MABC
MINING ASSOCIATION OF BRITISH COLUMBIA

May 16, 2013

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Sent via email: scott.barillaro@gov.bc.ca

Re: Industrial Electricity Policy Review

Dear Mr. Barillaro,

Further to our meeting with the Industrial Electricity Policy Review Task Force on March 8, 2013, please find attached additional observations for your consideration in preparing recommendations for government.

Our comments focus on the important role that low cost line power plays in our competitiveness as a mining jurisdiction and on the policy framework needed to enable the growth of responsible mining in BC. However, additional industry consultations should take place before implementing any specific policy changes based on recommendations from the Task Force. As is described below, many of the policy options under consideration by the Task Force could impact our members in different ways, given the divergent needs of individual mining projects and operations across BC.

Thank you for providing us with the opportunity to meet with the Task Force and to share our views on the Industrial Electricity Policy Review.

Sincerely,

Karina Brino
President and CEO

MINING ASSOCIATION OF BRITISH COLUMBIA

Industrial Electricity Policy Review – Mining Association of BC (MABC) Comments

1.0 Introduction

In January 2013 the Ministry of Energy, Mines and Natural Gas (MEMNG) appointed a Task Force and launched an Industrial Electricity Policy Review with tight timelines. The Task Force is to make recommendations to the Government of BC on the extent to which transmission voltage rates may be used to contribute to: provincial electricity conservation objectives; provincial economic development; provincial environmental policy; and the implications of pursuing each objective in relation to the other two. It is also to make recommendations on "principles" to guide the Province concerning the use of its directive powers related to the BC Utilities Commission (BCUC) and/or BC Hydro in order to pursue provincial policy objectives.

The scope of the review is broad ranging and deals with the following specific issues: the stepped rate; economic development; end user rates; generation contribution policy; postage stamp rates; the regulatory approach to BC Hydro; retail access, and transmission contribution policy. We recognize the inherent complexity of the current industrial electricity policy and the need for a comprehensive analysis of the impacts on the mining industry of any planned changes. MABC looks forward to continued consultation in advance of any anticipated changes. However, we would like to take this opportunity to provide a mining industry perspective on the importance of retaining accessible and competitively priced electricity as a competitive advantage for BC as a mining jurisdiction. In the paragraphs below, we will also provide commentary on regulatory approach for BC Hydro, the contribution policy, and highlight mining-specific considerations when forming electricity rate policy to advance environmental, conservation or economic development objectives.

MABC's primary focus in electricity policy is on the provision of accessible, reliable and competitively-priced line power. Competitively priced power is defined as both the upfront costs as well as the monthly charges on the invoices received. The following paragraphs will outline some measures to preserve the low-cost electricity advantage that has made BC a jurisdiction of choice for mining investors. However, the Task Force should advise the government that additional consultations would be needed before any industrial electricity policy changes are made to ensure that no change to one policy objective is made without a clear understanding of the impacts of that change on the other policy objectives, both individually and cumulatively.

In sections 2 and 3 of this submission, we will provide the Task Force with an overview of the state of the mining industry in BC and describe the basic relationship between electricity prices and mining economics. In section 4 we will discuss the mandate of the Task Force and the importance of having electricity policy that is flexible and responsive to the needs of a growing mining sector. In section 5 we will discuss issues for the Task Force to consider in making recommendations related to the use of electricity rates as a tool for provincial policy objectives. Finally, in section 6 we will discuss mining sector-specific concerns related to electricity infrastructure contribution policies.

1.1 Summary of Recommendations

Recommendation #1: *The Task Force should recommend the creation of a new public policy framework to govern the use of directive powers to pursue economic, conservation or environmental policy objectives. Directives should be transparent and consistent with BC Hydro's cost-based rate framework and mandate to provide reliable power at low cost. Regulations and legislation should be amended (Water Act; Financial Administration Act, BC Hydro Act, Clean Energy Act) to ensure BC Hydro is able to use a greater portion of rate revenues (redirected water rentals and dividends) to pay for investments in new programs and new infrastructure.*

Recommendation #2*: The Task Force should recommend that it is in the interests of rate-payers ("rolled in" costs) and government (utility/government capital contribution) to contribute to electricity infrastructure expansion costs to ensure access to reliable and low-cost line power in every region of BC.*

