City of Richmond

Report to Committee

To:	General Purposes Committee	**Date:**	March 17, 2023
From:	Peter Russell, MCIP, RPP Director, Sustainability and District Energy	**File:**	10-6000-00/Vol 01
Re:	**Changes in Provincial Legislation Needed to Address Gas Utilities in British Columbia**		

Staff Recommendation

1. That, as described in the report titled 'Changes in Provincial Legislation Needed to Address Gas Utilities in British Columbia' from the Director, Sustainability & District Energy, dated March 17, 2023:
   a) Letters be sent to the Premier, the Minister of Municipal Affairs, the Minister of Environment and Climate Change Strategy, the Minister of Energy, Mines and Low Carbon Innovation and to local Members of the Legislative Assembly, asking the Government of British Columbia to
      i. reform the British Columbia Utilities Commission in the context of a changing climate as noted in the report;
      ii. urgently enact legislation that regulates greenhouse gas emissions from gas utilities; and
   b) Letters be sent to Metro Vancouver, Metro Vancouver member local governments, the City of Victoria and the District of Saanich requesting their support by sending letters to the Office of the Premier, the Minister of Municipal Affairs, the Minister of Environment and Climate Change Strategy and the Minister of Energy, Mines and Low Carbon Innovation accordingly.

Peter Russell
Director, Sustainability and District Energy
(604-276-4130)

Att. 3

REPORT CONCURRENCE		
ROUTED TO:	**CONCURRENCE**	**CONCURRENCE OF GENERAL MANAGER**
Law	☑	
SENIOR STAFF REPORT REVIEW	**INITIALS:**	**APPROVED BY CAO**

Staff Report

Origin

Council adopted the Community Energy & Emission Plan 2050 (CEEP) in February 2022, which emphasized that advocacy, alongside regulation, education, partnerships and the provision of infrastructure and incentives, is an essential tool for achieving the City's greenhouse gas (GHG) 2030 and 2050 emission reduction targets. In this report, it is recommended that the City ask the Government of British Columbia (Province) to take swift action to regulate gas utilities, as committed in the Province's CleanBC plan. This report also recommends that the Province take action to reform the British Columbia Utilities Commission (BCUC) to restore public confidence and to revise its mandate in the context of the Province's GHG reduction targets and.

Related to the above, Council endorsed the call for a Global Fossil Fuel Non-Proliferation Treaty in May 2022, and endorsed a Union of British Columbian Municipalities (UBCM) resolution asking the Province to do the same. The resolution additionally asked the Province to implement a GHG reduction cap on gas utilities. The resolution was not endorsed by the UBCM membership but staff observed that there was a vigorous debate on the matter at the 2022 annual convention.

Finally, on March 14, 2023, the Province announced the launch of a new energy action framework in the context of approval requirements for LNG export facilities. The announcement noted that the Province will '*put in place a regulatory emissions cap for the oil and gas industry to ensure B.C. meets its 2030 emissions-reduction target for the sector*' and '*create a BC Hydro task force to accelerate the electrification of B.C.'s economy by powering more homes, businesses and industries with renewable electricity*'. The recommendations in this report are consistent with these directions but also further expands on how the BCUC can be reformed to support the clean energy transition.

This report supports Council's Strategic Plan 2022-2026 Focus Area #1 Proactive in Stakeholder and Civic Engagement:

> *Proactive stakeholder and civic engagement to foster understanding and involvement and advance Richmond's interests.*
>
> *1.1 Continue fostering effective and strategic relationships with other levels of government and Indigenous communities.*

This report supports Council's Strategic Plan 2022-2026 Focus Area #5 A Leader in Environmental Sustainability:

> *Leadership in environmental sustainability through innovative, sustainable and proactive solutions that mitigate climate change and other environmental impacts.*
>
> *5.1 Continue to demonstrate leadership in proactive climate action and environmental sustainability.*

Findings of Fact

Methane is a greenhouse gas with a global warming potential 28 times that of carbon dioxide, when impacts are compared over a 100-year period.[1] Conventional natural gas is 95% methane, sourced from plant material that was buried over the past 540 million years and chemically transformed into this fossil fuel through heat, pressure and time. Renewable Natural Gas (RNG) is also methane but it is generated through the anaerobic digestion of organic wastes, such as sewage sludge, food waste, and yard waste, that would have otherwise released methane and carbon dioxide to the atmosphere through decomposition within a conventional landfill. RNG can displace fossil methane without further increases in atmospheric concentrations of methane or carbon dioxide. Renewable Gas (RG) includes RNG as well as other potentially low-carbon gases such as hydrogen, which may be derived from fossil fuels with carbon capture, biomass, or green electricity. This report highlights concerns related natural gas, RNG and hydrogen.

Analysis

This report brings together a number of policy and regulatory concerns to light and makes connections as the report progresses. To support readability, the content is organized under the follow section headings:

- Ongoing BCUC and Court of Appeal Proceedings
- The Case for Expedited Regulation of Gas Utilities in BC
- Best Regulatory Practices and Utility Responses
- Urgent Need for Provincial Policy and Review of BCUC's Related Mandate

Ongoing BCUC and Court of Appeal Proceedings

The BCUC is an independent regulatory tribunal of the Government of British Columbia. The BCUC is primarily governed by the Utilities Commission Act. The City is participating or monitoring the following BC Utilities Commission proceedings, based on the rationale below:

- **FortisBC Revised Renewable Gas Program:** FortisBC recognizes that RNG is not a cost-competitive low-carbon solution, so they are proposing to provide new construction with 100% RNG, with additional costs paid for by existing ratepayers who would receive a lower percentage of RNG in their own natural gas supply. The subsidy aggregates to over $750 million over an eight year period from 2024 through 2032, expressed in real dollar terms in 2022 dollars.[2] The use of RNG can be positive and supports circular economy outcomes; RNG is currently being harvested at the Lulu Island Waste Water Treatment plant in which the City purchases RNG credits in order to offset natural gas use at select City facilities for a portion of their annual energy consumption. As active Interveners in this proceeding, staff intend to argue against FortisBC's proposed allocation of 100% RNG in new residential construction on the grounds that existing ratepayers should not be subsidizing new ratepayers at such high levels. Staff will further argue that the highest and best use of this scarce resource is in existing buildings where full

[1] Methane has a much higher GWP of 84-87 when measured over a 20-year period, but breaks down relatively quickly in the atmosphere, resulting in the lower 100-year value.
[2] https://docs.bcuc.com/Documents/Proceedings/2022/DOC_69044_C7-5-CoV-Intervener-Evidence.pdf, page 26.

electrification is not economically feasible. Ultimately, RNG should be used to reduce natural gas use for existing ratepayers and not for the expansion of gas infrastructure. The City is working with other local government Interveners in this proceeding including Metro Vancouver, the cities of Vancouver, Surrey and Victoria and the districts of North Vancouver and Saanich.

- **FortisBC Long-Term Gas Resource Plan:** FortisBC is seeking approval for its vision of continued system growth with an increased overall use of gaseous fuels – including natural gas, augmented by RNG, hydrogen and other fuels. Much of the fuel used would be conventional natural gas to which the "attributes" of low-carbon fuel are transferred. Most of the actual RNG and other low-carbon fuels would be generated in other provinces or the United States, and most of this supply would not be physically transferred to BC for use. Rather, offsets, similar to carbon credits, are transferred from out-of-province and international RNG suppliers. As active Interveners, staff are currently requesting more information from FortisBC regarding current and anticipated RNG agreements and the viability of using of other gases, such as hydrogen in their distribution network. Staff are also concerned that FortisBC's long term gas demand projections do not take into consideration the impact of energy efficiency and carbon reduction standards for cities participating in the BC Energy Step Code and those anticipating to adopt the newly released Zero Carbon Step Code;

- **BCUC Inquiry into Regulation of Municipal Energy Utilities:** The BCUC continues to inquire into issues related to ownership structures and operational arrangements of utilities affiliated with municipalities and regional districts in order to determine whether the BCUC has a mandate to regulate these entities. The City is seeking leave from the Court of Appeal to appeal and quash the BCUC's Stage 1 Inquiry report which concluded that wholly-owned municipal corporations fall under BCUC regulation;

- **BCUC Inquiry into Regulation of Municipal Energy Utilities:** The BCUC continues to inquire into issues related to ownership structures and operational arrangements of utilities affiliated with municipalities and regional districts in order to determine whether the BCUC has a mandate to regulate these entities. The City is seeking leave to appeal the BCUC's Stage 1 Inquiry report which concluded that wholly-owned municipal corporations fall under BCUC regulation;

- **BCUC Inquiry into Hydrogen Energy Services:** BCUC is inquiring into the appropriate regulation of hydrogen in different sectors. Staff note that the applicability of hydrogen is not defined in provincial policy and the findings in this inquiry could be used as *defacto* policy in the absence of policy direction from the Province. This inquiry is a good example of the BCUC effectively setting policy within a policy vacuum created by provincial government inaction; and,

- **City of Richmond v. the BCUC and FortisBC Energy Inc. (Court of Appeal)**: The City has been granted leave to appeal the decision of the BCUC in relation to FortisBC natural gas pipeline relocations in City highways in Burkeville that were necessary to accommodate City infrastructure projects. The BCUC imposed a term which the City

maintains it had no jurisdiction to impose that limits the City's ability to sue and recover damages from Fortis. Recognizing the importance of this issue, the Court of Appeal granted the City leave. The decision of the Court of Appeal is attached as Attachment 1 to this report.

The Case for Expedited Regulation of Gas Utilities in BC

The Province's *CleanBC Roadmap to 2030* highlights that *'local governments play a vital role in meeting provincial climate targets. Along with directly controlling emissions from their own facilities, operations and vehicle fleets, municipalities and regional districts have the capacity to influence about 50% of our GHG emissions through decisions on land use, transportation and infrastructure that affect where people live and work, how they get around, and how their communities grow and change with time. This puts local governments on the front lines of climate action, where all these policies converge.'*[3]

In support of the above, the Province has provided local governments with a number of important tools for achieving GHG emission reductions at the local level, including: the opt-in Energy Step Code for energy efficiency in 2017; increased funding through the Local Government Climate Action Plan in 2022; and most recently, the opt-in Zero Carbon Step Code, adopted into the BC Building Code in February 2023.[4]

Despite these advances, the Province has yet to implement key measures that will determine whether or not Richmond and the Province can fully achieve their respective 2030 and 2050 GHG emission reduction targets. Of particular concern is Province's delayed and piecemeal implementation of specific climate action measures related to the gas sector. The result is a policy vacuum that has enabled provincial agencies and industry to initiate projects that threaten, impede or prevent effective climate action by local governments.

The BCUC has become an agency of particular concern in this context. Staff have the following concerns regarding the wide scope and potential for *de facto* policy-making within current BCUC proceedings, specifically because of their potential to restrict the ability of provincial and local governments to achieve GHG reductions:

- **Feasible North American RNG Supplies**: Because of the finite sources of RNG, research indicates that feasible North American RNG supplies are limited to 5- 20% of existing North American natural gas consumption. The allocation of highly-subsidized 100% RNG in new residential construction as proposed by FortisBC, where electrification is most cost-effective, is not the highest and best use of this scarce resource. While FortisBC has been quick to recognize the value of RNG, and has secured significant supplies from around North America, it is anticipated that once these initial supply contracts expire, the amount of affordable RNG available to FortisBC will decline dramatically as other jurisdictions compete for this limited resource, ultimately leaving ratepayers at risk;

[3] https://www2.gov.bc.ca/assets/gov/environment/climate-change/action/cleanbc/cleanbc_roadmap_2030.pdf p.44
[4] Richmond Council and staff were vocal advocates for all of these advancements.

