

April 24, 2013

Ms. Erica Hamilton  
Commission Secretary  
British Columbia Utilities Commission  
Sixth Floor - 900 Howe Street  
Vancouver, BC V6Z 2N3

**Via email: [Commission.secretary@bcuc.com](mailto:Commission.secretary@bcuc.com)**

Dear Ms. Hamilton:

**Re: FortisBC Inc. (FortisBC) – Application for a Certificate of Public Convenience and Necessity for the Advanced Metering Infrastructure Project (AMI Project)**

This is the Final Submission of the Nelson Creston Green Party Constituency Association with respect to the above-noted matter.

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**Argument Number One:**

Regarding Certificates of Public Convenience and Necessity, the **Utilities Commission Act, Section 45 (8)** states:

***“The commission must not give its approval unless it determines that the privilege, concession or franchise proposed is necessary for the public convenience and properly conserves the public interest.”***

With regard to **Utilities Commission Act, Section 45(8)**, the NCGPCA states categorically that wireless smart meters are neither “necessary for the public convenience” nor do they “properly conserve the public interest”.

The BCUC considers its mandate is to consider public interest and take no notice of public opinion. In Order G-31-87, the Commission stated:

“The Utilities Commission Act, which determines the basis on which the Commission carries out its regulatory responsibilities, clearly specifies the Commission’s overriding duty to protect the public interest and is silent on the matter of public opinion. It is apparent that the two cannot be the same unless public opinion has been based on public understanding of the same information required for a reasoned determination of what is in the public’s best interests overall.”

In that order, the Commission concluded “that only evidence which was supported by either acts or a reasonable degree of probability should influence its decision.”

On March 15, 2013 Commission Counsel Gordon Fulton stated (as reported on page 2195 in Volume 11 of the Proceedings) “The Commission will make its decision based on the evidence that its heard in the oral hearing, based on the written filings its received, and the Commission will speak through the decision that it makes on this application.”

And as Commissioner Len Kelsey said during his concluding remarks on March 15, “this is a very important matter with obviously many issues of interest to the public.”

**The effects of public opinion are relevant not just to national-level policymakers, but to government actions at all levels and in all decision-making institutions.** It is the contention of the Nelson Creston Green Party Constituency Association that public opinion has a place in the shaping of policy and that the BC Utilities Commission must take into consideration the hundreds of letters of comment it has received from the public in opposition to the granting of an approval of a Certificate of Public Convenience and Necessity for the Advanced Metering Infrastructure Project proposed by FortisBC. In addition, the NCGPCA asserts that the Commission must also be mindful of the hundreds of people represented by those interveners that have presented arguments in opposition to the granting of a CPCN for FortisBC’s AMI project.

The relationship between public opinion and policymaking is central to normative and empirical theories about the workings of democracy. At the start of *Public Opinion and American Democracy*, V. O. Key, Jr., asserted that “Unless mass views have some place in the shaping of policy, all the talk about democracy is nonsense. As [Harold] Lasswell has said, the ‘open interplay of opinion and policy is the distinguishing mark of popular rule’” ([Key 1961](#), p. 7; citing [Lasswell 1941](#), p. 15).<sup>1</sup>

Public opinion received by the BCUC on the issue of smart meters is overwhelmingly against their installation. The NCGPCA maintains that any decision by the BCUC that ignores public opinion with regard to AMI project 3698682 is therefore a decision that is not in the public interest and is instead a decision in the proponent’s interest.

BCUC decision-making must to be able to stand up to critical scrutiny, to be rational, to be moral, to be supported by evidence and to be in accordance with some principles that can be defended. A decision forcing FortisBC customers to accept smart meters against their express wishes is neither rational nor moral and cannot be defended.

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<sup>1</sup> See <http://poq.oxfordjournals.org/content/75/5/982.full>

The Canadian public has long suspected that decisions made by government regulatory agencies are biased in favour of project proponents from the outset and that these agencies merely act as rubber stamps in granting the proponent's wishes. The BCUC must be seen as listening to the voices of the people.

