larrygoodman4@gmail.com

Dear Director Hatfield,

Thank you for moving ahead with Raab Associates for the SEC study committee work called for by SB-99.

Will the work that Raab does include a comprehensive look at the <u>cost/benefit</u> metrics associated with industrial scale wind plants?

Specifically, on the **cost** side, will the work include:

- 1) The cost per MWH associated with the PTC and the ITC?
- 2} The \$1.6 Billion to \$ 25 Billion in transmission upgrades specified by ISO-NE for industrial wind? { This "range" obviously needs to be refined. It is dated and originates in the NEWIS study which was written by three companies with ties to industrial wind}
- 3) The thus far unaccounted for cost of keeping base load power sources "spinning" during the limited and sporadic times wind makes it onto the grid without being curtailed.
- 4} The costs associated with the frequent curtailment of industrial wind.
- 5} The power costs associated with having to use conventional power to help operate turbines both in the operations building as well as for each individual turbine's functions.

We, wwwnhwindwatch.org, are certain that there are costs associated with each of the five items above; and that item #3, as reported by The LA Times, The NY Times and others is quite significant on both the cost and emissions side.

We believe, the true cost of industrial wind includes all five of the items above. In order for the SEC to make fully informed decisions regarding the economic impact of industrial wind, we would ask that the Raab work model the aggregate cost of wind to include all of the cost elements above along with the fixed cost per KWH associated with any specific industrial wind PPA.

On the **emissions** front, will the work Raab does include:

- 1} The net emissions impact of needing to keep base load power sources "spinning" while wind is on the grid?
- 2} The immediate emissions impact of deforesting thousands and thousands acres of mature forest across NH for utility scale wind? {68 tons/acre at this latitude}
- 3} The cumulative impact over ten, twenty, thirty year periods of the annual carbon sequestration loss associated with the massive deforestation wind requires? {1.5 tons per acre per year}
- 4} The CO2 emissions impact associated with producing the steel needed

for industrial wind. As we understand it, approx 1.8 tons of CO2 are released for every ton of material needed for an industrial turbine.

Please ask Raab Associates to comprehensively model all of the cost elements for wind; and please ask them to model the true emissions impact. The LA Times and The NY Times have both clearly stated that the "real world" impact of wind on emissions must include the fossil fuel redundancy that wind requires even during the intermittent and sporadic times it is on the grid.

Thank you again for the work OEP is doing and for the work you have commissioned Raab to do.

Sincerely,

Larry Goodman www.nhwindwatch.org