated fund for fees or penalties collected under the *ZEV Act* to flow back into ZEV programming.
3. Keep a consistent per-vehicle-credit formula throughout the regulated time period, i.e. 2020-2040, rather than establishing a different formula now for 2026.

Ministry Policy Recommendations

Appendix B includes a table that summarizes the feedback received on the Intentions Paper and provides the Ministry's corresponding analysis. The Ministry supports a number of the stakeholder suggestions, and proposes leaving some suggestions to address within future review processes. The following outlines the Ministry's recommendations with respect to the main issues raised by stakeholders.

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The Intentions Paper proposed using the California and Quebec credit formulas to 2025 where credits are based on the range and type of ZEV:

- For hydrogen fuel cell electric vehicles, battery electric vehicles and extended-range electric vehicles, each sale = $(\text{Range} \times 0.006214) + 0.5$ Class A credit, where the maximum credits one Class A vehicle could get would be 4; and
- For plug-in hybrid electric vehicles and shorter range extended-range electric vehicles, each sale = $(\text{Range} \times 0.006214) + 0.3$ Class B credit, where the maximum credits one Class B vehicle could get would be 1.1; and
- then switching to 1 ZEV sale = 1 credit from 2026 to 2040; irrespective of the range or type of ZEV.

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Stakeholders were not supportive of a credit formula switch in 2026. In general, industry favoured delaying the determination of targets for the post-2025 period, but if post-2025 targets were set, that the credit-per-vehicle formula not be adjusted at this time. They wanted the credit formula to favour longer range, cleaner vehicles.

Local governments and ENGOs were concerned that the proposed switch post-2025 created many banked credits that would weaken the supply of ZEVs to B.C. To address this concern, their requests ranged from maintaining the 2020-2025 formula through to 2040, having a 1-credit-per-vehicle formula starting from 2020 through to 2040, or devaluing/expiring credits.

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Automakers want to use the UDDS range to calculate credits-per-vehicle. Because it is a higher range, it gives them more credits per vehicle. Local governments and one ENGO requested using the 5-cycle test range because it is more reflective of real-world driving ranges.

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The Intentions Paper proposed compliance requirements aligned with California and Quebec to 2025, and then aligning with the CleanBC targets from 2025-2040 (i.e. to meet 10% ZEV sales by 2025, 30% by 2030, and 100% by 2040). Automakers, except Tesla, requested targets, beginning with model year 2022, and ending in model year 2025. Local governments and some ENGOs requested higher targets, starting at 10% sales in 2020 (five years ahead of the 2025 target), to better align with the current ZEV sales rates in B.C.

The original CleanBC targets were set in 2018, when B.C.'s ZEV sales rate was at approximately 4% of new light-duty vehicle sales. Since then the market has evolved rapidly and B.C.'s ZEV sales rate was 8.6% of new light-duty vehicle sales in 2019, the highest ZEV sales rate in North America. Approximately half of the regulated parties, representing approximately 40% of the light-duty vehicle sales in B.C., had ZEV sales rates of 5% or more in 2019 (see Appendix C), one year ahead of the equivalent 2020 compliance requirement proposed in the Intentions Paper.

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British Columbia is currently the only jurisdiction in the world with a legislated 100% ZEV sales target. The United Kingdom is consulting stakeholders on a 100% ZEV target by 2032. Under the UK proposal, plug-in hybrid electric vehicles would be ineligible as ZEVs. California is waiting on legal processes with the United States (U.S.) federal government prior to setting post-2025 targets. Quebec's 2020-2030 Transportation Electrification Strategy is expected to be released in fall 2020 (delayed from spring 2020 due to COVID-19). Quebec was expected to make its ZEV regulation more stringent, given the high level of industry over-compliance with their current regulations, although this is uncertain now considering COVID-19. Quebec stakeholders are asking for regulations that would require 100% ZEVs by 2030.

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The Intentions Paper proposed to limit Initiative Agreements to 5% of a supplier's annual ZEV credits required and to only two actions: the sale of used ZEVs new to B.C.; and the sale of medium/heavy-duty ZEVs not captured under the ZEV Regulation.

Automakers asked to increase the limits to 25%, and for increased flexibility to bring forward proposals for other actions. Some ENGOs supported increased flexibility in the actions. Local governments, and some ENGOs either supported the limits or requested stronger limits (e.g. regulating medium/heavy-duty vehicles rather than letting them earn credits, and only allowing initiative agreements in the first five years).

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Section 2.1 (Who is Being Regulated) of the Intentions Paper identified that the *ZEV Act* and Regulation would ensure that compliance is required by manufacturers representing 99% of the light-duty vehicle sales market, with 90% of the market having to also provide a certain percentage of Class A vehicles (i.e. battery electric vehicles (BEVs), hydrogen fuel cell vehicles (FCEVs) or extended-range electric vehicles (EREVs). To do this, the paper proposed defining the classes of suppliers based on the average annual sales volumes of the three previous consecutive years (e.g. model year (MY) 2017-2019 for MY 2020):

- Small – under 1,000 vehicles sold per year on average
- Medium – 1,000-7,999 vehicles sold per year on average
- Large – 8,000+ vehicles sold per year on average

All ENGOs and half of all industry stakeholders (including General Motors, Tesla, and the Canadian Vehicle Manufacturers Association which represents Ford, GM, and Fiat Chrysler) advocated for a reduction in volume thresholds. Jaguar Land Rover and BMW were interested in higher volume thresholds, and Mazda and Subaru advocated for volume thresholds based on global revenues rather than unit sales. Many local governments and the emails received through a coordinated email campaign expressed an interest in having higher Class A compliance ratios to achieve 100% Class A by 2040.

Section 2.8 (ZEV Credit from consumer sales) of the Intentions Paper sets the rules for credit formulas for each Class of ZEVs. The California and Quebec ZEV regulations allow for plug-in hybrid electric vehicles to get an additional 0.2 credits if they meet a minimum all-electric range for the US06 test (testing electric power at high speed and acceleration) – it is a measure of how “clean” the vehicles operate. The Intentions Paper did not originally propose including this credit adder. Industry recommended including this provision in the credit formulas.

Section 2.5 (ZEV Types) of the Intentions Paper defines HICE vehicles and NZEVs as types of ZEVs. Several ENGOs (David Suzuki Foundation, Pembina, Sustainable Transportation Action Research Team, and the Victoria Electric Vehicle Club) all expressed an interest in excluding HICE vehicles since they are not associated with any GHG benefits and emit nitrous oxide. Only one industry stakeholder (Hydra Energy) expressed interest in having HICE light-duty vehicles included.

Several ENGOs (David Suzuki Foundation, Pembina, Sustainable Transportation Action Research Team, and Clean Energy Canada) also expressed an interest in excluding NZEVs from the regulation (or phasing them out in 2026). They argued that since they are not a viable alternative to regular light-duty vehicles, if they earn credits, they are decreasing the number of viable ZEVs required to be supplied. Surrey also expressed interest in establishing limits on NZEV credits for medium and large suppliers.

Section 2.12 (Early issuance for ZEV credits from consumer sales) of the Intentions Paper proposed that an application for early issuance of credits in relation to consumer sales could only occur between December 1st and July 31st, and only for sales occurring in the period from (and including) January 2nd of the calendar year preceding the calendar year of the model year until July 31st of the calendar year after the calendar year of the model year (e.g. for model year 2021, for sales from January 2, 2020 until July 31, 2022).

Industry stakeholders expressed interest in being able to apply for credits at any time of the year and in having the credits be confirmed automatically/in real time. In addition, the Canadian Vehicle Manufacturers' Association (CVMA) specifically identified an interest in being able to have any vehicles sold after the compliance date of the model year remain eligible to earn credits, since some vehicles may take longer than forecast to be sold to a consumer.