### **Argument Number Two:**

We are currently suffering the consequences of the 300-year fossil-fueled binge known as modern industrial civilization. As I write this, concentrations of the greenhouse gas carbon dioxide in the global atmosphere are approaching 400 parts per million (ppm) for the first time in human history. The Mauna Loa carbon dioxide (CO<sub>2</sub>) record – from the [NOAA-operated Mauna Loa Observatory](#), near the top of Mauna Loa on the big island of Hawaii – registered 398.44 ppm on April 23, 2013.<sup>2</sup>

In the words of ecologist John Michael Greer, contemporary industrial society may soon have to downgrade into a “scarcity society”<sup>3</sup> that manages on minimal energy. In every aspect of our daily lives we must learn to manage on much less energy; homes – and businesses – will have to transition to compactness, energy efficiency, and production of their own electricity. In short, the way we provide electricity and the electrical grid will need to be reinvented to best serve the needs of consumers.

We are at a point in time where we have “an unprecedented opportunity to create a 21st century grid that operates far more intelligently, reliably, efficiently and cost-effectively. It would stimulate the economy and expedite the development of clean energy while reducing the need for new conventional power plants. Most important, it would give consumers ultimate control over their electricity use and cost. It is a revolution that would compel utilities to evolve, to focus more on consumer needs and service quality,” says Jay Stuller, writing in the booklet *An Electric Revolution: Reforming Monopolies, Reinventing the Grid and Giving Power to the People*.<sup>4</sup>

Stuller goes on to say that the word “intelligent” would be a more precise descriptor of the proposed smart grid, and describes it thus:

*An intelligent electricity system begins by providing consumers with meters that transmit the price and usage of power in real time, and with electronic controls that enable the user's devices to automatically adjust power consumption during peak periods of demand and avoid higher prices — sometimes called “prices to devices.” These would replace today's iron curtain of utility-controlled meters over which consumers have no control. Such a grid would enable a seamless*

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<sup>2</sup> See <http://keelingcurve.ucsd.edu/>

<sup>3</sup> Greer, John Michael, *The Ecotechnic Future: Envisioning a post-peak world*, New Society Publishers, 2009.

<sup>4</sup> Stuller, Jay, *An Electric Revolution: Reforming Monopolies, Reinventing the Grid and Giving Power to the People*, page 7, <http://www.galvinpower.org/sites/default/files/AnElectricRevolution.pdf>

*and constant two-way flow of electricity and information between power providers and consumers.*

*The reformed grid also would allow homeowners and businesses with solar panels, wind turbines or other forms of distributed generation to sell any excess power produced back to the grid — at fair market rates that reflect the full value of the service. A truly intelligent grid also would allow consumers in an apartment building, office park, campus or an entire community to combine, or aggregate, their power use in order to secure the most competitive rates and share excess production. These new aggregations — conceivably many thousands of independent islands of power — would effectively transform office and retail buildings, homes and electric vehicles from power pigs into power plants that augment rather than drain the nation’s electricity supply.*

*These smaller entities also would be tied together in a network of intelligent **microgrids**. Each would have two-way controls that are linked to still other microgrids and the bulk electricity grid, automatically routing power to where it’s needed at the speed of light and incorporating a self-healing function that isolates and corrects outages, providing uninterrupted service. What’s more, the interconnectivity of these distribution microgrid networks could smooth out the spikes of peak demands, eliminating the need to build additional and expensive standby power plants.<sup>5</sup>*

Climate change, energy price spikes, and concerns about energy security have reignited interest in local efforts to promote end-use energy efficiency, customer-sited renewable energy, and energy conservation. Government agencies and utilities have historically designed and administered such demand-side measures, but innovative third-party administrative models – like energy saving trusts and sustainable energy utilities – present new options to finance, market, and deliver sustainable energy services to energy end-users.

These new models are needed because a huge paradigm shift is required to set up the infrastructure to deliver low-carbon energy.

Fulfilling the vision of a low or zero carbon society can be achieved by moving to a distributed energy system. “Distributed energy strategies, diverse in type and scale, that increase local and regional self-reliance, may well be more prudent and resilient options for the transition to a low-carbon, powered-down, conservation-oriented future,” say Michael Lewis and Pat Conaty.<sup>6</sup>

The current electricity sector business model is broken. Until now, it has been based exclusively on a “base load and peak load” scenario, where large generators

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<sup>5</sup> Stuller, Jay, *An Electric Revolution: Reforming Monopolies, Reinventing the Grid and Giving Power to the People*, page 10-11, <http://www.galvinpower.org/sites/default/files/AnElectricRevolution.pdf>

<sup>6</sup> Lewis, Michael and Pat Conaty, *The Resilience Imperative: Cooperative Transitions to a Steady-State Economy*, New Society Publishers, 2012, page 112.

provide the bulk of energy, and a whole bunch of flexible generators are added to meet “peak demand”. Under the cost-of-service model, electric and gas utilities do not have an incentive to maximize their customers’ energy savings. In fact, utilities’ profit margins typically decrease as customer energy use decreases, so a fundamental conflict of interest lies between the utilities’ desire to sell energy and the public interest in conserving energy.