- **Cost Competitiveness of RNG**: At present, using unsubsidized RNG in boilers in new construction is not cost-competitive with electric heat pumps and/or with district energy services. Further, heat pumps and Richmond's district energy utilities also provide cooling services, providing resilience for new buildings in the face of climate change. FortisBC's proposed Revised Renewable Gas Program relies on existing natural gas ratepayers to subsidize RNG consumption in new construction to the tune of $750M from 2024 through 2032, enabling the utility to keep increasing overall demand for the fuels it provides. Under the new Zero Carbon Step Code, new construction is already required to reduce GHG emissions so this subsidy has the potential to divert new buildings away from heat pumps, leading to an inefficient use of scarce RNG resources;

- **Overreliance on Hydrogen Gases to Reduce GHGs:** Low-carbon hydrogen is currently not a viable or cost-effective approach for heating buildings. This is validated in over three dozen independent international studies of hydrogen for heating. Producing zero-carbon hydrogen from green electricity for heating could require up to six times as much electricity as using that same electricity directly in a heat pump. In addition, research indicates that existing natural gas infrastructure cannot safely convey a gaseous fuel blend containing more than a 20% hydrogen. At a 20% hydrogen mix, GHG emissions reductions would be less than 7% relative to natural gas. At higher concentrations of hydrogen, major upgrades would be required both to the existing gas distribution network and to end-use devices, including household equipment, to convey the fuel.

- **Health Considerations**: Leakage of methane and hydrogen from gas grids, and end use devices within homes and building is also a growing health and environmental concern, whether these are produced from green energy sources or not.

Best Regulatory Practices and Utility Responses

Research indicates that other jurisdictions have recognized that building heating must largely transition away from gas. There is an emerging consensus that while gas utilities will not disappear, these networks will likely be trimmed and reshaped over time to provide heat and process energy to those existing users that are the most challenging to electrify due to cost and/or location considerations. Given the above concerns, policymakers in the US and in Europe are taking steps to manage this transition to avoid further stranded investments and reduce the impacts on consumers, with policies such as (see Attachment 2 for examples):

a) Prioritizing "non-pipe alternatives" over sustaining, upgrading or expanding gas grids. This approach seeks to implement deep retrofit and fuel-switching programs within defined areas so as to enable the decommissioning of less cost-effective portions of the gas grid, reducing overall systems operations costs.

b) Limiting or banning gas connections for new construction, as has already been done in a number of US cities and parts of Europe;

c) Requiring accelerated depreciation rates for new methane-based fuel infrastructure, reflecting the risk that these assets will need to be retired early and signaling clearly to

gas utilities that they will bear risk for their investments, as is already being done in the UK and Australia;

d) Establishing local "heat planning" processes to coordinate and manage the optimal transition away from gas and towards alternative heating solutions including electrification and low carbon district energy. This could also include consideration of strategic investments to upgrade portions of the gas grid to hydrogen (i.e. to individual users or to supply peaking energy intense users). Staff completed such heat mapping to as part of the City Centre District Energy Utility due diligence work.

Policymakers are aware of the potential for RNG and hydrogen and have determined that these low-carbon gases can play a crucial, but necessarily limited role in decarbonizing BC's economy. When supply limitations, higher costs inherent with RNG and hydrogen fuels are considered, together with the risks of reverting to the use of natural gas in the wake of supply shortfalls, makes it imperative that demand for building heating be transitioned from methane-based fuels to near-zero GHG electricity wherever it is practical to do so. The City is a leader in this regard: building electrification policies in the BC Energy Step Code, district energy services and forthcoming building retrofit initiatives together will support a gas grid transition that will minimize costs and stranded investments compared to an uncoordinated and ad hoc approach.

Urgent Need for Provincial Policy and Review of BCUC's Related Mandate

BC is lagging in addressing the above noted issues. An ongoing policy vacuum at the provincial government level is resulting in continued demand for gas and expansion of gas grids, without any clear and cost-effective pathway to decarbonize existing demand and infrastructure. Natural gas utilities in BC continue to operate within BCUC's utility regulation regime that guarantees profits as a function of investments in infrastructure expansion. Natural gas utilities in BC have continued with a business-as-usual approach without any credible path to full decarbonization that is cost-competitive with significant electrification. For context, FortisBC will invest $666 million in new expansion infrastructure into service in 2023, equivalent to 9% of their total existing infrastructure.

Regarding the utility regulator, the BCUC allows gas utilities to subsidize service extensions, and approves infrastructure expansion plans on past rates of demand growth rather than the projected reductions in energy demand produced by high-performance buildings now being built to BC Energy Step Code requirements. Continuing expansion of gas infrastructure heightens the risk of stranded assets and imposes greater costs and risks for ratepayers, particularly low-income households with fewer options to avoid these costs in future.