Many local governments and the public letter-writing campaign requested various other measures to increase the stringency of the ZEV Regulation, including the following:

- Increase the minimum range of eligible ZEVs as proposed, to reflect the higher ranges of ZEVs being sold today.
- Increase the vehicle weight limit for light-duty vehicles to match Quebec's 4,500 kg as opposed to 3,856 kg, to capture more of the truck market.
- Exclude plug-in hybrid or extended range electric vehicles from getting credits to focus the requirements on true ZEVs.

Automakers are opposed to the requests. The minimum ranges align with California and Quebec, and ensure that all the ZEVs available on the market come to B.C. The 3,856 kg weight limit for light-duty vehicles does capture SUVs and some trucks (e.g. the Ford F150). The *ZEV Act* enables Government to set targets for other vehicle weight classes in the future. In many rural regions, PHEVs remain the most viable ZEV option on the market today.

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A handwritten signature in black ink, appearing to read 'Bruce Ralston', written over a horizontal line.

Honourable Bruce Ralston, Minister
Energy, Mines and Petroleum Resources

June 15, 2020

Date

Reference Document Attachments:

Appendix A: Intentions Paper
Appendix B: Stakeholder Input on Intentions Paper
Appendix C: Automaker % ZEV Sales in 2018 and 2019
Appendix D: Forecast ability of industry to comply
Appendix E: Updated Credit Requirements
Appendix F: Online Reporting Tool Status

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Appendix A: Intentions Paper

See *ZEV Act* Regulations Intentions Paper-1-final - updated 29Oct2019 attached.



B.C. Zero-Emission Vehicles Act: Regulations Intentions Paper

October 29, 2019

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1. Context

Government recently released its CleanBC plan as part of its commitment to stimulating sustainable growth and jobs using clean energy to power B.C.'s economy while driving down greenhouse gas (GHG) emissions. Transportation accounts for 39% of B.C.'s GHG emissions, or 25 million tonnes per year of carbon pollution. The CleanBC plan identified concrete actions to reduce GHG emissions across sectors including a plan to introduce a zero-emission vehicles (ZEV) standard. Budget 2019 has further supported the implementation of CleanBC with increased financial support to complementary demand-side ZEV programs.

The Province fulfilled a CleanBC commitment when it passed the *Zero-Emission Vehicles Act* (ZEV Act) on May 30, 2019. The ZEV Act requires automakers to meet ZEV sales targets reaching 10% of light-duty vehicle sales by 2025, 30% by 2030, and 100% by 2040. The legislation is intended to ensure a greater availability of ZEVs at more affordable prices in B.C., as well as provide a regulatory backstop to ensure the Province's GHG reduction targets are met. With the passage of the legislation, B.C. joined a growing number of jurisdictions with ZEV standards, including Quebec, California, and nine other U.S. states, and became the first jurisdiction in the world to legislate a 100% ZEV target.

2. Discussion

While the ZEV Act provides the overarching framework for the ZEV standard in British Columbia, some of the more technical components will be prescribed by its regulations. This paper outlines the Province's intentions with respect to the ZEV Act regulations, to seek input from stakeholders.

2.1 Who is being regulated?

Vehicle manufacturers, or suppliers, are being regulated. Section 2 of the ZEV Act identifies that a person is a supplier of a vehicle make if that person supplies motor vehicles of the vehicle make for consumer sale or lease in B.C.

Government intends for the ZEV Act and regulations to ensure that compliance is required by suppliers representing 99% of the light-duty vehicle sales market, with 90% of the market having to also provide a certain percentage of battery electric vehicles (BEVs), hydrogen fuel cell vehicles (FCEVs) or extended-range electric vehicles (EREVs). To do this, the ZEV Act provides for the ability to establish different classes of suppliers.

It is proposed that the ZEV regulations:

- *Define the following classes of suppliers based on the average annual sales volumes of the 3 previous consecutive years (e.g. MY 2017-2019 for MY 2020):*
 - *Small – under 1,000 vehicles sold per year on average*
 - *Medium – 1,000-7,999 vehicles sold per year on average*
 - *Large – 8,000+ vehicles sold per year on average*
- *Identify the “small” class of suppliers as the class of suppliers for which certain sections of the ZEV Act (as identified in the ZEV Act) do not apply, unless they opt-in.*

2.2 What kind of vehicles are being regulated?

Together, the ZEV Act and regulation will identify to which motor vehicles the ZEV requirements apply. In CleanBC, the Province identified that the ZEV standard would be applied to the sale or lease of new light-duty vehicles, with the possibility of placing ZEV requirements on additional vehicle classes in the future. The ZEV Act identifies that the Part 2 targets only apply to light-duty motor vehicles. However, it leaves to regulation any additional definition of the vehicles to which the ZEV Act applies.

One key issue to be set by regulation is the definition of light-duty. In Canada and the U.S. light-duty vehicles have a standard meaning - gross vehicle weight ratings (GVWR) equal to or below 3,856 kg. This is mirrored in California's ZEV mandate. Quebec's ZEV legislation includes medium-duty passenger vehicles by placing the weight limit at 4,500 kg.

Other vehicle classes are not being regulated at this time, however, the sale or lease of medium and heavy-duty vehicles is proposed to be eligible for credits under initiative agreements.

It is proposed that the ZEV regulations define the following vehicle class:

- *Light-duty motor vehicle – to mean vehicles and trucks up to and including GVWR 3,856kg.*

In addition, it is proposed that the ZEV regulations ensure the ZEV Act:

- *Include neighbourhood zero emission vehicles;*
- *Exclude motorcycles, golf carts, implements of agriculture, industrial utility vehicles, all-terrain vehicles, off-road side-by-side vehicles, and snowmobiles.*

2.3 What is the compliance and reporting date?

Compliance under the ZEV Act will be assessed each year on the same date. Under Section 17 of the ZEV Act, a model year report is due within a prescribed number of days after the compliance date. California has a May 1st deadline for suppliers to submit their main report, and September 1st to submit any supplemental report. Quebec uses September 1st in the calendar year following the model year of a vehicle make for its compliance date and model year report due date.

It is proposed that the ZEV regulation:

- *Set the compliance date for September 30th in the calendar year following the model year of a vehicle make (e.g. the compliance date for model year 2020 vehicle sales would be September 30, 2021).*
- *Set that the model year reports are due within twenty days after the compliance date for a model year (e.g. the reporting date for model year 2020 vehicle sales would be October 20, 2021).*

2.4 How will model year be defined?

Compliance under the ZEV Act is based on model year. The federal *On-Road Vehicle and Engine Emission Regulation* provides a standard definition for model year in Canada. Section 1 of the ZEV Act provides for the definition of model year to be prescribed by regulation.

It is proposed that ZEV regulation:

- *Define model year using the federal On-Road Vehicle and Engine Emission Regulation definition.*

2.5 ZEV Types

The legislation is designed to ensure B.C. has the cleanest vehicle options so that the Province can meet both the CleanBC emissions and ZEV targets. The purpose of establishing ZEV types is to be able to assign different rules (e.g. regarding credits earned) to each type, as well as to be able to assign each type to a ZEV class. ZEV classes are used so that targets can be set for different ZEV classes.

Section 1 of the ZEV Act defines ZEVs as a motor vehicle that is propelled by electricity or hydrogen from an external source and emits no GHGs at least some of the time. The regulations propose to further categorize types of ZEVs.