Recommendation #3*: The Task Force should recommend that any contribution policy changes should take into account the fact that many mining companies cannot afford to make substantial contributions until they are in full production. Therefore, any infrastructure contribution policy should include a transparent, graduated scale for the application, if any, of non-recoverable infrastructure costs.*

Recommendation #4*: The Task force should recommend that any contribution policy changes should include increased resources to reduce timelines for System Impact Studies, which are needed to determine the technical and cost implications to the BC Hydro system of a new load. Continuing or expanding the current wait times of 6-9 months would be detrimental to project schedules and could have a negative impact on investment decision considerations. The Task Force should recommend that initial assessments are to be undertaken and completed in 90 days or less from request.*

2.0 MABC and Mining in BC

MABC represents companies involved in the exploration and development, mining and smelting of minerals, metals, coal and industrial minerals in British Columbia. It is regarded as the pre-eminent voice of mining in the province. Vancouver is home to over 800 mining and mineral exploration companies, including head offices for major international companies such as GoldCorp and Teck. Vancouver is a global centre of mine financing and mineral exploration expertise. Our industry produced gross revenues of over $9.2 billion for BC in 2012. BC mining operations supported 10,419 direct employees and supported thousands more indirect jobs in communities across the province. The mining industry is one of the highest paying trade industries with an average salary of $121,900, including benefits. In 2012, the mining industry paid $515 million in taxes and other payments to government which will help support important government programs such as education and healthcare.

HIGHLIGHTS FOR 2012

- Mineral and coal production estimated at $9.2 billion
- Evaluation and advanced-stage projects drive expenditures to $680 million
- New Afton mine opened; Red Chris and Mt. Milligan mines under construction
- Major expansions and upgrades at existing mines

At first glance, BC's mining industry is well-positioned for the future. The province's mineral potential includes vast reserves of steel-making and thermal coal and metals such as copper, gold and molybdenum. Our sector has led the economic recovery in BC with expanding production levels and the potential opening of major new mines in every region in British Columbia, injecting upwards of $6 billion in private sector investment and the creation of thousands of new jobs. However, uncertainty in the mining sector continues to grow for reasons that include increasing timelines for regulatory approvals, increased costs for mine development and the resulting hesitation of potential investors.

3.0 Basic Economics of Mining and Electricity as an Input Cost

The processes used to extract and transform rock into the metals and minerals we use every day make mining a capital and energy intensive industry. [INSERT GRADE CHARACTERISTICS] In order to compete globally as a mining jurisdiction of choice for investors, British Columbia must continue to improve accessibility to reliable and competitively priced line-power in all regions of the province.

3.1 Global Market

BC's mining producers compete globally and are considered "price takers" because they are constrained by global commodity prices. Because they are unable to pass on increased production costs to their consumers, mining producers are significantly impacted by commodity price fluctuations, increases in taxes or royalties and exchange rates, and increases in input costs, such as electricity.

3.2 Site and Mine Life Cycle Economics

At our initial meeting with the Task Force the question was asked: at what price point would electricity rates cause mines to become uneconomical? The answer is that it depends on the concurrent impacts of a series of other cost factors, not simply electricity rates.

While mining companies share the global market and have similar input cost characteristics, such as taxes, exchange rates and energy costs, the overall economics of each mine vary. Mines are developed according to the unique characteristics of their ore bodies. Factors such as the depth, dispersion, distribution of ore grades and the nature and stability of surrounding material are considered when determining the economic feasibility of extraction techniques, equipment requirements, and infrastructure needs, including power needs.[1]

In addition to a unique set of capital costs, the economic feasibility of a mine will also depend on market conditions associated with the particular commodity (or commodities) being produced. For example, decreases in the price of molybdenum in 2012 negatively affected operations in one BC mine and was a factor leading to the shut-down of another. Other cost factors at play include: input costs (labour, energy use, transportation), commodity prices, taxes, and exchange rates. For most mines, electricity accounts for the top two or three costs of mining production. In conjunction with other costs, significant rate increases could lead to the closure of an operating mine or deter investment in a new project.

