To whom it may concern,

ECOPEI Priorities for the PEI PES:

A. Practical steps:

- PES Implementation Plan
- Conservation & Efficiency first
- Wind power and electrification
- HST exemption
- Controlling the peak electrical demand
- Public Education
- Municipal governments

B. Policy statements that should be included in the PES:

- Fossil fuels
- Gulf of St. Lawrence
- Electricity, MECL
- Biomass
- Community involvement/control

A. Practical steps:

PES Implementation Plan

Please give more detail and emphasis on the structure, targets and timeline of **a PES Implementation Plan**, especially:

- 1. Staffing intentions- it needs to be stated that staff and resources will be continued and increased to properly implement the PES and CCMS.
- 2. Put an immediate stronger focus on **reducing the peak electrical demand by at least 2% per year**, to avoid any possibility of wasting resources on building fossil fuel generators such as the proposed CT4, or new power purchases from NB Power. Also show the sector breakout of peak, not just energy (i.e., residential compared to commercial). See below **Controlling the peak electrical demand**

3. Immediate implementation of PES goals in government construction projects, eg Manors in Montague & Tyne Valley. Long-term maintenance and energy costs must be included in design considerations. Unfortunately even recent constructions, eg Spring Park School, have had shortcomings in design due to budget limits that didn't take ongoing energy or GHG costs into account.

Conservation & Efficiency (C & E) comes first

Conservation Goals should be more aggressive: We recommend the goal of at least 5% energy savings each year of non-electric, non-renewable imported fuels.

More on C&E:

Use **Local Improvement Charges (LIC)** for financing to property owners, ie, utility-or-tax-bill-based financing. (resident or business is loaned \$ [to pay for retrofits, energy storage, renewable energy, etc], which is paid back thru their utility or tax bill, see e.g., http://thechronicleherald.ca/novascotia/1368787-halifax-expands-solar-city-rebate-program). See also programs offered by GMP in Vermont, eg

Government must lead by example:

- * Include employees and unions in discussions and planning
- * Set a long term plan with targets & goals
- * Institute energy and environmental standards and require maximum C&E in all publicly funded, publicly owned and leased buildings
- *All departments of the provincial government must be mandated to consider and put a priority on energy conservation and efficiency in all significant expenditures and actions.
- * Update building codes and require energy rating for all buildings when being sold
- * Use Energy Technology Investment Funds for C&E programs, both within government and for the public, including expanded social housing and retrofitting rental units.

Wind power and electrification

Transitioning away from the use of fossil fuels, especially for transportation and agriculture, will require a major shift to, and new demands for electricity.

Large wind generators sited appropriately are the most cost-efficient and have the lowest total impact per kwh. It is critical to have community-wide part-ownership of these wind generators to get democratic community acceptance and benefits.

Using heat-storage systems, wind-generated electricity should be substituted for most fossil fuels used for heating on PEI. Using electric vehicles, wind-generated electricity could eventually substitute for most fossil fuels in transportation on PEI.

Electricity demand and the supply of it from wind can be managed and balanced through customer pricing mechanisms, energy storage and PEI's cable connection with the mainland.

Wind power is already cost-efficient and the more important challenge is to get our electricity demand to be managed in a way that allows for more wind generation. Wind turbine development should maximize local labour and materials.

HST Exemption

Change the HST to eliminate the exemption for oil heating, and instead exempt energy conservation and efficiency costs and appropriate renewable energy systems [in conjunction with financial assistance for those with immediate needs to change their heating to effective and efficient systems based on renewable energy.]

Controlling the peak electrical demand

Annual overall electricity use may increase due to appropriate substitution for fossil fuels, but PEI should achieve reduction of at least 2% off PEAK electric load each year by 2022

While we agree with the 'Recommended Action' under 'Demand Response' (p. 25): "Focus on "quick wins" in the short term, to begin an initial lowering of peak demand before additional heat pumps on the system create stability issues.", we recommend that this be given **highest priority** for quick implementation by these actions:

- 1. PEIEC immediately implement a pilot project for peak demand management, eg, install ~ 10 (expand to ~ 1000 by Jan 2017) timers on residential hot water heaters, to be controlled if necessary through internet-connected switches (project must include customer reward for installing the timer unit). These would be used to test and practise how best to manage demand at peak periods, with 1000 or more of these units by Jan 2017.
- 2. Efficiency PEI immediately replace incentives for heat pumps with high incentives (including customer reward) for heat storage units, controlled as above and **used to lower peak demand**.

Public Education

The PES Implementation Plan will only work if there is broad public acceptance and understanding of the factors and reasons involved. A Public 'Energy Education' campaign should be described in the PES. The campaign should include PEIEC, Efficiency PEI, utilities, ENGOs, community service clubs and other organizations, schools, community courses, information in electric and other bills, social media, open houses and demonstrations, and government in-house training.

This campaign should make extra efforts to include young people in the planning, delivery and as a target audience.

As well, that public education should include discussion to help consumers understand that the best goal is to control or reduce their household cost of energy, rather than focusing on the \$/kwh or \$/litre of fuel. Carbon taxes may increase energy prices but will pay for programs to reduce household energy costs.

Because Maritime Electric (MECL) is a private company with vested interests that don't include energy conservation, there should be no expectation or reliance on MECL to voluntarily promote or deliver energy conservation education or programs.

Municipal governments

should be engaged in clean energy advocacy and actions, as promoted for Smart Energy Communitieshttp://www.questcanada.org/, http://www.questcanada.org/files/download/7844eec41e15db9

Policy statements that should be included in the PES:

- 1. State clearly that the PEI government does not and will not support, nor invest in, nor take any part in oil and gas development anywhere, including especially fracking, importing fracked gas, and the 'Energy East' tarsands pipeline,
- **2. Gulf of St. Lawrence**: State clearly that the PEI government will work with provincial and federal counterparts for agreement on designating the precious Gulf of St. Lawrence as permanently protected from oil and gas development,
- **3. Electricity policy**: must be taken out of its control by Maritime Electric, which as a for-profit corporation is mandated to focus on profits, not conservation. For example, in the discussion of the Millvale transmission lines proper consideration must be given to an alternative plan based on intensive local energy conservation (geotargeted energy efficiency).
- *Programs must be developed that encourage decentralized energy generation and distribution. Creating decentralized generation would make for a decreased vulnerability to wide-spread power outages as well as lowering infrastructure costs such as transmission lines. Community Feed-in Tariffs as were used in NS, could be a useful tool in the future for PEI for solar PV power and energy storage systems.
- * Require Climate Action considerations in Power Purchase Agreements (PPA) with NB Power, i.e., no new agreements for power generated by fossil fuels or nuclear.
- * Study and plan for public ownership of all new utility-scale electricity generation on PEI.
- * Provide funding for a public advocate to facilitate public involvement and consumer concerns (as recommended in the PEI Energy Commission report Sept 2012).
- **4. Biomass**: can only be included as a clean energy choice in projects that are primarily aimed at rebuilding healthy forests and have a sustainable supply, both of which will need to be verified.
- 5. Community involvement: must be promoted extensively, including:
- * sufficient resources and person power to properly get the new Energy Strategy message out to the public through advertising, information sharing and social media,
- * support for communities to cooperatively develop their own clean energy supply, creating employment and local pride which will attract newcomers to all areas of PEI and entice young people to stay in those communities.

Thank you,

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