Renewable sources of energy are poised to expand exponentially between now and 2030, according to Bloomberg New Energy Finance. “The likeliest scenario implies a jump of 230%, to \$630 billion per year by 2030,” says BNEF in a news release.<sup>7</sup> The new electrical grid dominated by renewables will be much different looking. It will be characterized by inflexible generation – where energy is produced when the sun shines and/or the wind blows – and flexible sources, which can deliver the balance needed when required. This could come in the form of flexible fossil fuel generation, or storage, either through current sources such as hydro, or other forms of storage enabled by batteries or solar thermal, for instance. The new energy economy will be controlled by local co-operative, municipal, and small-scale producers and result in a “democratization” of the energy supply system.

The decisions of private citizens are directly responsible for the majority of all final energy consumption so it is critical to have local energy agencies that disseminate to consumers good practices in demand-side management. Therefore the NCGPCA recommends that instead of granting FortisBC leave to spend millions of dollars on smart meters that the citizens don’t want, the money should instead be directed to establish Energy Saving Trusts in every community in the FortisBC service area.

The purpose of the EST model is to address climate change by reducing energy related greenhouse gas emissions and securing energy supply, price stability, energy efficiencies and local economic and workforce benefits. The EST will operate like an energy service company to promote efficiency as the first priority in a portfolio of economic and environmentally sustainable energy resources and to encourage customers and public officials to think energy efficiency first when they are making energy resource procurement or energy policy choices.<sup>8</sup>

The EST model looks at the big picture world in a near future that cures both its addiction to fossil fuels and its reliance on centralized energy grids. It envisions a tomorrow where residents and businesses create an ever increasing amount of their own renewable power needs and feed their excess needs into a decentralized, distributed energy grid.

An EST is characterized by central coordination, comprehensive programs, flexible incentives, financial self-sufficiency, competitive procurement, and a focus on delivering energy services rather than commodity energy. It will begin to build the low

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<sup>7</sup> See <http://about.bnef.com/press-releases/strong-growth-for-renewables-expected-through-to-2030/>

<sup>8</sup> See the mission statement of the National Association of Energy Service Companies (NAESCO) at <http://www.naesco.org/about/mission.htm>

carbon economy by exploiting energy efficiency as the “first fuel”. The energy we stop wasting, or unnecessarily consuming, is the cheapest and most readily available energy source there is.

FortisBC could help finance the EST model by dedicating a percentage of their utility bills to support a variety of energy-efficiency and renewable energy services and programs. That is how the Energy Trust of Oregon<sup>9</sup> receives some of its funding. As a result of a 1999 energy restructuring law, Oregon's two largest electric investor-owned utilities (PGE and Pacific Power) are required to collect a three percent “public purpose charge” from their customers. The Danish Energy Saving Trust<sup>10</sup> is financed by a special energy savings charge of DKK 0.006/kWh payable by households and the public sector. The Massachusetts Renewable Energy Trust Fund<sup>11</sup> is supported by a non-bypassable surcharge of \$0.0005 per kilowatt-hour (0.5 mill/kWh), imposed on customers of all investor-owned electric utilities and competitive municipal utilities in Massachusetts.

Energy Saving Trust models also exist in the United Kingdom (<http://www.energysavingtrust.org.uk/>), Ireland (<http://energysavingfund.info/>), Scotland (<http://www.energysavingtrust.org.uk/scotland/>), New Zealand (<http://www.communityenergy.org.nz/about/our-story/>), and Australia (<http://wisegroup.org.au/>). The U.S. states of Delaware (<http://www.seu-de.org/>) and Virginia (<http://www.cafe2.org/>) have sustainable energy utility models.

Developing a targeted program of deep energy retrofits for homes and businesses, the EST will especially help those on low incomes and tenants; lower energy bills; create hundreds of jobs; increase sales for local suppliers; and generally get money flowing around the community. As the costs of distributed energy decline, the EST will assist consumers to disconnect from the grid and utilize rooftop solar and other micro generation possibilities like wind and geothermal. The EST will offer solar leasing products that require no deposit for rooftop systems installed by customers.