[1] Topp, Vernon et al. *Productivity in the Mining Industry: Measurement and Interpretation*, Melbourne: Productivity Commission Staff Working Paper, 2008. Page 69 Found at: http://www.pc.gov.au/__data/assets/pdf_file/0005/84911/mining-productivity.pdf

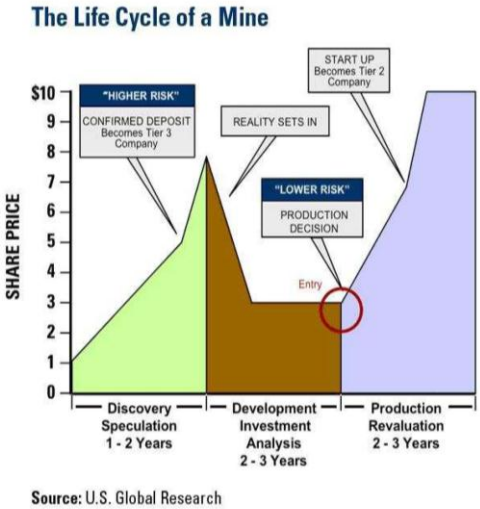
Mining economics also change according to the stage of development a particular project is at in its mine life cycle. Mineral properties can be grouped into three main stages of development: exploration properties, development properties, and production properties.[2] Mining companies with projects that are only in the exploration or construction stage will not be in the same position to absorb unforeseen costs as companies with mines that are already in production, due to the fact that they rely completely on investors to fund operations. This is particularly significant when considering contribution policies for transmission reinforcements or tariffs for the construction of new electricity infrastructure. The provision of accessible, reliable and competitively-priced line power provides a competitive advantage to BC projects at each stage in the mine life cycle.

Exploration Properties

Exploration properties are those on which an economically viable mineral deposit has not yet been demonstrated to exist.[3] Their value lies in their potential for the discovery of an economically viable mineral deposit. Although companies with operating mines also undertake exploration activities, most of the major new discoveries in the past several decades have been made by junior exploration companies, commonly referred to as "juniors."[4] Juniors have no operating mines and no revenue, so their exploration activities are fully reliant on funds they raise in equity markets as a speculative stock investment. In his 2010 book entitled *Mineral Exploration and Mining Essentials*, Robert Stevens estimated that juniors can spend anywhere from $50 million to over $150 million on exploration work, over periods ranging from 3 to 12 years, before a property is ready to move to the construction stage.[5] As will be demonstrated in section 3.4, the availability of infrastructure, including energy supply, is a one of the determinative factors of the value of an exploration property. The guarantee of reliable and competitively-priced line power reduces project risk and helps juniors attract the investments needed to fund exploration work on their properties.

Development Properties

When a mining company's project is ready to move to the development stage, companies turn to debt financing lenders, such as banks, pension funds and private equity funds to finance the cost of bringing a mine into production.[6] The permitting and financial analysis (including feasibility studies and environmental assessments) needed to develop an exploration project into a producing mine will vary from project to project, but could take from 2 to 7 years to complete at costs ranging from $2 million to $20 million. Construction could take 1 to 4 years to complete, at a cost ranging from $100 million to over $3 billion.[7] Mine project financing lenders often



[2] Baurens, Svetlana. *Valuation of Metals and Mining Companies,* Zurich: Basinvest AG, 2010. Page 15. Found at: http://www.basinvest.ch/upload/pdf/Valuation_of_Metals_and_Mining_Companies.pdf
[3] Baurens, *Valuation of Metals and Mining Companies*, 15.
[4] Stevens, Robert. *Mineral Exploration and Mining Essentials*. Port Coquitlam: Pakawau GeoManagement Inc., 2010, 4.
[5] Stevens, Mineral Exploration and Mining Essentials, 4.
[6] Baurens, *Valuation of Metals and Mining Companies*, 15.
[7] Stevens, *Mineral Exploration and Mining Essentials*, 4.

provide more than half of the overall project costs, with the balance raised through equity markets.[8] However, to attain project financing mining companies must meet rigorous lender requirements, and enter into a myriad of agreements, including power purchase agreements. Mine project financing may be delayed or withheld by lenders in the absence of signed agreements, between, for example, the mining company and BC Hydro for power supply.