As noted above, the long-term potential supply of RNG and alternative gases available for BC residents is limited to a fraction of current demand for natural gas. FortisBC has secured a number supply contracts before many other utilities had entered the market. These contracts are, however, limited in volume and will expire before 2050, placing homeowners and businesses at risk. Further, many of the supply contracts that FortisBC has secured were from sources outside of BC. Most of these fuels will not actually be consumed within BC, foregoing provincial economic and employment opportunities. Instead, FortisBC will transfer the "RNG" attributes

from the producer, similar to carbon credits. By contrast, current provincial energy policy stipulates that all additional electricity supply, virtually all of which is to come from low-carbon technologies, will have to be generated within BC. According to BC Hydro's 2021 assessment of new generation resources, most of this new supply will come from wind farms, solar arrays, small hydro facilities, and biomass plants, at locations throughout the province, powering local jobs and economic activity.

There are also risks for the Province. BC does not have a viable pathway to decarbonize existing demand using natural gas, let alone any increased demand resulting from new development, as would occur if the BCUC approves FortisBC's current application to provide new customers with RNG.

The BCUC is not well-suited to lead the transition of the heating sector, let alone reconfigure energy regulation in the context of the climate crisis. The BCUC was not designed to do so but in the context of a provincial policy vacuum in the regulation of GHGs from gas utilities, this is what is occurring. Regulatory commissions, such as the BCUC, are meant to take a passive approach by assessing proposals by utilities within a relatively narrow set of issues. The scale, complexity and rapidity of the energy transition requires proactive provincial regulation to address emerging issues and cultivate new solutions rather than manage incremental changes. The ongoing provincial policy vacuum on these matters has left the BCUC as the *defacto* lead entity, establishing the Province's energy policies despite its lack of a elected mandate to make these strategic policy determinations.

The BCUC as a *defacto* lead entity is even more concerning given that the BCUC is a captured regulator whose primary objective is advancing the commercial interests of FortisBC. Both the Deputy Chair of the BCUC and a sitting Commissioner are former senior executives of FortisBC. The legitimacy of the BCUC as a regulator depends upon its independence and a clear separation of the BCUC from those it regulates. Public confidence, therefore, demands that the appointments to the BCUC do not include former FortisBC executives. Filling the ranks of the BCUC at its highest levels with former long serving executives and senior employees of FortisBC, who are then tasked to regulate and investigate FortisBC's past and present activities that have resulted from the implementation of corporate policies and procedures which they played a role in establishing, is the opposite of regulatory independence and separation. Moreover, these corporate policies and procedures, combined with BCUC advancing the commercial interests of FortisBC under the guise of ratepayer protection, not only frustrate the GHG reduction goals, but have also resulted in a history of the BCUC saddling municipalities with onerous terms including bearing 100% of the costs of natural gas infrastructure relocations that are necessary to accommodate municipal infrastructure within municipal highways that FortisBC occupies without paying any compensation to municipalities. In effect, the BCUC has forced municipalities to subsidize the shareholders of FortisBC at the expense of the public purse and to the detriment of GHG reduction goals of municipalities and the Province.

A final point and concern is the consideration of local governments in BCUC proceedings. The City should be concerned when an agency of the province, as is the case for the BCUC, independently acts to limit the Provincially-granted jurisdiction of local governments as was the case for BCUC's Inquiry into Regulation of Municipal Energy Utilities. The BCUC does not

have a mandate to establish policy and its regulatory mandate is limited to certain considerations. Ultimately, many aspects of the energy transition will be carried out by local governments and the BCUC does not have the purview of a provincial regulator.

For the above reasons, Attachment 3 includes a set of requests to be sent to the Premier's Office and other Ministers, asking that the Province take urgent action consistent with the Province's commitment to achieve deep GHG emission reductions. More specifically, these requests call upon the Province to:

1) **Bring forward legislation implementing the 2030 GHG cap on the gas sector** without further delay as committed to in the Province's CleanBC plan and recently reaffirmed by the Premier on March 14, 2023 with the launch of a new energy action framework;
2) **Launch an independent gas utility planning exercise** that plots a course for addressing an expected decline in throughput of gas grids and the transition of gas grids towards transporting RNG and hydrogen to sectors and/or locations that are hard to decarbonize, leading to the increased role of electrification in building heating and transport;
3) **Reject the use of RNG and hydrogen in new construction** to meet GHG limits in the Step Code, so that the limited and costly supply of these alternative fuels can be put to highest and best uses;
4) **Develop policies to assess, certify and track the GHG intensity** of RNG, hydrogen and other alternative gases;
5) **Reform the BCUC in the context of a changing climate to** consider, quantify and minimize the potential costs of lock-in and stranded investments when evaluating capital plans, rate setting and extension policies for gas utilities. This direction should also include greater consideration of non-pipe alternatives to marginal investments in gas grids as well as consideration of strategic opportunities to prune gas grids in conjunction with targeted electrification strategies. Finally, proceedings should be guided by a framework or set of guidelines that do not impact or limit the jurisdiction and authority of local governments without provincial direction;
6) **Bring forward legislation and other regulatory changes specific to the heat transition** that, among other issues, establishes a distinct BCUC regulatory framework for public district energy systems more aligned with their small scale and localized nature; and,
7) **Require that a minimum percentage of low-carbon methane-based fuels** (i.e. up to 100%) be produced within BC.

Attachment 3 includes further information related to the above concerns based on information and recommendation in the Climate Solutions Council's (CSC) 2022 Report. The CSC is an advisory group with a legislated mandate under the Climate Change Accountability Act to advise the Minister of Environment and Climate Change Strategy regarding plans and actions to achieve climate targets and reduce emissions and related matters.

Financial Impact

None.

Conclusion

The report highlights and makes a case for the urgent need to implement Provincial legislation that regulates GHG emissions from gas utilities, as committed in the Province's CleanBC Plan and recently reaffirmed by the Premier on March 14, 2023. The report also details ways in which the BCUC can be reformed to better consider GHG reductions from gas utilities. In support of the recommendations, the report highlights a number of international best practices for how gas utilities are being regulated in the context of climate change. Given the importance of the issues highlighted in the report, a recommendation is also included asking Metro Vancouver, other Metro Vancouver local governments, the District of Saanich and the City of Victoria to support the recommendations in the report and send their own support to the Premier, Ministers and their local MLAs.

