Comments from the Environmental Coalition of PEI regarding docket # UE21406 - Maritime Electric Company, Limited (MECL) DSM proposal :

The Environmental Coalition of Prince Edward Island (ECO-P.E.I.) is a community-based action group formed in 1988. ECO-P.E.I.'s goal is to work in partnership with others and the land itself in order to understand and improve the Island environment. Our work centers on education, advocacy and action.

We recommend that IRAC hold extensive public hearings to gather more meaningful information and input on this proposal, along with the issues of docket # UE20723 (combustion turbine generator), as outlined in our previous submission. The scope of those hearings must be much broader than examining the details of MECL's applications.

Our ECOPEI Energy Project has no present funding and our volunteer work is limited, as are these comments.

However it is clear to us that these important IRAC decisions will have a major effect on our PEI economy for many years, and so it is imperative that hearings be held to gather meaningful information and input from many more sources, so all the alternatives for PEI's energy future can be properly considered.

Those sources should include independent scientists, educational institutions and the general public, as well as officials of utilities and governments elsewhere that are using innovative solutions such as electrical energy storage and time-of-use rate discounts. There should also be input from independent public interest groups in other jurisdictions that are involved in these issues.

At the same time, we are urging the provincial Department of Energy to publish a proposal document for a multi-year energy plan, which would include policy for: enhancing solar and wind power generation, conservation and efficiency programs, and optimizing electricity imports and transmission infastructure. It is now 7 years since the PEI 5-year Energy Strategy of 2008, an excellent but out-of-date document.

Public hearings based on that new energy plan document would engage Islanders from many viewpoints and should include input from government officials, MECL & many others.

The outcome would then be a forward-thinking 'transparent' energy policy, and MECL applications in the future would be based on that policy.

While including DSM considerations in comprehensive hearings on electricity, IRAC should allow a one year pilot to try to reduce this winter's peak demand. Of MECL's proposals(1), only 'Incentives for thermostat shut off below -15C of heat pumps in oil heated homes', should be included, and only for existing installations with incentives that would not encourage using more oil. With a 'non-oil' incentive, the shut off temperature could possibly be higher and more likely to lower the peak demand.

(Installing more heat pumps, without appropriate 'smart metering', RCC systems(2) or similar measures, could actually increase the peak demand. There are also the 'peak demand issues' of heat pump units that are much less efficient and/or switch to resistant heating at low temperatures.)

Another strategy to reduce the peak demand at 5-6 pm, just after workplaces close, could be systems to automatically turn off lights and shut off heating systems (esp electric) in a large number of those workplaces. Those heating systems would be restarted (and lights where needed for cleaning staff...) after 7 pm, when residential cooking & washing demand has dropped. Motion activated lighting should be required in all new construction for washrooms and hallways, as is now the case in many jurisdictions elsewhere.

There are many more possibilities than those for efficiency and conservation that MECL has not outlined, including some stated in our ECOPEI comments on docket # UE20723 and by others in comments. Important among those are the use of 'time of use', 'interruptible' and other rate structure tools; Energy Efficiency Financing Programs (3); and also encouraging more investment in wind and solar generation which can, when combined with energy storage, provide base load capacity and peak demand reductions (4).

We look forward to well-publicized, informative public hearings, and an open public discussion on electricity policy and planning for PEI.

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(1) excerpt
from http://www.irac.pe.ca/document.aspx?file=infocentre/documents/utilities-mecl-ue21406-notice-20150603.asp :

"...Maritime Electric's proposed plan is summarized in the following table. It lists the measures that the Company is proposing, the reduction in energy and peak load expected to be realized through each measure, and the estimated implementation cost for each measure.

TABLE 1
SUMMARY OF 2015 - 2020 PROPOSED ENERGY EFFICIENCY
AND DSM MEASURES

Proposed Measure	Expected annual energy saving in year five	Expected peak load reduction in year five (MW)	Estimated cost for the five years ($ millions)	Estimated cos after 2020 ($ millions

	(GWh)			
rebate coupon for LED light	12.2	5.9	$6.0	
s for heat pumps that operate to -25C in electric resistance d homes	0.3	1.5	$1.0	
tives for thermostat shut off -15C of heat pumps in oil d homes[1]	1.0	2.3	$3.1	$4.2
mer Outreach Activities			$0.8	
L	13.5	9.7	$10.9	$4.2

d on a successful pilot phase in 2016 and full implementation for 2017 to 2020.

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(2) http://www.countrylines.com/house-home/hot-water-can-heat-homes/ & https://www.aquaproducts.us/reverse-cycle-chiller.html

(3) Summary of Energy Efficiency Financing Program - "Many energy efficiency measures pay back their original cost from energy savings .... Loans repaid through surcharge on utility bill (less than amount of savings)." https://www.google.ca/url?sa=t&rct=j&q=&esrc=s&source=web&cd=3&cad=rja&uact=8&ved=0CCwQFjACahUKEwiSzuGUturGAhUJpZQKHRKGBAQ&url=http%3A%2F%2Fwww.sauder.ubc.ca%2FFaculty%2FResearch_Centres%2FISIS%2FResources%2F~%2Fmedia%2FD75DDF3E4B3E48F781E84E1A17405F08.ashx&ei=OUmtVdLNOYnK0gSSjJIg&usg=AFQjCNENXG849HzrT1W2ebJVI51A2AUHWw&sig2=J7MPRkDr8N8YySLGIBrBMg

(4) http://cleantechnica.com/2015/09/21/new-10-mw-storage-plant-opened-feldheim-germany-europes-largest and many other articles, including those I submitted for docket # UE20723 (combustion turbine generator)