The development stage of the mine life cycle also tends to depress the share price of the controlling company due to uncertainty surrounding the outcome of feasibility studies, financing and permits.[9] It is important for the Task Force to understand that during the capital intensive development phase of the mine life cycle and in advance of the cash flow realized through mine production, it is difficult for some companies to accommodate requests for up-front cash or letters of credit to advance the upgrades needed to provide line power to new projects.

Production Properties

Properties will enter into the production stage once construction is complete and operations to extract mineral assets are underway. Mines can operate from 5 to 100 years, providing revenue in the hundreds of millions to billions. As discussed above, reliable and competitively-priced line power will always affect the economic viability of mining operations through each stage of the mine life cycle. However, the Task Force should also understand that the energy needs of mining operations evolve over time. Changes to mine depth and ore grade, for example, could increase the electricity needed to sustain production. Producers may also decide to increase production or to extend the life of the mine, in which case the producer may seek additional debt financing from lenders. As will be described in section 6.0, it is important that any contribution policy for electricity infrastructure is responsive to the evolving needs of mining operations.

3.3 Electricity Prices and Consumption by BC Mining Operations

Electricity is a significant cost driver at BC mine sites, constituting up to 10% of operating costs at metal mines. This is due in part to the nature of our geology, as many ore bodies contain low-grade, large tonnage deposits.[10] Electricity is the second or third highest cost (depending on diesel prices) for most operating mines in BC. For example, in 2010, Teck's Highland Valley Copper (HVC) operation consumed 893 Gigawatt-hours of electricity, its largest portion of energy consumption (3,215,000 GJ). HCV's second largest portion of energy consumption was diesel, at 57 million litres (2,257,000 GJ). In 2011, mining accounted for about 2800 GWh/yr or 22% of the BC hydro's total industrial load. Eight metal mines accounted for 80% of the mining load, ten coal mines accounted for 20% and two mines operated off grid. Mining operations were also able to reduce electricity consumption by 18% through demand side management initiatives in 2011.

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[8] Elias, John M. Raising Mining Debt Capital, Vancouver: Paper Prepared for the Canadian Executive Forums Conference "Canadian Mining Law & Finance," Fasken Martineau DuMoulin LLP, 2008. Found at: http://www.fasken.com/raising-mining-debt-capital-04-07-2008/

[9] Baurens, *Valuation of Metals and Mining Companies*, 21.

[10] For examples of low-grade, large tonnage properties in BC see: Britton, Jim et al. *Provincial Summary: Exploration and Mining in British Columbia 2012*, Government of BC: Ministry of Energy, Mines and Natural Gas, 2012. Found at: http://www.empr.gov.bc.ca/Mining/Geoscience/PublicationsCatalogue/InformationCirculars/Documents/IC2013-01.pdf

At an average of 3.5¢/kWh, BC rates are up 24% over 3 years, relative to 6% for the rest of Canada, and additional rate increases are projected for the future. In fact, according to a recent Association of Major Power Customers (AMPC) study, within Canada BC Hydro industrial rates are now higher than those of Manitoba Hydro, Newfoundland and Labrador Hydro, and Hydro Quebec, which are all primarily hydraulic systems. With the return to the PST April 1, 2013, the mining industry was also hit with an additional 7% tax on the purchase of electricity. BC is now one of only two jurisdictions in Canada that taxes electricity for industrial processing, with Manitoba charging 1.4%.

MABC understands that some of the root causes of escalating power rates in BC, including supply and demand issues, the diversion of BC Hydro's rate revenues to water rentals and dividends, and expensive obligations placed on BC Hydro through the Clean Energy Act. The dramatic decline in global oil and gas prices along with a significant downturn in the global economy have also altered the balance of energy prices and the global demand for energy. Significant capital reinvestment in BC generation, transmission and distribution systems is required and will also contribute to increased costs for all ratepayers. MABC supports these needed investments. MABC also supports ongoing efforts to reduce upward pressure on rates, such as using rate revenues to reduce deferral accounts instead of paying dividends and water rentals to the shareholder, along with other measures proposed in the Government of BC's 2011 *Review of BC Hydro*. We look forward to these and other measures in the next Integrated Resource Plan (IRP), which is due in August 2013.