Peter Russell, MCIP, RPP
Director, Sustainability and District Energy
(604-276-4130)

Att. 1: Decision of the Court of Appeal Richmond (City) v. British Columbia (Utilities Commission)
2: Best Utility Regulatory Practices
3: City of Richmond Requests for the Government of British Columbia

COURT OF APPEAL FOR BRITISH COLUMBIA

Citation: *Richmond (City) v. British Columbia (Utilities Commission)*, 2022 BCCA 348

Date: 20221013
Docket: CA48336

Between:

City of Richmond

Appellant
(Applicant)

And

British Columbia Utilities Commission

Respondent
(Administrative Tribunal)

And

FortisBC Energy Inc.

Respondent
(Respondent)

Before: The Honourable Madam Justice Saunders
(In Chambers)

On appeal from: A decision of the British Columbia Utilities Commission, dated May 9, 2022 (Order Number G-123-22).

Oral Reasons for Judgment

Counsel for the Appellant:	T. Kruger
Counsel for the Respondent, British Columbia Utilities Commission:	J.M. Coady, K.C. T. Shoranick
Counsel for the Respondent, FortisBC Energy Inc.:	D.G. Cowper, K.C. M.T. Ghikas T. Ahmed
Place and Date of Hearing:	Vancouver, British Columbia October 6, 2022
Place and Date of Judgment:	Vancouver, British Columbia October 13, 2022

Summary:

The application is for leave to appeal a decision of the British Columbia Utilities Commission taking jurisdiction to limit liability as between the parties. Held: The jurisdictional issue is sufficiently arguable as to meet the criteria of Queens Plate Dev. Ltd. v. Vancouver Assessor, Area 09 (1987), 16 B.C.L.R. (2d) 104. Leave to appeal is granted.

[1] **SAUNDERS J.A.**: The City of Richmond seeks leave to appeal a decision of the British Columbia Utilities Commission acting under the *Utilities Commission Act*, R.S.B.C. 1996, c. 473, on issues between the City and FortisBC Energy Inc.

[2] The issues of appeals to this court are governed by s. 101(1)(b) of the *Act*, which requires leave to appeal:

> 101 (1) An appeal lies from
>
> ...
>
> (b) any other decision or order of the commission to the Court of Appeal, with leave of a justice of that court.

[3] The application for leave to appeal, in turn, is guided by the factors listed in *Queens Plate Dev. Ltd. v. Vancouver Assessor, Area 09* (1987), 16 B.C.L.R. (2d) 104. For purposes of this application, the key factors are Mr. Justice Taggart's points: (a), (b)(i), and (d):

> (a) whether the proposed appeal raises a question of general importance as to the extent of jurisdiction of the tribunal appealed from (*Chevron Can. Ltd. v. Vancouver Assessor, Area 09,* [1986] B.C.W.L.D. 2210, No. CA005532, 17th April 1986 (not yet reported));
>
> (b) whether the appeal is limited to questions of law involving:
>
> (i) the application of statutory provisions (*Allard Contr. Ltd. v. Coquitlam Assessor, Area 12,* [1986] B.C.W.L.D. 2601, No. CA003122, 29th March 1985 (not yet reported));
>
> ...
>
> (d) whether there is some prospect of the appeal succeeding on its merits (*Clarke v. Supt. of Brokers* (1985), 67 B.C.L.R. 294, 23 D.L.R. (4th) 315 (C.A.), and *Re Wasmuth* (1984), 58 B.C.L.R. 17 (C.A.)); although there is no need for a justice before whom leave is argued to be convinced of the merits of the appeal, as long as there are substantial questions to be argued;

[4] In the impugned decision, the Commission declined to reconsider its earlier affirmation of jurisdiction under s. 32 of the *Act* to impose an order limiting the

liability of Fortis to the City, in tort, for loss resulting from Fortis' work directed by the Commission to be performed.

[5] The work concerned offsetting gas mains to enable completion by the City of drainage, sewer, water main and sanitary sewer upgrades in the Burkeville area. The question sought to be raised on appeal is whether ss. 32 and 36 of the *Act* give the jurisdiction propounded by the Commission. Relevant is also s. 92.

[6] Fortis resists the application. The question of liability, it says, is intimately tied to establishment of rates and the recent decision of this court in *Coquitlam (City) v. British Columbia (Utilities Commission)*, 2021 BCCA 336, applies, with the result that the Commission has jurisdiction to make the impugned order.

[7] While the proposed appeal raises a question of jurisdiction, and is limited to a question of law involving the application of the *Act*, Fortis says it cannot meet the merits threshold as the City cannot succeed on the authority of *Coquitlam*. In the vernacular, Fortis says the appeal is a dead duck. In support of that submission, Fortis also refers to *ATCO Gas & Pipelines Ltd. v. Alberta (Energy & Utilities Board)*, 2006 SCC 4.

[8] The City contests Fortis' view of *Coquitlam*. It says *Coquitlam* addressed the jurisdiction of the Commission to order decommissioning and abandonment of a line. That circumstance, says the City, is materially different from orders shielding Fortis from liability.

[9] It seems to me that the application of *Coquitlam* to the circumstances here is sufficiently questionable that the City should have the opportunity to advance its position on that question fully before a division of this court.

[10] Going further into matters that may engage this court, should a division conclude that *Coquitlam* does not answer the jurisdictional question, the questions of statutory interpretation will follow. Those questions, absent *Coquitlam*, have substance, are important, and have the degree of merit required for the granting of leave to appeal.