It is proposed that the ZEV regulations define the following ZEV types:

Type	Definition	Variation	Range	Applicable Years
Battery Electric Vehicle (BEV)	1. ZEV that is propelled solely by an electric motor powered solely by a battery.	Standard	80.47km minimum	2020-2040
		Short	Less than 80.47km	2020-2040
Hydrogen Fuel Cell Electric Vehicle (FCEV)	1. ZEV that is propelled solely by an electric motor powered solely by a hydrogen fuel cell.	Standard	80.47km minimum	2020-2040
		Short	Less than 80.47km	2020-2040
Extended range electric vehicle (EREV)	1. Capable of plugging into an electricity source. 2. Its drive wheels are always driven solely by electric motor(s), with the on-board internal combustion engine used solely as a generator to charge the batteries.	Standard	121km minimum	2020-2025
			80.47km minimum	2026-2040
		Medium	16km to 121km	2020-2025
		Short	Less than 16km	2020-2025
			Less than 80.47km	2026-2040
Plug-in Hybrid Electric Vehicle (PHEV)	1. Capable of plugging into an electricity source. 2. Can be driven solely using electricity and can be propelled by an electric motor powered by a battery.	Standard	16km minimum	2020-2025
			80.47km minimum	2026-2040
		Short	Less than 16km	2020-2025

			Less than 80.47km	2026-2040
Hydrogen Internal Combustion Engine Vehicles (HICE)	1. Propelled entirely by an internal combustion engine that burns hydrogen.	Standard	16km minimum	2020-2025
			80.47km minimum	2026-2040
		Short	Less than 16km	2020-2025
			Less than 80.47km	2026-2040
Neighbourhood Zero Emission Vehicle (NZEV)	1. As per the <i>Motor Vehicle Act</i> Regulations ¹ : a vehicle that travels on 4 wheels and is powered by an electric motor that is designed to allow the vehicle to attain a speed of 32km/hr but not more than 40 km/hr in a distance of 1.6km on a paved level surface.	n/a	n/a	2020-2040

2.6 ZEV Classes

The purpose of establishing ZEV classes within the ZEV Act and the regulations is to be able to distinguish ZEV unit requirements for different ZEV classes.

It is proposed that the ZEV regulations:

- *Define the following ZEV classes:*
 - *“ZEV Class A” to consist of the following types of ZEVs:*
 - *BEV*
 - *FCEV*
 - *EREV*
 - *“ZEV Class B” to consist of the following types of ZEVs:*
 - *PHEV*
 - *HICE*
 - *EREV – medium*
 - *NZEV*
 - *“ZEV Class C”:*
 - *PHEV-short*
 - *EREV-short*
 - *BEV-short*
 - *HICE-short*
 - *FCEV-short*

¹ http://www.bclaws.ca/civix/document/id/complete/statreg/26_58_01#division_d2e855

2.7 Supply of ZEVs and Compliance Ratios

In order to meet the ZEV sales targets that it identifies, the ZEV Act establishes a ZEV unit system in which suppliers must earn ZEV credits (positive ZEV units) for a model year equal or greater than the ZEV units that will be deducted (as established by the formula in section 11) from their ZEV unit 'account' each year. To be in compliance, the balance of ZEV units in a regulated party's 'account' at the end of every compliance year must be zero or positive, although one grace year is allowed as long as the supplier can make up both ZEV units from the previous year and the current year.

As is the case in California and Quebec, large volume suppliers will also need to meet battery-electric, hydrogen fuel cell-electric or extended range electric vehicle credit levels (i.e. ZEV Class A credit requirements) as part of meeting their ZEV compliance targets. The two requirements are needed because the ZEV Act sets the framework to require certain classes of suppliers to have to accumulate certain types of ZEV units, all set by regulation.

While the ZEV minimum sales targets themselves are identified in the ZEV Act (10% in 2025, 30% in 2030, 100% in 2040), there are several ways that credit requirements could be set to meet those targets. Given that the ZEV Act identifies ZEV sales targets to 2040, and that industry has expressed an interest in having as much advance notice of credit requirements as possible, a schedule of annual compliance ratios is proposed below. California and Quebec have set credit requirements only to 2025.

How many years' notice on compliance ratios is recommended to allow industry to effectively plan for their compliance with the ZEV Act in B.C.? What are the considerations with setting annual targets to 2040, versus some earlier interim period?

The credit requirement framework identified below follows California's model until 2025. In 2026, it proposes that the formula for credit values-per-ZEV switch to a one-credit-per-vehicle formula. This switch is proposed in order to simplify the system by making the credit requirements align with legislated vehicle targets. It is also based on the assumption that the broader ZEV market will have evolved sufficiently to longer-range ZEVs, that there will no longer be a need for the regulation to encourage supply of the longest-range ZEVs. It should be noted that regardless of the credit system used, the overall outcome being pursued is the same, i.e. an increasing % ZEV sales requirement to ensure that the ZEV sales targets in the ZEV Act are met. The intention would be to allow any credit balance in 2025 to be carried forward to 2026 and beyond.

One option under consideration for the compliance ratios, is that the ZEV regulations:

- Identify the large supplier as the class of supplier that has to meet the minimum ZEV Class A % requirement
- Identify the compliance ratios as follows:

Model Year	Total ZEV Compliance Ratio (CR in s.11(1) of ZEV Act)	Minimum ZEV Class A Compliance Ratio (large suppliers only) (CR in s.11(2) of ZEV Act)	Estimated Forecast ZEV Sales % Related to Compliance Ratios
2020	9.5%	6%	5%
2021	12.0%	8%	6%
2022	14.5%	10%	7%
2023	17.0%	12%	8%
2024	19.5%	14%	9%
2025	22.0%	16%	10%
2026	14%	10%	14%
2027	18%	13%	18%
2028	22%	16%	22%
2029	26%	19%	26%
2030	30%	21%	30%
2031	37%	26%	37%
2032	44%	31%	44%
2033	51%	36%	51%
2034	58%	41%	58%
2035	65%	46%	65%
2036	72%	51%	72%
2037	79%	56%	79%
2038	86%	61%	86%
2039	93%	66%	93%
2040	100%	70%	100%

2.8 ZEV Credits from consumer sales

Consumer sales of ZEVs is one of the ways the ZEV Act enables suppliers to accumulate ZEV credits towards their targets. The ZEV Act provides authority for regulations to be made regarding the accumulation of credits from consumer sales. The legislation allows for regulations to specify how many ZEV credits will be received for each ZEV sale.

Both California and Quebec use a standard equation for calculating ZEV credits. Their ZEV targets, however, only go to 2025.

One option under consideration for the credit formulas, is that the ZEV regulations:

- *For model years 2020-2025, set the equation to determine ZEV credits per sale as follows:*
 - *For BEV, FCEV and EREV:*
 - *Each consumer sale is equal to $(R \times 0.006214) + 0.50$ of ZEV Class A credits*
 - *ZEV Class A credits earned per ZEV is capped at 4 ZEV credits*
 - *For PHEV, HICE, EREV-medium:*
 - *each consumer sale equal to $(R \times 0.006214) + 0.30$ of ZEV Class B credits*
 - *ZEV credits earned per ZEV is capped at 1.1 ZEV credits*
 - *Where R = the electric range determined by the US Environmental Protection Agency Light-duty Urban Dynamometer Driving Schedule (UDDS) method provided for in U.S. 40 CFR Appendix I to Part 86²*
- *For the 2026-2040 timeframe, set the following rules:*
 - *For BEV, FCEV, EREV with a minimum range of 80.47km, each consumer sale is equal to 1 ZEV Class A credit*
 - *For PHEV, HICE with a minimum range of 80.47km, each consumer sale is equal to 1 ZEV Class B credit*
- *Identify that each consumer sale of an NZEV is equal to 0.15 ZEV Class B credits*
- *Identify that where the result of a calculation above contains more than 2 decimals, it is rounded to the nearest second decimal*

2.9 ZEV Credits from Initiative Agreements

Initiative agreements are another compliance pathway where the ZEV Act enables suppliers to accumulate ZEV credits towards their targets. The ZEV Act gives the director, with the approval of the Minister, authority to enter into an agreement to issue credits for actions taken by suppliers to reduce GHG emissions from motor vehicles and increase consumer sales or use of ZEVs in B.C.

