

Opening Statement from E3 Analytics, on behalf of the EAC and NovaSEA.

Good afternoon Mr. Chairman, members of the panel, and participants in attendance. I have submitted comments to the Board, which you should now have before you. I will make a few further comments to elaborate upon these; in the interests of brevity, I will not repeat all of them here.

1. By and large, having taken the time to run the numbers in Synapse's cost modeling, the tariffs proposed by the Consultants stand up to financial analysis. This is supported by evidence from projects in other jurisdictions throughout North America, and indeed, around the world that have been successfully developed at prices in this range.
2. That being said, the added costs and challenges of developing community-based and community-owned renewable energy projects are real. Experience elsewhere suggests that such projects do experience significant challenges in obtaining initial capital resources for pre-feasibility and scoping work that do not apply to private or commercial projects.
3. I have also made it clear in my previous submission that, contrary to the assumptions of the Consumer Advocate, it is neither reasonable, nor advisable, to assume that COMFIT projects will be built on good will, or that endless pools of time and money will be freely and readily available to support such projects. Assuming this runs counter to experience in jurisdictions around the world where community-based projects have been built. Ontario has explicitly acknowledged this by offering higher rates for community projects. The fact that community projects are costlier to develop has yet to be satisfactorily contested by the consumer advocate, by reference to data, or by evidence to substantiate his claim.
4. As pointed out in my submission to the Board, there is a wide disparity (greater than a factor of 3) between the <50kW tariff (\$449/MWh) and the >50kW tariff (\$139/MWh). This presents an opportunity for regulatory arbitrage, as project proponents may seek to exploit the higher tariff by stringing together smaller projects, and is likely to lead to a number of potentially negative consequences. The practice of stringing together a number of smaller projects to exploit the higher tariff was reportedly tolerated in Germany between 2000-08 for solar and biogas projects, but was prohibited in the RES Act 2008, and made retroactive by a court decision.
5. As currently structured, the price spread could result in 'clustering' around the 50kW threshold, putting undue upward pressure on rates. Second, providing a markedly higher tariff for projects <50kW reduces the ability of communities to choose an appropriately scaled turbine model (i.e. one scaled to their wind site, available land, financial resources, and so on). Third, the current tariff structure is likely to markedly increase number of turbines required, while reducing the kWh-output/dollar invested. Larger turbine units benefit from higher average wind speeds, and higher capacity factors, making it more economically efficient both for participants and for ratepayers to choose the largest turbine models available to them. Finally, clustering around the 50kW range is likely to increase land-use requirements, and exacerbate NIMBYism. This is not intended as an argument against small wind projects, but rather an economic argument in favor of fewer, larger, and more efficient turbines.

I have suggested three different possibilities to address, and preemptively avoid, this set of issues. I have recommended a method based on linear interpolation (also referred to as

Opening Statement from E3 Analytics, on behalf of the EAC and NovaSEA.

‘sliding’ tariffs), which offers a rate that is designed to be more reflective of economies of scale. It is my opinion that this option (which is now employed in countries such as Germany, and Portugal), would provide significant benefits for COMFIT participants, and for Nova Scotia ratepayers.

Now, questions have been raised about whether this is beyond the Consultant’s, and indeed the Board’s, remit. More specifically, Synapse has interpreted the regulations to mean that *one* tariff should be applied to projects below 50kW, and *one* tariff should be applied to projects above 50kW. There is an evidentiary basis on which to call this interpretation of the Regulations in question.

I direct the Board to Article 18 of the Regulations under the Electricity Act: *The Renewable Electricity Regulations made under Section 5 of the Electricity Act S.N.S. 2004, c. 25 O.I.C. 2010-381 (October 12, 2010), N.S. Reg. 155/2010 Electricity Act: (Available at: http://www.gov.ns.ca/just/regulations/regs/elecnew.htm#TOC2_18)*

“Article 18, (3): The Board must set separate *tariffs* for wind power with a capacity greater than 50 kW and wind power with a capacity of 50 kW or less (*emphasis added*).”

According to these directions from the Government, there appears to be no explicit restriction in the regulatory guidance provided by the Government to the adoption of a model of linear interpolation (or sliding tariffs) for wind projects in Nova Scotia. I am glad to provide further insight into how this design option has been implemented elsewhere in the world, to address the set of concerns outlined above.

6. According to the Consumer Advocate’s testimony on April 6th 2011 (p. 270, lines 15-17), the Board “*could have a price for a certain number of megawatt hours per month and then have the price for additional megawatt hours drop off.*”

This variant on a declining block rate structure (adapted from electricity rate design) is a way to deal with disparities in wind resource quality, to offer lower tariffs for highly productive sites after a certain amount of output, *not* with project size. The approach proposed by the Consumer Advocate has no precedent, to my knowledge, in regulating the price offered to renewable energy projects. It would effectively penalize efficient, well-sited, and well-operated projects. This seems at odds with the goal of the policy, as proposed by the Government.

Moreover, FITs are typically designed as ‘levelized’ tariffs. In other words, they include in the tariff price the variation in output that invariably occurs from one month to the next.

7. I have also made a few general points about the discussion that has taken place to date on capacity factors. I have also made comments about the tidal tariff, project financing, FIT design in other jurisdictions, etc. and am glad to answer further questions about any of these comments.

Thank you.