[11] The application of the City is allowed.

"The Honourable Madam Justice Saunders"

Best Utility Regulatory Practices

a) *Prioritizing "non-pipe alternatives" over sustaining, upgrading or expanding gas grids. This approach seeks to implement deep retrofit and fuel-switching programs within defined areas so as to enable the decommissioning of less cost-effective portions of the gas grid, reducing overall systems operations costs.*

California: On December 1, 2022, the California Public Utilities Commission (CPUC) adopted a new framework to comprehensively review utility natural gas infrastructure investments in order to help the state transition away from natural gas-fueled technologies and avoid stranded assets in the gas system.[5] Key elements of the decision:

- Utilities must seek CPUC approval of natural gas infrastructure projects of $75 million or more or those with significant air quality impacts.
- Utility applications must demonstrate the need for the project and provide information on projected financial impacts on customers and a summary of engagement with local communities likely to be impacted. Applications would also trigger a California Environmental Quality Act (CEQA) review by the CPUC.
- Emergency projects, routine repair and maintenance projects, and projects expected to be in service by January 1, 2024 are exempt from the new review process.
- To advance transparency in long-term gas system planning, the decision directs utilities to file annual reports detailing planned long-term infrastructure projects exceeding $50 million over the next 10 years. The reports must include a detailed description of the project, projected capital expenditures, cost drivers, and environmental implications.
- For projects planned to start within five years, utilities must provide information on non-pipeline alternatives, projected operational costs, and reliability benefits from the project.

This new framework is modeled on the CPUC's existing framework for review of significant electric infrastructure projects. Previously, all natural gas infrastructure projects were considered in utility General Rate Cases, where individual natural gas projects can get buried in the extensive applications without meaningful environmental or strategic reviews. The framework focusses on avoiding potentially stranded large incremental investments in gas grid infrastructure. It is not yet clear if this framework will be sufficient on its own to minimize stranded investments as there are also questions about the obligation to serve and minimizing safety issues during any transition.

Separately, the state is also beginning to confront the concept of tactical decommissioning of portions of the state's gas infrastructure, as a means of reducing the cost of operating and maintaining the gas grid and managing the transition. This has not yet been tested at scale. Instead, the state is undertaking pilot projects to fill knowledge gaps. In 2021 the CEC awarded two EPIC grants for consortia to conduct pilot projects of strategic pathways and analytics for tactical decommissioning of portions of the natural gas infrastructure within the service areas of Southern California Gas Company (SoCalGas) and Pacific Gas & Electric Company (PG&E).

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[5] The proposal voted on is available at docs.cpuc.ca.gov/PublishedDocs/Published/G000/M499/K396/499396103.PDF. Documents related to the proceeding are available at apps.cpuc.ca.gov/p/R2001007

These pilots are still in progress. The team for the pilot project in PG&E's service area includes East Bay Community Energy (EBCE), Energy and Environmental Economics (E3), and Gridworks. PG&E is assisting the team with technical insights into their gas and electric systems.[6] Elements of the pilot include:

- Develop a replicable framework to identify electrification opportunities that support the objective of gas system cost savings through tactical decommissioning.
- Engage local communities to share their perspectives and priorities related to building electrification and gas decommissioning in order to produce a community needs assessment.
- Identify up to three candidate pilot sites, including at least one within a disadvantaged community. Produce deployment plans for the recommended pilots, including a proposal for community stakeholder engagement.
- Conduct targeted education and outreach to stakeholders and policymakers within and beyond California to motivate action, including lessons learned at key milestones and final work products.

Northeastern US : National Grid, a natural gas distributor operating in New York, Massachusetts and Rhode Island, actively seeks non-pipeline alternatives (NPA) which would allow it to avoid or defer upgrades to the natural gas system. It has already completed several NPA projects and is seeking several new opportunities based on system needs[7]. Other gas utilities in New York state, including Con Edison and NYSEG, have established similar programs to defer major investments[8]. These initiatives seem to be largely driven by the companies themselves rather than by regulation. In general, the northeast US has an older natural gas network than B.C. with more need for major upgrades and replacements.

a. *Limiting or banning new gas connections, as has already been done in a number of US cities and parts of Europe;*

California: The updated state building code requires, as a baseline, the use of electric heat pumps for either space heating or DHW. Builders can forego installing a heat pump but face greater energy efficiency requirements as a result. This is expected to result in most homes constructed from 2023 onwards to have no gas grid connection[9]. Separately, several California communities have enacted bans on new gas grid connections for new construction within their boundaries.

Washington State: Updates to the state's building code mean that new multi-family residential and commercial construction will be required to have all-electric heating and DHW systems as of 2023[10]. Previously, individual municipalities in Washington had enacted similar policies.

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[6] https://gridworks.org/2022/06/tactical-gas-decommissioning-project-overview/
[7] https://www.nationalgridus.com/Business-Partners/Non-Pipeline-Alternatives/Third-Party-Opportunities
[8] https://info.aee.net/hubfs/Sarah%20S%20uploads/NPAs.pdf
[9] https://www.nrdc.org/media/2021/210811-0
[10] https://www.seattletimes.com/seattle-news/environment/wa-building-council-votes-to-require-heat-pumps-in-new-homes-and-apartments/

Quebec: As of 2023, oil-fired furnaces cannot be replaced with new fossil fuel-based heating systems in Quebec. This is expected to help shift existing oil-heated buildings to electrification[11].

b. Requiring accelerated depreciation rates for new methane-based fuel infrastructure, reflecting the risk that these assets will need to be retired early and signaling clearly to gas utilities that they will bear risk for their investments, for example in the UK and Australia;

California: As of early 2023, Pacific Gas & Electric has a rate application before the California Public Utilities Commission which includes accelerated depreciation for its gas distribution grid, driven in part by the possibility of the grid being rendered obsolete by California's Net Zero by 2045 commitment. The CPUC has yet to rule on this request[12].