It is proposed that the ZEV regulations:

- *Specify that the director may only enter into initiative agreements to issue credits for the following actions:*
 - *Sale or lease of the following types of used ZEVs being sold or leased in B.C. for the first time (i.e. new to B.C.)*
 - *BEV*
 - *FCEV*
 - *EREV*
 - *EREV-medium*
 - *PHEV*

² <https://www.govinfo.gov/app/details/CFR-2016-title40-vol21/CFR-2016-title40-vol21-part86-appl>

- *Sale of medium duty passenger ZEVs or heavy duty ZEVs, to be defined in the regulations for the purposes of initiative agreements as:*
 - *Medium-duty passenger vehicle – to mean greater than GVWR 3,856kg but less than 4,536kg, and designed to transport people and not equipped with open cargo.*
 - *Heavy-duty vehicle - Class 2B – to mean a class of heavy-duty vehicles that has a GVWR of more than 3,856 kg but not more than 4,536 kg.*
 - *Heavy-duty vehicle - Class 3 – to mean a class heavy-duty vehicle that has a GVWR of more than 4,536 kg but not more than 6,350 kg.*
 - *Heavy-duty vehicle - Class 4 – to mean a class of heavy-duty vehicle that has a GVWR of more than 6,350 kg but not more than 7,257 kg.*
 - *Heavy-duty vehicle - Class 5– to mean a class of heavy-duty vehicle that has a GVWR of more than 7,257 kg but not more than 8,845 kg.*
 - *Heavy-duty vehicle - Class 6– to mean a class of heavy-duty vehicle that has a GVWR of more than 8,845 kg but not more than 11,793 kg.*
 - *Heavy-duty vehicle - Class 7– to mean a class of heavy-duty vehicle that has a GVWR of more than 11,793 kg but not more than 14,969 kg.*
 - *Heavy-duty vehicle - Class 8– to mean a class of heavy-duty vehicle that has a GVWR of more than 14,969 kg.*
- *Identify that the cap on initiative agreement credits that can be earned in a compliance period is 5% of a manufacturer's total ZEV units' requirement for the previous model year for each manufacturer*

2.10 ZEV Credits from Purchase Agreements

The ZEV Act provides authority for the creation of regulations respecting purchase agreements.

It is proposed that the ZEV regulations:

- *Specify that the director must consider whether the supplier has no other options for ensuring that their balance at the end of a compliance date does not contain less than zero ZEV units.*
- *Set the purchase agreement price per ZEV unit to the automatic administrative penalty rate + \$500 CAD per ZEV unit.*

2.11 Transfers of ZEV Credits

The ZEV Act provides authority for the creation of regulations respecting transfer of credits between suppliers. Given the authority already provided in the Act, no regulation is contemplated at this time.

2.12 Early issuance for ZEV credits from consumer sales

The ZEV Act provides authority for regulations to be made to prescribe how and when an application for issuance of ZEV credits for consumer sales can be made (i.e. early issuance).

It is proposed that the ZEV regulation:

- *Specify that an application for early issuance of credits in relation to consumer sales can only occur between December 1 and July 31, and only for the period from (and including) January 2 of the calendar year preceding the calendar year of the model year until July 31 of the calendar year after the calendar year of the model year (e.g. for model year 2021, from January 2 of 2020 until July 31, 2022).*

2.13 Monitoring compliance – model year and supplementary reporting

The ZEV Act provides authority for the creation of regulations respecting the timing, form, content and manner of submission of model year and supplementary reports.

It is proposed that the ZEV regulation:

- *Set 20 calendar days after the compliance date (i.e. October 20) as the number of days after the compliance date for a model year that the model year report must be submitted.*
- *Identify that a supplementary report should be provided as an updated model year report and in the form and manner that the director has identified for the model year report.*

2.14 Non-compliance – Automatic and discretionary administrative penalties

The ZEV Act provides authority for the creation of regulations respecting discretionary administrative penalties.

It is proposed that the ZEV regulation:

- *Set the automatic administrative penalty rate at \$5,000 CAD per ZEV unit for all model years, the light-duty vehicle class and all ZEV classes.*
- *Identify discretionary administrative penalties will apply if a supplier fails to: provide a model year or supplementary report; provide written notice as required; retain records as required; provide complete and accurate reports; provide additional information; and/or pay an administrative penalty when it is due.*

3. Providing Input

The Ministry of Energy, Mines and Petroleum Resources requests your written input on this ZEV Act Regulations Intentions Paper by no later than December 3, 2019 to

CEVEnquiries@gov.bc.ca

Appendix B: Stakeholder Input on ZEV Act Regulation Intentions Paper

Regulated Parties & their Associations	Local Government	Other
Tesla	Metro Vancouver	New Car Dealers Association
Toyota	Vancouver (City)	Clean Energy Canada (CEC)
General Motors (GM)	Langley	David Suzuki Foundation & Pembina & START
Honda	Capital Regional District	BC Sustainable Energy Association
Mazda	North Vancouver (City)	Victoria Electric Vehicle Club
Subaru	Surrey	HTEC
Nissan	Saanich	Plug-in Richmond
BMW	Kelowna	Electric Mobility Canada
Jaguar Land Rover	Port Moody	ChargePoint
Mitsubishi	Abbotsford	Natural Resources Canada
Global Automakers of Canada (GAC) [represents 15 automakers]	North Vancouver (District)	Hydra Energy
Canadian Vehicle Manufacturers Association (CVMA) [represents GM, Fiat Chrysler, Ford]	Fraser Valley Regional District	Zen Energy
	City of New Westminster	
	Richmond	
	Victoria	
	West Vancouver	
And approximately 150 miscellaneous emails from members of the public		

Topic	Summary of Stakeholder input	Ministry analysis
2.1 Who is being regulated?	<p>Volume Thresholds: Four ENGOS/ZEV company stakeholders (Electric Mobility Canada, Victoria Electric Vehicle Club, Clean Energy Canada, ChargePoint) were advocating for thresholds for small, medium and large to be reduced from what was in the Intentions Paper, in order to encourage greater sale of full ZEVs (BEVs, FCEVs). Three industry stakeholders (Tesla, GM, CVMA) were advocating for the threshold for large be reduced (Tesla identified 3,500; GM, CVMA identified 5,000). Two industry stakeholders (JLR, BMW) wanted the thresholds raised (BMW so they are medium; JLR small 4,499 or less). Two industry stakeholders (JLR, BMW) wanted the small and medium thresholds based on automotive-related global revenue of 40 billion U.S. dollars or less.</p> <p>Rules for ‘small’ suppliers: Three local governments (Vancouver, Port Moody, Surrey) suggested that small manufacturers should not be fully exempt from compliance obligations under the regulation.</p>	s.13
2.2 What kind of vehicles are being regulated?	<p>Gross Vehicle Weight Rating (GVWR): Thirteen local government stakeholders, Tesla and Clean Energy Canada expressed interest in ensuring that all long-range pick-ups and all passenger vehicles are included in the regulations, with many suggesting this should be done by regulating all vehicles below 4,500 kg/4536 kg GVWR. The CVMA expressed agreement with the proposed weight threshold of 3,856 kg.</p> <p>Utility & All-Terrain vehicles (ATV): One industry stakeholder (Hydra Energy) requested the inclusion of these vehicles, e.g. for retrofit of logging trucks, as well as mining vehicles.</p>	
2.3 Compliance & reporting date	<p>Credit for consumer sales: The CVMA expressed interest in having any vehicles sold after the compliance date of the model year (MY) remain eligible to earn credits</p>	
2.4 Model year definition	Nothing substantive	

