

Transmission Service and Provincial Environmental Policy

Issue

The current industrial electricity policy and regulatory framework may be inconsistent with Provincial environmental policy objectives including those that support greenhouse gas (GHG) emissions reductions and the use of clean and renewable resources for electricity generation.

Background

Environmental impacts have increasingly become key considerations in Government economic development decision-making. Government strives to balance the economic benefits of new and existing investment with sustainability, impact on protected areas and greenhouse gas (GHG) mitigation amongst other potential adverse environmental affects. These considerations are embedded in to Government's electricity policy.

The 2007 *Greenhouse Gas Reductions Target Act* legislated targets for BC to reduce its carbon emissions. The 2007 Energy Plan (Energy Plan) committed that all new fossil-fuel based generation (except self or off-grid generation) would need to offset or sequester their GHGs. The Energy Plan also committed BC Hydro to ensuring at least 90% of its generation came from "clean" (non fossil-fuel) resources. BC Hydro was also required to meet 50 percent of its incremental demand from conservation by 2020.

The 2010 *Clean Energy Act* (CE Act) includes 16 Provincial Energy Objectives (PEOs), many of which support Government's environmental policy objectives. The CE Act increased the clean energy target to 93 percent and the conservation target to 66 percent. The CE Act also bound BC Hydro to the legislated GHG reduction targets, encouraged fuel switching to lower carbon fuels (electrification), foster innovative technologies that support energy conservation and foster the use of "clean" energy resources.

The CE Act also included a provision to prohibit the construction of large hydroelectric projects after the Site C Dam is built. It also included a consequential amendment to the *Environmental Assessment Act* that required Environmental Assessment Certificate reviews to explicitly consider the cumulative effects of projects. BC Hydro also considered the environmental footprint (e.g., land-based impacts, water-based impacts, air contaminants, GHG emissions, etc.) of different resource options as it developed its draft Integrated Resource Plan mandated by the CE Act.

Discussion

BC Hydro's rates are expected to increase in the near to medium term in order to support reinvestment in existing generation and transmission assets. These anticipated rate increases,

combined with low market prices in the medium term, may prompt industrial customers to explore alternative sources of electricity supply such as self-generation and retail access.

Incremental self-generation will likely be either gas-fired single cycle turbine (SCT) combined cycle gas turbine (CCGT) or direct drive. Policy Action 18 of the 2007 Energy Plan committed that only grid-connected electricity generation would be subject to net-zero GHG emission standards. None of these generation technologies would be covered by the proposed regulatory framework (currently not in force) provided they remained off-grid even though gas-fired generation is not consistent with BC's overarching goal to decarbonise the economy.

The policy aspects of retail access are addressed in a different issue paper (See Retail Access). Electricity purchases from the market would be a mix of "clean" and fossil-fuel energy. Market purchases imported in to BC via a third party do not count against the purchaser's emissions. Further, the purchaser is not required to pay the carbon tax on those purchases because they did not occur in BC.

BC Hydro must comply with the PEOs under the CE Act. This is not the case for other electricity generators in BC or those that acquire energy from the market. This raises the question of whether the current regulatory regime is comprehensive. It also raises the question of why Government holds BC Hydro to a higher environmental standard than other generators when doing so increases costs to its ratepayers.