UK: In 2011 the UK national regulator, Ofgem, established a new performance-based model to regulate network costs for gas and electricity, referred to as the RIIO model or Revenues = Incentives + Innovation + Output. One of the inputs to the model is an asset life and depreciation profile for gas and electricity utilities (both transmission and distribution segments). At the time, Ofgem established an asset life of 45 years for gas distribution but also uses a front-end loaded depreciation profile for these assets which is different from gas transmission and also electricity. This allocates a larger share of depreciation charges to the initial period of depreciation. The effect of this decision is that ~75% of new gas distribution assets are recovered in the first 22 years of use. For comparison, under straightline depreciation rates of 50 – 60 years typically seen for B.C., only 35 – 45% of the asset is recovered by Year 22. The increased depreciation means current ratepayers pay more of these assets affecting economic comparisons with alternatives and there is less chance of stranded assets being borne by a smaller and captive group of customers in future.

Australia: In 2021, the Australian Energy Regulator (AER) issued a decision allowing a gas distribution utility to include accelerated depreciation for rate setting purposes so as to reduce bill impacts on future customers due to future declines in gas demand[13]. Other Australian gas utilities have since proposed similar rate treatment.

d. Establishing local "heat planning" processes to coordinate and manage the optimal transition away from gas and towards alternative heating solutions including electrification and low carbon district energy. This could also include consideration of strategic investments to upgrade portions of the gas grid to hydrogen (i.e. to individual users or to supply peaking energy intense users). Staff completed such heat mapping to as part of the City Centre District Energy Utility due diligence work.

Denmark: Denmark pioneered the concept of top-down policies coupled with bottom-up power, which is often credited with the extensive and sustained growth of district energy in the country and rapid transition to renewables in heating. The 1979 *Danish Heat Supply Act* provided the

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[11] https://www.cbc.ca/news/canada/montreal/quebec-bans-oil-heating-1.6252420
[12] "Opening Brief on Depreciation of Pacific Gas and Electric Company (U39M)", CPUC Proceeding A2106021.
[13] "Final Decision – Evoenergy Access Arrangement 2021 to 2026, Overview April 2021". Australian Energy Regulator, pp. 37-39. https://www.aer.gov.au/system/files/AER%20-%20Final%20decision%20-%20Evoenergy%20access%20arrangement%202021-26%20-%20Overview%20-%20April%202021.pdf

legal framework for municipal heat plans and planning. Under the framework, municipalities are responsible for approving district energy projects, subject to national standards for feasibility which includes requirement for lifecycle costing, evaluation of both financial and non-financial considerations, common evaluation methodologies, and standardization of some common assumptions.

Others: While frameworks and requirements for local heat planning have existed for many years in Denmark, it is now showing up in other jurisdictions. Three examples where heating and cooling plans have recently become mandatory include: the State of Baden Württemberg in Germany (under its revised 2021 Heating Climate Protection Act); The Netherlands (under the 2019 Dutch National Climate Agreement); and Scotland (under the 2021 Heat Network Act and 2022 Local Heat and Energy Efficiency Strategies (LHEES) statutory order.[14] Some of these mandates allow municipalities to implement mandatory connection in district energy priority zones (for certain types of buildings and with conditions).

The European Commission has proposed updating its Energy Efficiency Directive to require Member States to make heating and cooling plans mandatory for municipalities above a threshold of 50,000 inhabitants. Building on the direction from the European Commission and also the experience of several states which already have mandatory heat planning (e.g. Baden Württemberg, above, and also Schleswig-Holstein), the federal government of Germany is planning to introduce a national mandate for municipal heat plans in cities over 10,000 to 20,000 inhabitants (thresholds will be determined by states). The obligation would be implemented by states (which regulate cities), but it would come with federal law to permit cities to request the necessary data from energy suppliers and others in preparing heat plans. These heat plans are to include an inventory analysis, an analysis of potential, target scenarios and an action strategy. It is expected heat plans will include, among other things, the creation of heat registers (including waste heat sources), the monitoring of heat network expansion, the decarbonization of existing heat networks, the securing of areas for energy generation and storage, and concepts refurbishing of public buildings.[15]

The UK (which is no longer subject to EU requirements after Brexit) has recently introduced national requirements for municipal heat zoning as part of its recent Energy Security Bill (see Appendix B). A pilot program for to test a heat zoning methodology is under way. A consultation is planned for later this year on the detail of regulations for heat network zoning. In early 2022, the UK government set up A Heat Network Zoning Pilot Program (HNZPP) to test a methodology for heat network zoning in ~28 English cities and towns of varying sizes. The results of the pilot program are expected in early 2023.[16]

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14 https://energy-cities.eu/wp-content/uploads/2022/06/Factsheet-1-Final-1.pdf

[15] https://www.bayern-innovativ.de/en/page/draft-law-on-municipal-heat-planning-by-the-end-of-the-year

[16] https://www.gov.uk/government/publications/heat-networks-zoning-pilot#:~:text=The%20zoning%20pilot%20aims%20to,mandating%20powers%20and%20market%20support

City of Richmond Requests of the Government of British Columbia

Summary of issues to be included in the letters to Government of BC elected officials, as listed in the report:

1) **Bring forward legislation implementing the 2030 GHG cap on the gas sector** without further delay as committed to in the Province's CleanBC plan and recently reaffirmed by the Premier on March 14, 2023 with the launch of a new energy action framework;
2) **Launch an independent gas utility planning exercise that plots a course for addressing an expected decline in throughput of gas grids** and the transition of gas grids towards transporting RNG and hydrogen to sectors and/or locations that are hard to decarbonize, consistent with the Province's 2030, 2040 and 2050 GHG emission reduction targets, all leading to the increased role of electrification in building heating and transport.
3) **Reject the use of RNG and hydrogen in new construction to meet GHG limits in the Step Code**, so that the limited and costly supply of these alternative fuels can be put to highest and best uses.
4) **Develop policies to assess, certify and track the GHG intensity of RNG, hydrogen and other alternative gases**.
5) **Reform the BCUC in the context of a changing climate to consider,** quantify and minimize the potential costs of lock-in and stranded investments when evaluating capital plans, rate setting and extension policies for gas utilities. This direction should also include greater consideration of non-pipe alternatives to marginal investments in gas grids as well as consideration of strategic opportunities to prune gas grids in conjunction with targeted electrification strategies. Finally, proceedings should be guided by a framework or set of guidelines that do not impact or limit the jurisdiction and authority of local governments without provincial direction;
6) **Bring forward legislation and other regulatory changes specific to the heat transition** that, among other issues, establishes a distinct BCUC regulatory framework for public district energy systems more aligned with their small scale and localized nature;
7) **Require that a minimum percentage of low-carbon methane-based fuels (i.e. up to 100%) be produced within BC**.

More information to be included as an attachment in the letters:

1) **Bring forward legislation implementing the 2030 GHG cap on the gas sector without further delay** as committed to in the Province's CleanBC plan and recently reaffirmed by the Premier on March 14, 2023 with the launch of a new energy action framework;

2) **Launch an independent gas utility planning exercise that plots a course for addressing an expected decline in throughput of gas grids** and the transition of gas grids towards transporting RNG and hydrogen to sectors and/or locations that are hard to

decarbonize, consistent with the Province's 2030, 2040 and 2050 GHG emission reduction targets, all leading to the increased role of electrification in building heating and transport.

3) **Reject the use of RNG and hydrogen in new construction to meet GHG limits in the Step Code, so that the limited and costly supply of these alternative fuels can be put to highest and best uses.** RNG volumes are very limited and RNG may be the only option for decarbonizing heavy industry and some portions of the transportation sector. There are affordable low-carbon alternatives for heating new buildings. Heating new buildings is not the highest and best use of limited RNG resources. In addition, prioritizing electric heat pumps, including district energy heat pump applications, over generating hydrogen gas from electricity is a more efficient use of BC's electricity resources. The Climate Solutions Council identifies these issues as *Opportunity #7: Electrifying our Economy and Communities* in their 2022 Annual Report.

4) **Develop policies to assess, certify and track the GHG intensity of RNG, hydrogen and other alternative gases** B.C. needs a robust and credible system for assessing the GHG intensity of renewable gases and ensuring these fuels do not contribute further to GHG emissions. Key issues include avoiding double-counting GHG credits and minimizing fugitive methane emissions.

5) **Reform the BCUC in the context of a changing climate to consider to:**
   - consider and minimize lock-in and stranded investment risks when evaluating capital plans, rate setting and extension policies for gas utilities including:
   - ensuring extension policies of gas utilities take into account reduced consumption and stringent GHG limits for new construction;
   - using different depreciation rates and allowable returns on equity for new investments commensurate with the uncertainty over useful life and stranding risk;
   - ensuring non-pipe alternatives are adequately considered as alternatives to maintaining and/or upgrading gas infrastructure, including local decommissioning of gas infrastructure in favour of electrification or district energy; and
   - considering provincial policy and credible independent studies into the future role of hydrogen when considering hydrogen or hydrogen-ready infrastructure
   - proceedings should be guided by a framework or set of guidelines that do not impact or limit the jurisdiction and authority of local governments without provincial direction.

   The Climate Solutions Council identifies these issues as *Opportunity #7: Electrifying our Economy and Communities* in their 2022 Annual Report, asking the Province to identify an appropriate role for the BCUC in supporting BC's clean energy transition.

6) **Bring forward legislation and other regulatory changes specific to the heat transition similar to recent initiatives implemented or proposed in the UK, Netherlands, Germany, France and New York State, among others, which would among other things:**
   - recognize the unique role for district energy systems in the energy transition;

- establish a distinct BCUC regulatory framework for public district energy systems that is more aligned with their small scale and localized nature;
- provide incentives and resources to support the development of local heat plans to coordinate and optimize incremental investments in gas, electric and district energy infrastructure, as well as spatially targeted retrofit and fuel switching programs and incentives.
- provide incentives and fairer tax treatment for low-carbon district energy systems, including addressing the unequal burden from property taxes and PST on these systems

7) **Require that a minimum percentage of low-carbon methane-based fuels (i.e. up to 100%) be produced within BC.** Currently there is no requirement that low-carbon gases be produced and procured within B.C. and as a result, FortisBC has sought out low-cost supply in other provinces and in the US. This may help reduce renewable gas prices but it also limits the ability of B.C. workers to benefit from investments in new low-carbon gas production. Procuring out-of-Province gases is a risk because since they are limited resources and it is anticipated that net-zero state- or federal-level commitments in other jurisdictions are likely to affect long-term supply and prices for consumers in B.C. Mandating that a minimum share of gas utilities' low-carbon gases be produced within B.C. would also drive employment opportunities in B.C. and manage the impacts of the energy transition on B.C.'s workforce. The Climate Solutions Council identifies these issues as *Opportunity #8: Minimizing Reliance on Offsets* in their 2022 Annual Report.