Topic	Summary of Stakeholder input	Ministry analysis
2.5 ZEV Types	<p>Exclusion of certain ZEV types: Four ENGOs supported the removal of HICE and one industry stakeholder supported its inclusion. Four ENGOs supported the removal of NZEVs. One ENGO and one local government suggested ensuring that any hydrogen vehicles must be zero-emission (not fueled by SRM Hydrogen). Emails from the public and 4 local government indicated an interest in only having 100% electric ZEVs (not EREV or PHEVs) be included in the regulation.</p> <p>Range adjustments: Three ENGOs argued for decreasing the 80.47km range for PHEVs and EREVs to help with affordability; and 9 local governments and one ENGO advocated for increasing the ranges for these ZEVs (especially in the 2020-2025 period) to more closely align with current conditions/more suitable range for daily driving.</p> <p>One industry stakeholder wanted the EREV definition to align with California's, i.e. adding specificity that the function of the APU cannot be meaningfully changed "aftermarket." Two industry stakeholders (GM, CVMA) did not want ZEV types and technical requirements set past 2025. One local government called for the creation of an evaluation mechanism to determine the appropriateness of PHEV ranges greater than 80.47 km post-2030.</p>	s.13
2.6 ZEV Classes	<p>One industry stakeholder (CVMA) indicated support for proposed ZEV classes. Four ENGOs commented suggested rolling PHEVs and EREVs into one category. Three ENGOs suggested long range PHEVs be included in 'Class A', or at least higher than NZEV and HICE. Five local governments expressed interest in having Class A credits only for true zero emission vehicles (not EREVs)</p>	

Topic	Summary of Stakeholder input	Ministry analysis
2.7 Supply of ZEVs and Compliance Ratios	<p>Timing of regulation in force: Eight industry stakeholders (including GAC and CVMA) expressed interest in delay of application (and/or phase in) of compliance ratios (and Class A requirements). This is contrasted with eleven local government stakeholders expressing support for higher annual ZEV sales targets in the 2020-2030 period (in recognition of already reaching the 2025 goal). In addition, one industry and one ENGO stakeholder expressed explicit support for compliance starting in 2020.</p> <p>Post-2025 - compliance ratios: Nine industry stakeholders supported either no targets post-2025 or separate coming into force dates (including one for post 2025), as well as, suggesting a formal review to set those targets and that those targets be consistent with forthcoming California regulations. Surrey also expressed support for a phased in approach with review. Ten local governments and two ENGOs expressed support for a post-2025 credit system that incentivizes longer range ZEVs and/or requires higher proportion of Class A vehicles (e.g. with phase out of Class B prior to 2040, e.g. 2035). One industry stakeholder expressed interest in phase out of Class B by 2025. One local government and one ENGO stakeholder expressed explicit support for targets to 2040, and one ENGO suggested moving the 100% ZEVA goal to 2035. Three ENGOs expressed support for the 1-to-1 credit formula switch, while Surrey supported continuing with the compliance ration system.</p> <p>Timing of 1-to-1; Credit devaluing/expiration: Nine local government, one ENGO and one industry stakeholder suggested a devaluing or retiring of credits (after two years) or strengthening of compliance ratios for post-2025/2030 (relevant if the 1-to-1 system is kept). The emails from the public and seven local governments also suggested moving to 1-to-1 from 2020 on to avoid surplus of credits.</p>	s.13

Topic	Summary of Stakeholder input	Ministry analysis
	<p>MY sales OR 'look back' 3-yr rolling avg: Six industry stakeholders expressed interest in compliance obligation based on “look-back” three-year rolling average. One industry stakeholder identified that it should be based on actual sales for a model year.</p> <p>Grace year: There was mixed support for the ‘grace year’ with one industry stakeholder asking for it to be increased to three years, and one industry stakeholder disagreeing with it completely, and one local government stakeholder asking that it only be a one-time option.</p> <p>Alternate credit requirement calculation: CVMA suggested an allowance for an alternate credit requirement calculation consistent with California and Quebec (s 19 of the 1 Reg) in the event of a dramatic and unforeseen year over year sales change, that is beyond a manufacturer’s control, occurs.</p>	s.13
2.8 ZEV Credits from Consumer Sales	<p>Retail vs Wholesale: CVMA expressed a desire for wholesale to be used for credit accumulation. Tesla and Clean Energy Canada were interested in seeing point of credit generation is the retail sale.</p> <p>Testing - US06 & credit bonus; range tests: Six industry stakeholders (including GAC and CVMA) expressed interest in recognition of US06 for PHEVs & credit bonus (as per California). Metro Vancouver suggested that the regulation use a method of fuel consumption testing that reflects a range of B.C. driving conditions to determine the electric range of ZEVs; and Victoria Electric Vehicle Club suggested that the regulation use the EPA75 range standard test.</p> <p>Credit formulas: There was a range of input on credit formulas ranging from support for the current proposal; to support for no credit system (i.e. just 1 to 1) from 2020 onward; to not linking credits earned to range</p>	

Topic	Summary of Stakeholder input	Ministry analysis
	but establish range minimums instead; to increasing the ZEV cap beyond 4 credits to incentivize range; to increases to minimum ranges.	s.13
2.9 ZEV Credits from Initiative Agreements	<p>Eligible actions: Five ENGOs and three local governments articulated an interest in keeping the actions limited to those that increase the supply of ZEVs. Five industry stakeholders (including GAC and CVMA) and two ENGOs expressed interest in initiative agreements remaining open to proposals. Other ideas for actions were suggested by four industry stakeholders and one ENGO and included autonomous and shared vehicles, hydrogen fuel supply and station actions, support for charging stations (including for MDV and HDV), Scrap-It incentives, engagement and marketing, support for training</p> <p>Used ZEVs: There was general support for the inclusion of provision of used ZEVs as eligible for initiative agreements. Four local governments expressed concern over double counting of ZEVs counted toward supplier credit in another jurisdiction, while one ENGO expressed that it should not matter where they come from.</p> <p>Medium-Duty Vehicle (MDV) & Heavy-Duty Vehicle (HDV): There was mixed support from all stakeholders for the inclusion of MDV and HDV in initiative agreements, with most stating a preference for these vehicles to just be regulated to be ZEVs.</p> <p>Cap: Eight industry stakeholders supported an increase to the cap on credits that can be earned through initiative agreements to 25% (and 50% for 2020-2023 MYs). While, three local government stakeholders expressed support for the 5% cap.</p> <p>Accountability and Transparency of IAs: A mix of industry and ENGO stakeholders expressed an interest in initiative agreements being</p>	

Topic	Summary of Stakeholder input	Ministry analysis
	transparent (including in decision making), publicly disclosed, reviewed by a ZEV Council and subject to a quality and additionality test and audit.	s.13
2.10 ZEV Credit from Purchase Agreements	Industry was divided on the last resort language. Local governments suggestions included: setting amounts according to per tonne of GHG avoided and pegging amounts to inflation; setting criteria for situations when purchase agreements are justified; setting caps on amounts to be earned; phase out of purchase agreements post-2025; reporting that provides justification for purchase agreements.	
2.11 Transfers of ZEV Credits	Two ENGOs commented on transfer. One stated an interest in limiting for large manufacturers of 20% of the required Class A ZEV credits that can be credits transferred from another supplier (so that everyone participates in EV market); and the other that transfers should be reviewed by the ZEV Advisory Council and publish for public perusal.	
2.12 Early Issuance ZEV credits	Tesla indicated an interest in allowing unlimited, ad-hoc credit filings or allow, at a minimum, monthly; and automate the issuance of credits to the greatest extent possible.	
2.13 Monitoring compliance	Tesla indicated an interest in aligning compliance and reporting dates with those used in California; and Toyota was interested in harmonizing with Quebec 3MY reporting periods to reduce regulatory burden.	
2.14 Non-compliance – automatic/ discretionary administrative penalties	Four ENGOs and two local governments' comments spoke to the following: automatic and discretionary penalties to be brought before the ZEV Advisory Council and published for public perusal; administrative penalties to escalate by increments of \$5000 for each year out of compliance per ZEV not sold; and that there be higher penalty rates for non-compliance (\$7,500 or \$10,000/credit); and that the penalty rate be inflation-adjusted.	
Other input	Dedicated fund for \$ collected under ZEV Act: Five industry stakeholders and two ENGOs suggested that government establish a dedicated fund for funds generated under the ZEV legislation can be deposited and then re-committed to support the goals and objectives of the legislation.	