3.4 Electricity and BC's Competitiveness as a Mining Jurisdiction

What makes a mining jurisdiction attractive to investors? There are many factors considered when choosing a jurisdiction in which to invest. Quality of ore body (grade, etc.) accessibility to infrastructure, proximity to markets, labour costs, political and legal stability, taxes and royalties and energy costs will all be considered by investors before they choose to invest in a project. Competitive mining jurisdictions will be strong on one or more of these areas. In the case of British Columbia, mining investors have identified low cost and accessible line power as one of the key strengths of BC's global competitiveness.

In two recent surveys of global mining decision makers, electricity and infrastructure featured a top reason for investing in BC and Canada. Global law firm Baker & McKenzie's September 2012 report entitled *Mining Investment – local challenges, global implications* surveyed more than 300 industry leaders across six key mining jurisdictions were surveyed: Australia, Brazil, Canada, China, Indonesia and South Africa.[11] In ranking factors that encourage investment in Canadian mining jurisdictions, 89% of respondents named solid infrastructure, including electricity, as the second most encouraging feature of Canada as a mining jurisdiction, just behind the first place feature of the ability to enforce contractual rights.

In January 2013 the Fraser Institute released its 2012-2013 Survey of Mining Companies, which surveyed 742exploration, development, and other mining-related companies around the world.[12] The survey found that while BC's overall scores as a favourable mining jurisdiction were lower than other Canadian provinces, due to environmental policies, unsettled land claims, and regulatory duplication, when it

[11] Ryan, David et al. *Mining investment: local challenges - global implications*, Sydney: Baker & McKenzie, 2012. Found at: http://www.jdsupra.com/legalnews/baker-mckenzie-mining-investment-loc-56800/

[12] Wilson, Alana, Fred McMahon, and Miguel Cervantes. *Annual Survey of Mining Companies 2012/2013*, Vancouver: Fraser Institute, 2013. Found at: http://www.fraserinstitute.org/uploadedFiles/fraser-ca/Content/research-news/research/publications/mining-survey-2012-2013.pdf

came to the quality of infrastructure and access to power in BC, 64% of the respondents found it either encourages (22%) or does not deter (42%) investment.

The Fraser Institute survey demonstrates that different mining jurisdictions have different competitive advantages and disadvantages. For example, while BC may have electricity cost advantage, Australian jurisdictions may be closer to Asian markets and African jurisdictions may have lower labour costs. Given that mining is a capital intensive industry, with multiple-sources for mineral resources in jurisdictions around the world, capital will flow to the jurisdictions with the most favourable aggregate business conditions. If BC loses its low-cost power advantage, it also loses a key feature of its global competitiveness as a mining jurisdiction.

4.0 Industrial Electricity Policy Review and a Flexible and Responsive Electricity Policy

Changes to electricity policy, including those considered in the Task Force discussion papers, may affect MABC member companies in different ways, according to their electricity needs and the characteristics of their respective mining and smelting operations or properties. For this reason, our submission will focus on two overarching issues raised by the Task Force that have a common impact on the growth of the mining industry in BC, namely the use of electricity rates as a tool for provincial policy objectives and the contribution policy for the development of new electricity infrastructure.

Although we will limit our comments to the aforementioned issues, any changes to industrial electricity policy should be based on a principled approach towards policy development and rate-setting (Bonbright principles). The actions of government, BC Hydro and the regulator should be transparent, include an acknowledgement of assumptions, be predictable, and provide timeliness of decisions and fairness to all ratepayers. Given the divergent needs of mining companies, electricity policy should also be flexible and responsive to the changing circumstances of mining projects and operations. Any decision to change industrial electricity policy should be based on full and meaningful consultation with industry.

5.0 Electricity Rates as a Tool for Provincial Policy Objectives

As mentioned at the outset of this submission, accessibility to competitively-priced line power, both upfront costs as well as monthly charges, is a key component in the development and ongoing success of operating mines in BC. However, competitive line power rates are of no use to an operation that does not have the infrastructure needed to access the grid. For many of BC's proposed low-grade, high-volume projects, accessibility to line power may be a deciding factor in making the project economical. Because ore bodies cannot be moved to be mined closer to line-power infrastructure, line-power infrastructure must be brought to the regions where we find those ore bodies before they can be developed. We believe the government has a role to play in the economic development of BC by contributing the development of this infrastructure.