These Energy Saving Trusts will prove that the FortisBC service area can have energy independence, local independent renewable energy, energy security, and energy efficiency. It will save unending kilowatt hours of electricity and therms of natural gas and assist communities and individuals to take responsibility for their energy and carbon future.

The NCGPCA believes establishing ESTs would be a much wiser decision than spending millions on wireless smart meters. We hope the BCUC agrees and denies the CPCN for the FortisBC AMI project.

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<sup>9</sup> See <http://energytrust.org/>

<sup>10</sup> See <http://www.savingtrust.dk/>

<sup>11</sup> See [http://www.dsireusa.org/incentives/incentive.cfm?Incentive\\_Code=MA07R](http://www.dsireusa.org/incentives/incentive.cfm?Incentive_Code=MA07R)

### **Argument Number Three:**

Put simply, there is just too much difference of opinion about whether the Itron wireless smart meters proposed by FortisBC are the correct meters to use; whether they are cost effective; and whether they will cause disruption to rural and remote Wi-Fi services using the 900 - 928 band. Submissions to the Commission have speculated that FortisBC may be being over-charged by Itron.

And then there is the health and safety issue. Although NCGPCA was unable to attend the March hearings in Kelowna, it is apparent that two weeks of testimony did not settle the argument about the health effects on humans of the radiation that will be given off by the wireless smart meters. Again there is just too much difference of opinion to give a conclusive yes or no answer on wireless smart meter safety.

NCGPCA notes that Section 7 of the Canadian Charter of Rights and Freedoms states:

*Everyone has the right to life, liberty and security of the person and the right not to be deprived thereof except in accordance with the principles of fundamental justice.*

Section 15 of Charter further states:

*Every individual is equal before and under the law and has the right to the equal protection and equal benefit of the law without discrimination and, in particular, without discrimination based on...mental or physical disability.*

NCGPCA submits that FortisBC's proposal to unilaterally and deliberately expose its EMF and EMR sensitive customers to electromagnetic and radio frequencies detrimental to their health, and without even the slightest concession to due process in connection with that exposure, are a clear and undeniable violation of those customers' Section 7 and Section 15 Charter rights.

### **Summary**

The Nelson Creston Green Party Constituency Association does not support FortisBC's application for a Certificate of Public Convenience for its Advanced Metering Project in its current form.

NCGPCA respectfully submits:

**A.** That the Commission dismiss FortisBC's application with the proviso that FortisBC be free to make another application based upon a thorough and

unbiased request for proposal (RFP) process which includes consideration of all available PLC-AMI alternatives.

**B.** In the event that FortisBC's application is approved, that, in accordance with section 45.9(b) of the BC *Utilities Commission Act*, such approval be granted only on the following conditions:

(i) that FortisBC be required to bear the full extra cost of deploying its chosen technology, namely that the full amount by which the cost of FortisBC's proposal exceeds that of a PLC-AMI alternative be the sole financial responsibility of FortisBC and its shareholders, and that those extra capital and operational costs never be borne directly or indirectly by any FortisBC customer;

(ii) that, in accordance with section 45.9(b) of the BC *Utilities Commission Act*, the Commission require FortisBC to resolve all technological compatibility issues with any and all Wi-Fi services and any other communication media (such as ham radios) prior to beginning any deployment of AMI meters and/or adjunct collection equipment on its service territory;

(iii) that FortisBC, prior to deployment of any AMI equipment, develop and provide the Commission with a very clear policy governing how FortisBC will deal with persons with medical conditions, hypersensitivities, and medical or other devices sensitive to or affected by low electromagnetic exposures.

(iv) that, in accordance with the provisions of sections 1, 2, 7 and 15 of the *Canadian Charter of Rights and Freedoms*, the Commission order FortisBC to develop a general opt out provision to wireless AMI deployment, and that such opt out provision shall take into account the following types of customers:

a. those diagnosed with medical conditions and/or who use devices that may be affected by low electromagnetic exposure;

b. those diagnosed with sensitivity and/or diagnosed with electro-hypersensitivity to low electromagnetic exposure;

c. those without the financial means to move the meter base away from their home and/or beyond their property boundary.

Respectfully submitted by,

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