Topic	Summary of Stakeholder input	Ministry analysis
	Social inclusion/equity: Three local governments suggested broadening the ZEV standard by exploring mechanisms to make ZEVs available to a range of income levels.	

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Appendix D: Forecast ability of industry to comply

The ability of the industry to comply with the ZEV Regulation is based on the annual credit bank – i.e. the total credits across all regulated parties after subtracting the compliance requirements for any given year. The assessment assumes that the credit market is working – i.e. regulated parties are trading credits such that automakers without ZEVs to sell can purchase compliance credits from automakers who have a surplus of credits. The *ZEV Act* does provide Government with the authority to establish regulations to ensure a functioning credit trading market should that not arise naturally, such as limiting the time period over which credits are able to be applied to compliance requirements, or devaluing older model year credits.

The credit bank is calculated by the Ministry using third party forecasts of ZEV sales, translating that to credits using the per-vehicle-credit formula proposed for the ZEV Regulation and the forecast mix of Class A and Class B vehicles along with the forecast ranges, and then subtracting the credit compliance requirements from the credits arising from sales.

In the forecasts chart below, the shaded blue area is the range of forecasts the Ministry has. The yellow line is the estimated ZEV sales % relative to the propose compliance targets. ^{s.13}

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Using these forecasts, credit banks were calculated for different annual compliance ratio requirements (i.e. credit requirements).

In the following series of charts, the grey line forecast was applied to measure compliance across the different scenarios. The more conservative grey line was chosen because of the current uncertainty of the technology status of ZEVs for SUV and pick-up truck vehicle types. If there is a significant technical advancement in those vehicle types in the next 5 – 10 years, a forecast closer to the yellow line might be more appropriate (and a related increase in the annual compliance requirements).

Green bars represent industry's total credit bank year-over-year, after adding credits, subtracting the annual compliance requirement, and carrying over any credit balance from the previous year. The red bars represent the annual compliance requirements, and the blue bars represent the annual estimated credits generated based on the grey line forecast above.

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Appendix F: Online Reporting Tool Status

ZEVA (Zero Emission Vehicles Application)

Overview of the online tool

The Ministry is developing an online system called ZEVA (Zero Emission Vehicles Application) which regulated parties will use to demonstrate their compliance with the *ZEV Act* Regulation. Regulated parties will use ZEVA to report their ZEV sales, request ZEV credits and submit compliance information including Model Year reports. The Ministry will use ZEVA to issue ZEV credits, record credit transfers between regulated parties and monitor regulatory compliance. Regulated parties will access ZEVA securely and confidentially using individual business BCeID accounts.

Independent verification of reported information

The province will use ICBC vehicle registration data as a means of checking the accuracy of reported information on ZEV sales before issuing credits to vehicle suppliers. The province will use NRCan and/or vehicles test results (from the US EPA) to verify ZEV model performance.

Agile development approach and user engagement

ZEVA is being developed by an in-house team using the Agile project management approach. This is an iterative development approach built around 2-week cycles with a focus on quick build of usable features of the tool and frequent engagement with end users (both internal to government and external).

The project has established an external user group who are providing regular feedback and suggestions to ensure ZEVA will meet the needs of regulated parties as well as government. This group includes 14 vehicle supplier representatives who are actively participating in monthly product review meetings. The automakers are highly supportive of the process and tool, and have indicated that thus far the development exceeds their experience in Quebec and California.

MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES

BRIEFING NOTE FOR INFORMATION

PREPARED FOR: Honourable Bruce Ralston, Minister of Energy, Mines and Petroleum Resources

ISSUE: Emerging Economy Taskforce and Innovation Commissioner Report
Recommendations Relevant to the Ministry of Energy, Mines and Petroleum Resources

BACKGROUND:

Through the Confidence and Supply Agreement signed on May 30, 2017, the British Columbia (B.C.) Government committed to establish an Emerging Economy Task Force (EETF) to address the changing nature of business over the next 10 to 25 years. In parallel, the B.C. Government established an Innovation Commission to support innovation and business development in the technology sector. An Innovation Commissioner was created with a mandate to be an advocate and ambassador on behalf of the B.C. technology sector in Ottawa and abroad. Dr. Alan Winter served as the Innovation Commissioner for a two-year appointment.

Both the EETF and the Innovation Commissioner released reports publicly in May 2020, with several recommendations relevant to the work of the Ministry of Energy, Mines and Petroleum Resources (EMPR). The key themes of the EETF's report relevant to EMPR across 25 recommendations are: embracing technology and innovation as a driver for the economy and competitiveness; leveraging B.C.'s green economy; and demonstrating public sector leadership through green procurement and infrastructure.

The report by the Innovation Commissioner, *Innovation to Work for British Columbia: Growing B.C. Companies*, has five recommendations focused on helping innovative B.C. companies thrive and grow, while supporting more innovation across all sectors of the economy.

The reports identified that B.C. is a small and open economy, blessed with significant natural advantages, but influenced by changing global trends, emerging technological advancements, changing business processes, climate change, and a variety of other factors.

DISCUSSION:

Of particular relevance to EMPR, both reports identified CleanBC innovation and talent as areas for targeted focus. The EETF identified B.C.'s vertically-integrated, clean power advantage and the Innovation Commissioner's report examined Intellectual Property (IP).

CleanBC

Both the Innovation Commissioner's report and the EETF's final report include CleanBC as an integral part of the innovation and the emerging economy. The Innovation Commissioner's report recommends using the CleanBC Plan as an economic driver; which aligns with the

EETF's recommendation to take advantage of the growing global demand for Green Economy products and services by building on CleanBC. CleanBC Phase 2 Recommendations brought forward by EMPR, the Ministry of Jobs, Economic Development and Competitiveness (JEDC), and the Ministry of Environment and Climate Change Strategy in November 2019 recommended this approach. Enhancing the Innovative Clean Energy (ICE) Fund, fully implementing EMPR-related CleanBC Phase I commitments, and investing in CleanBC Phase II proposals, would align with these recommendations.

Innovation and Funding

On innovation, there is alignment between the EETF and the Innovation Commissioner's report. The EETF recommends strengthening the ecosystem for innovation commercialisation and scale-up of companies. The Metal Tech Alley in Trail, B.C., is highlighted as an example of collaboration supporting the growth of the local innovation community. The EETF also recommended enhancing the funding options available in the emerging economy by creating a provincial investment vehicle drawing from private, public, and not-for-profit leadership. The Innovation Commissioner's report recommends funding the establishment and operation of "innovation precincts" across B.C. and supporting the development of emerging technology clusters. The Innovation Commissioner's report also recommends incentivizing and protecting IP.

EMPR is currently working closely with JEDC, Western Economic Diversification, and Foresight Clean Technology Accelerator on a clusters initiative. The Premier's mandate letter to Minister Mungall JEDC directs the Minister to support cluster initiatives. Funding for Innovation Hubs are a key recommendation in Foresight's work. In addition, EMPR and JEDC are collaborating with the City of Victoria on the Ocean Futures Cluster Development initiative which includes an innovation hub concept. ICE Fund is participating with JEDC to respond to the federal IP strategy and the launch by the federal government of the Patent Collective.