5.1 Economic Development

The opening paragraph in the Industrial Electricity Policy Review's "Rationale for Industrial Electricity Policy Review" discussion paper is worth restating.

> "Electricity policy and industrial development in B.C. have been and remain inextricably linked. Access to affordable and reliable electricity has been a cornerstone of the Province's industrial development since BC Hydro was formed and B.C.'s modern hydroelectric infrastructure was developed. The Province requires a clear, balanced and flexible industrial electricity policy framework as part of its toolkit to retain existing industry and encourage new industry to locate in B.C."

MABC has traditionally supported this view and advocated for a government role that may include use of its directive powers in certain cases. As noted in the Task Force discussion paper, the reliable and inexpensive electricity we benefit from today was made possible by the direct intervention of previous governments in the provincial electricity sector, through initiatives such as the 1960's Two Rivers Policy.

For a contemporary example of how the use of directive powers have benefited the mining industry the Task Force needs to look no further than the recently developed Tariff Supplement No. 37, which has facilitated the construction of the Northwest Transmission Line (NTL). Like the Two Rivers Policy, the NTL is a forward-looking infrastructure project that will provide the opportunity for clean, competitively priced line power to at least six identified advanced mining projects BC's Northwest. It will also provide line power to the community of Iskut, BC so they would no longer have to rely on unreliable and expensive diesel power which often fails, resulting in brown-outs to the service area.

Acknowledging the cumulative positive impacts of the Northwest Transmission Line, including short and long-term socio-economic benefits, the Government of BC chose to proceed with the project. For Imperial Metal's Red Chris project, this meant immediate initial benefits of accessing clean hydro-electric line power instead of the more expensive diesel fuel. It also provided certainty on construction time-lines and a connection-date, which is needed by project financers. While also recognizing the NTL will also attract new economic development in the Northwest and provide new mining opportunities in this mineral rich area of the province, MABC is supportive of the Government of BC's decision to use its directive powers to promote this project for the benefit of industry and all British Columbians.

5.2 Conservation

With regard to conservation policies, all mining operations want to conserve and reduce energy use because it decreases costs, even in a period of time where BC Hydro has a surplus of electricity. BC mining companies are fully engaged with BC Hydro Power Smart programs to reduce consumption. In fact, in 2011 BC mining operations were also able to reduce consumption by 18% through demand side management initiatives. While the MABC supports Power Smart conservation initiatives, we are interested in exploring ways BC Hydro can use surplus power to encourage economic development. BC Hydro is now predicting a surplus of electricity for the next 3 – 5 years (some estimate a 10 year surplus could be 5,200GWh).

5.3 Environmental Policy

BC mining companies operations are also supportive of policies that work with industry to reduce the environmental impact of their operations. In addition to the many company-specific environmental policies, provincial programs and regulations, and international initiatives (GRI, ISO, and many others), BC mining companies also subscribe to Towards Sustainable Mining (TSM), which includes indicators on environmental priorities such as greenhouse gas reduction and energy use. In making recommendations on transmission service and environmental policy related to electricity use the Task

Force should be aware of the unintended consequences of increasing rates, as discussed in the Environmental issue paper. Not only will natural gas be an alternative, but diesel fuel will remain an option for off-grid mining projects, resulting in impacts to environmental policy objectives. Maintaining our low-cost, line-power energy rates will ensure BC's clean energy is the energy of choice for mining operations in BC.

Reforms to reduce deferral accounts, improve the balance sheet of BC Hydro, and ease upward pressures on rates, need not come from the removal of the government of BC's directive powers as a tool to pursue provincial policy objectives. MABC believes that the BC government can strike the appropriate balance between the interests of taxpayers and ratepayers by establishing a clear policy framework to govern its use of directives and redirect income currently used for dividends and water rentals to offset the cost incurred by BC Hydro to implement new programs or build new infrastructure.