The ICE Fund's mission is closely aligned with these recommendations in that it is designed to support the Province's energy, economic, environmental and greenhouse gas reduction priorities, and to advance B.C.'s clean energy sector. EMPR's current Budget Letter invites the Ministry to report on the potential for an expanded ICE Fund. Proposals to expand the ICE Fund mandate and scope to better support clean energy and clean technology and options for an additional provincial investment vehicle are being brought forward. The Minister's Clean Energy and Technology Advisory Group has also been invited to provide advice to the Minister on supporting these sectors.

Capitalizing on Natural Advantages

The EETF recommended taking advantage of B.C.'s vertically integrated, clean power advantage by mandating BC Hydro to capitalize on B.C.'s clean electricity generation assets and transmission infrastructure. The EETF stated that this would enable BC Hydro to play a key role in the decarbonization of B.C.'s economy and the catalyzation of new technology used in electricity generation and transmission. Regulatory and funding supports for the Green and Circular Economies are also discussed in the recommendations.

There are opportunities to support this recommendation with new transmission technologies and

by implementing remote generation and storage solutions to reduce diesel dependency in remote and indigenous communities. Furthermore, the BC Hydro Review Phase Two Interim Report, released on March 8, 2020, suggested that BC Hydro could target potential new low carbon industrial customers through an economic development rate, including for energy-intensive low-carbon industries such as hydrogen, renewable fuel production, and carbon capture. In addition, regulatory changes to support emerging technologies are currently being explored by EMPR in hydrogen, carbon capture, bioenergy, and renewable fuel production.

Talent and Workforce

The Innovation Commissioner's report recommended investing in leadership talent development strategies. The EETF has several recommendations focused on the strategic priority of building a highly skilled and adaptable workforce. EMPR has been providing support to the Foresight Cluster Initiative which will include recommendations on talent in its final report.

MINISTRY RESPONSE:

The two reports recommend investment in innovation and emerging technologies as an economic development opportunity to further benefit from B.C.'s natural advantages.

EMPR continues to implement CleanBC Phase One measures and advance additional opportunities in support of CleanBC. The Ministry is collaborating on the Foresight Cluster Initiative and continues to advance funding and regulatory proposals to better support the growth of emerging clean energy and technology companies, in alignment with economic recovery measures from the corona virus pandemic. Proposals under development for an expanded ICE Fund and an additional provincial technology and innovation investment vehicle would further support the reports' recommendations on CleanBC, innovation and funding, talent and capitalizing on B.C.'s natural advantages.

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MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES

BRIEFING NOTE FOR DECISION

PREPARED FOR: Honourable Bruce Ralston, Minister of Energy, Mines and Petroleum Resources

ISSUE: Extension of the existing COVID bill deferral program for BC Hydro's industrial customers for an additional three months.

BACKGROUND:

In March 2020, the Association of Major Power Customers (AMPC) wrote to the Minister requesting relief measures for industrial customers impacted by the COVID-19 pandemic. BC Hydro was able to implement two of the relief measures under their existing Electric Tariff. By way of a government direction to the British Columbia Utilities Commission (BCUC) BC Hydro introduced a bill deferral relief program for industrial customers for an initial period of three months.

A total of 27 customers were approved for the bill deferral treatment at an estimated cost of \$30-36 million (M). These deferred amounts are subject to repayment with interest that accrues at prime plus 2.5% during the deferral period increasing to prime plus 5% thereafter. These deferred amounts are to be repaid over a nine-month period.

AMPC along with the Mining Association of BC (MABC) has requested that the temporary COVID relief measures implemented by BC Hydro be extended. AMPC also requested two additional relief measures that are not supported by the Ministry of Energy, Mines and Petroleum Resources (EMPR) or BC Hydro staff.¹

DISCUSSION:

In its letter, AMPC credits the average billing demand and bill deferral measures implemented by BC Hydro and Government with enabling some industrial customers to avoid or reduce layoffs and continue operations at full or partial capacity.

EMPR staff and BC Hydro support extending the existing bill deferral programs and average billing demand treatment for industrial customers for an additional three months. The extension of these programs will support economic transition back to normal operations, as well as retain load that if lost would have significant negative impact for all BC Hydro ratepayers.

¹ Match BC Hydro's industrial rates with those of Manitoba Hydro by reducing the energy charge and/or suspending demand charges; and reduce electricity baselines to provide customers with an option to purchase non-firm electricity under the Freshet Rate or the Incremental Energy Rate, both of which are less than the standard industrial rate.

Average Demand Treatment Extension

The average demand treatment allows customers to be billed for the electricity demand they are currently using, as opposed to triggering a clause in the tariff that would typically have them pay based on the higher demand demonstrated during the winter period.

BC Hydro is proposing that the average demand treatment be applied for the months of July-September. June bills would not receive the treatment. However, many customers will be taking service under the Freshet or Incremental energy rate for June, so the average demand treatment would be less helpful for them.

The estimated benefit to industrial customers is approximately \$15M, assuming continued participation by the customers currently availing themselves of the relief plus enrolment of an additional twenty customers.

Although BC Hydro can continue this average demand billing treatment under current tariff provisions, they have requested government support via a letter to the BC Hydro Board to support the extended billing treatment for the months of July-September (Attachment 1).

Billing Deferral Extension

An extension of the bill deferral program would allow participating and new customers to defer a portion of their bills through the months of June-August 2020. Repayment on the deferred amounts would proceed in December 2020 for industrial customers, or March 2021 for the mining customers.

If the bill deferral relief is to be extended, the direction to the BCUC will need to be amended to allow BC Hydro to revise its tariff supplements to enable the automatic extension of the bill deferral program to the 27 existing customer participants, including an extension of the lower interest rate of prime plus 2.5% to the June – August billing periods, and extending the start of the repayment from September to December 2020.

The impact of extending the existing bill deferral program for an additional three-months is estimated to be \$30-36 M. Although new customers can apply for this program, BC Hydro does not anticipate any new requests for the program. BC Hydro estimates that extending the program is well within the overall \$200 million envelope initially approved for the COVID-19 relief package. Further, BC Hydro estimates that most customers will end up repaying the deferred amount with interest.

EMPR and BC Hydro have discussed the extension as proposed above with AMPC and MABC, and the associations are supportive of the terms.

Implementation

In order to extend the bill deferral programs starting in June, an amendment to the existing COVID-relief Order-in-Council (OIC) is required. The amended OIC could direct the BCUC to:

- approve the programs within 5 days of an application by BC Hydro; and

- clarify that the amounts provided under this incremental relief can be deferred to existing regulatory deferral accounts and recovered from ratepayers in future years in the same manner as the original industrial relief provided.

Alternatively, the BCUC has expressed openness to using section 91 of the *Utilities Commission Act* to assist in efforts to mitigate impacts of the pandemic by expediting a review of a utility application. Section 91 allows the BCUC to make interim orders without a prior hearing, effectively allowing the BCUC to authorize utilities to undertake interim actions within a few days. While an approval pursuant to section 91 allows for expedient relief to be granted, these interim decisions must still go through a proper hearing process and the decisions can be modified or set aside in the final order.

Further, there is no certainty that the BCUC would approve the tariff amendments as proposed and there is a risk that the BCUC may exercise its jurisdiction to impose different rate terms than proposed by BC Hydro. For example, the BCUC may require BC Hydro to apply tighter security requirements to reduce impaired cost risks to ratepayers or may modify the terms upon which the relief was offered in the first place.

Finally, the BCUC may not accept that the OIC allows BC Hydro to defer the costs incurred pursuant to this incremental relief to its existing regulatory accounts, consistent with the original relief provided. As a result, the BCUC may disallow BC Hydro from using its regulatory accounts to manage impaired costs and/or order that any impaired costs be borne by taxpayers instead of ratepayers.

OPTIONS:

Option 1: Approve amending the Order in Council that directs the BCUC to extend COVID-19 bill deferral relief measures for BC Hydro's industrial customers

Pros:

- Allows BC Hydro to provide continued and needed bill relief to industrial customers by a simple amendment to an existing OIC;
- Allows extension of the bill deferral program that has been successful to date and is supported by AMPC and MABC;
- Insulates Fiscal Plan from impaired bills through the use of existing deferral accounts.

Cons:

- Conflicts with Government's commitment to avoid directing the BCUC unless absolutely required;
- Risk to ratepayers if customers are unable to repay deferred amounts.

Option 2: Do not extend the COVID-19 bill deferral measures

Pros:

- No additional risk to ratepayers of unpaid deferral amounts;
- Limits the number of directions to the BCUC;

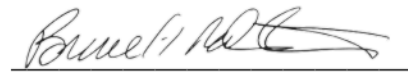
Cons:

- Will be seen as not supportive of the industrial sector that continues to be impacted by COVID-19

RECOMMENDATION:

Option 1: Approve amending the Order in Council that directs the BCUC to extend COVID-19 bill deferral relief measures for BC Hydro's industrial customers.

Approved / Not Approved



Honourable Bruce Ralston
Ministry of Energy, Mines and Petroleum Resources

June 01, 2020

Date

Attachment 1: Letter to BC Hydro Board Chair – Support for Extension of Average Billing Demand Treatment

DRAFTED BY:

Jiya Shoaib, TIB
Senior Policy Analyst

APPROVED BY:

Amy Sopinka, Dir., TIB ✓
Paul Wieringa, Exec. Dir., EPB ✓
Les MacLaren, ADM, EAED ✓
Dave Nikolejsin, DM ✓

May 25, 2020

Mr. Kenneth G. Peterson
Executive Chair
BC Hydro

Email: Kenneth.Peterson@bchydro.com

cc: Dave.Nikolejsin@gov.bc.ca
Les.MacLaren@gov.bc.ca
Chris.ORiley@bchydro.com

Dear Mr. Peterson:

I am writing to communicate the Government's views as the BC Hydro Board of Directors (Board) considers an extension of BC Hydro's COVID-19 relief package for industrial customers.

In April 2020, BC Hydro implemented relief measures for its customers impacted by COVID-19. Industrial customers can defer up to 50% of electricity use charges for three months and mining customers can defer up to 75% of electricity charges, depending on commodity prices. In addition, BC Hydro provided industrial customers with average billing demand treatment as permitted under the Electric Tariff.

With the impacts of COVID-19 continuing to affect B.C, Government is requesting that the Board approve an extension of the industrial customers' annual average demand charge treatment for three months, July 1 to September 30, 2020. I am bringing forward for approval a complimentary regulatory package to extend the bill deferral program for three months.

I would like to thank you and the Board for your consideration of this matter. The relief measures implemented by BC Hydro have played an integral role in allowing BC Hydro's industrial customers to avoid or reduce layoffs and continue operations during this challenging time.

Sincerely,

Bruce Ralston
Minister of Energy, Mines and Petroleum Resources

MINISTRY OF ENERGY, MINES AND PETROLEUM RESOURCES

BRIEFING NOTE FOR INFORMATION

PREPARED FOR: Honouable Bruce Ralston, Minister of Energy, Mines and Petroleum Resources

ISSUE: CleanBC Industrial Incentive Program Benchmarks

BACKGROUND:

In 2019, British Columbia's (BC's) carbon tax rate was raised from \$35 to \$40 per ton carbon dioxide equivalent (t CO_{2e}). It is scheduled to increase in \$5 increments each year until it reaches \$50 per t CO_{2e} (with a delay this year due to COVID-19). The CleanBC Program for Industry was established to support competitiveness as the price of carbon rises and facilitate emission reductions using revenues from the carbon tax that industry pays above \$30 per t CO_{2e}.

The CleanBC Industrial Incentive Program (CIIP) is intended to support industrial emissions reductions and minimizes carbon leakage by supporting industrial competitiveness. CIIP provides an incentive to industrial operations of up to 100 percent of estimated carbon tax payments over \$30 per t CO_{2e}. The incentive amount is based on how close an industrial facility's emission intensity is to a world leading performance benchmark. (Appendix A: CIIP). Under CIIP, operations reporting emissions under the *Greenhouse Gas Industrial Reporting and Control Act* are eligible to receive an incentive if the operation meets the eligibility threshold established for the sector. The eligibility threshold is set at twice the BC production weighted average. For 2020/2021, operators will receive a minimum of 75 percent of the incremental carbon tax paid, operations performing better than 75 percent against the benchmark will receive that amount. The benchmarks and eligibility thresholds will be used to calculate rebates under the CIIP for future years.

DISCUSSION:

Industry concerns with CIIP

Industry has been extensively engaged during the development of the CIIP, its benchmarks and eligibility thresholds. Overall, industry (both oil and gas and mining) have been supportive of the conversations and appreciative of the level of responsiveness from government when it comes to adjusting the details of the program design to reflect industry feedback. There are some remaining issues that industry has with the current program design. s.13

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At a more strategic level, industry has made a range of suggestions and requests related to the CIIP program intent and scope that have been outside of the scope of government's engagement on program design and have not been reflected in refinements made to the CIIP. s.13

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Carbon Pricing System (BC vs. Canada)

BC has an economy wide carbon tax, with no exemptions for large emitters. Fuel charges apply to fuel producers and distributors, who then pass the cost to consumers, including large industry. The current CIIP returns a portion of carbon tax paid by industrial emitters via a mechanism that compares projected emissions intensity to world leading benchmarks. If certain thresholds are met, emitters may receive rebates on all carbon tax paid above \$30 per t CO_{2e}.

The Federal Carbon Pricing System is comprised of a fuel charge that applies to fuel producers and distributors (who then pass the cost to consumers). Large industrial emitters identified as trade exposed are exempt from the fuel charge and subject to the Output-Based Pricing System (OBPS), where a carbon price applies to all emissions above a Canadian performance benchmark. Unlike BC's CIIP, this carbon price is only applied above the benchmark (not total emissions) and it can be paid via purchasing offsets or through purchasing credits from other operations that achieve results better than the benchmark. s.13

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Alberta Technology Innovation and Emission Reduction (TIER) System

TIER applies to all facilities in Alberta that emit more than 100,000 tonnes. Operators of facilities within a sector are not required to meet a common standard. Instead, performance targets for oil producers will be individualized to each facility based on their historical emissions. Facilities will be required to reduce their emissions intensity by 10 per cent over their average intensity recorded between 2016 and 2018. This target moves to 11 per cent the next year, then 12 per cent, and so on. For the cleanest facilities already using the best technology and designs, they can use the high-performance benchmark, which is set to the average emissions intensity of the most emissions efficient facilities (performers in the top 10 per cent). TIER rewards high-performing facilities that have implemented emissions-reducing technologies by helping them reduce costs or generate emissions performance credits. Those who don't comply have to pay into the TIER fund or buy emissions credits from compliant facilities.

The TIER regulation set a \$30-per-tonne carbon tax on industrial emitters like oilsands facilities and has been accepted by the federal government for this year as satisfying federal carbon pricing requirements.

CONCLUSION:

Government continues to receive feedback from industry on the CIIP. Some of this feedback focuses on program design details and is being considered as that work continues. Other elements of industry's feedback focus on larger strategic policy questions related to how government intends to balance its carbon pricing policies with its desire to maintain a competitive business environment. s.13

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Attachments:

Appendix A: CleanBC Industrial Incentive Program

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APPROVED BY:

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Appendix A: CleanBC Industrial Incentive Program