Recommendation #1: *The Task Force should recommend the creation of a new public policy framework to govern the use of directive powers to pursue economic, conservation or environmental policy objectives. Directives should be transparent, based on publically available information, and consistent with BC Hydro's cost-based rate framework and mandate to provide reliable power at low cost. To ease pressure on rate payers, regulations and legislation should be amended (Water Act; Financial Administration Act, BC Hydro Act,Clean Energy Act) to ensure BC Hydro is able to use a greater portion of rate revenues to pay for investments in new programs and new infrastructure instead of dividends and water rentals.*

6.0 Contribution Policy

Ratepayers and government should contribute to the cost of building new electricity infrastructure for British Columbia as both benefit from the resulting increased economic activity in the serviced area. In the case of a new mining operation, BC Hydro and government benefit from long-term, stable revenue from rates paid over the life of the mine. Ratepayers also benefit directly from increased economic activity in the area (direct, indirect and induced jobs supported by the mining operation) in addition to the benefits of social programs funded in whole or in part by mining taxes and royalties. In underserviced areas, electricity infrastructure upgrades benefit communities that would otherwise be reliant on diesel generation, such as the community of Iskut which will benefit from the Northwest Transmission Line.

In consideration of any changes to the current contribution policy to accommodate new large loads, the Task Force should seek to maintain fairness for ratepayers while ensuring flexibility to accommodate the growth of new projects. For example, in developing Tariff No. 37 for Northwest Transmission Line, BC Hydro incorporated provisions that allowed for contributions to be made after projects entered production. Such flexibility should be built into any contribution policy recommendations made by the Task Force. The Task Force should also consider the following points in recommending changes to contribution policy.

- While it is important that a contribution policy is fair and equally applied to all industries, any contribution policy should recognize the unique characteristics of the mining industry. Mines are developed where the ore is found and they cannot be moved closer to existing electricity infrastructure.
- Some mining companies have limited capability of funding a capital contribution during the initial stages of mine development. Any requirements for a letter of credit from a mining

company not yet in production would be akin to asking for cash, as many developing mines do not have operations and are fully reliant on financing from shareholders and banks. An expensive contribution policy would serve to deter investors.

- To accommodate the gradual build-up to production associated with mining projects under development, any contribution policy should include a transparent, graduated scale for the application, if any, of non-recoverable infrastructure costs.
- Certainty and predictability of costs, as well as timely availability of electricity are critical when mining projects are in the planning stage. Mining companies need predictable timelines for new infrastructure (including extensions, reinforcements and generation), yet the current policy results in significant delays. Mining operations seeking to expand operations are negatively impacted by slow, complex and costly connection policies. Under the current policy, it can take BC Hydro greater than a year to study the interconnection impacts of a project at costs of over $100,000 to the company. The Task Force should recommend that initial assessments are to be undertaken and completed in 90 days or less from request.

Recommendation #2*: The Task Force should recommend that it is in the interests of rate-payers ("rolled in" costs) and government (utility/government capital contribution) to contribute to electricity infrastructure expansion costs to ensure access to reliable and low-cost line power in every region of BC.*

Recommendation #3*: The Task Force should recommend that any contribution policy changes should take into account the fact that many mining companies cannot afford to make substantial contributions until they are in full production. Therefore, any infrastructure contribution policy should include a transparent, graduated scale for the application, if any, of non-recoverable infrastructure costs.*

Recommendation #4*: The Task Force should recommend that any contribution policy changes should include increased resources to reduce timelines for System Impact Studies, which are needed to determine the technical and cost implications to the BC Hydro system of a new load. Continuing or expanding the current wait times of 6-9 months would be detrimental to project schedules and could have a negative impact on investment decision considerations. The Task Force should recommend that initial assessments are to be undertaken and completed in 90 days or less from request.*

7.0 Conclusion

There are over 30 potential mining projects that could be developed in BC over the next ten years, representing a $30 billion investment. The province's mineral potential includes vast reserves of steel-making and thermal coal and metals such as copper, gold and molybdenum which continue to be in high demand for markets around the world, especially in Asia. Our sector has led the economic recovery in BC with expanding production levels and the potential opening of major new mines in every region in British Columbia, injecting upwards of $6 billion in private sector investment and the creation of thousands of new jobs. The mining sector has the opportunity to lead BC's economic recovery as long as we maintain our competitive advantage. By maintaining accessible, reliable and competitively-priced line power for mining operations in all regions of BC the potential of BC's mining sector can be realized.