From: Michael Corradini [mailto:corradin@cae.wisc.edu]
Sent: Sunday, November 19, 2006 10:51 AM
To: P Montgomery
Cc: Lovell, David; Stolzenberg, John
Subject: SUGGESTED PRINCIPLES for POLICY CHANGES on NUCLEAR POWER in WISCONSIN

Dear Phil,

Before you left for GB last Wednesday, you asked us to provide you with some thoughts on what we have seen over the last three meetings and what we might suggest as we move forward after the committee visit to Yucca Mtn. As you may remember, I will be at a French Atomic Energy Agency meeting that week and unable to attend. Also, I will be at a National Academy of Sciences meeting on Energy Futures in DC on Dec. 15th (scheduled for over 6 months) so I will absent that day too.

So I wanted to give you some thoughts and I am happy that they be circulated as David and John see fit to the committee members.

First, I wanted to thank David and John for the absolutely thorough job they have done in giving the committee a deep background on energy issues as well as nuclear power issues and environmental issues like CO2 effects. There is an enormous amount of facts and opinions (some of which I disagree but see no need to respond at this time) that we all need to digest. In fact, I would like to have my students see the large amount of info provided:

## http://www.legis.state.wi.us/lc/3\_COMMITTEES/Special%20Committees/2006/NPOWR/index.htm

Second, I am unsure of the process beyond this information gathering effort, so I feel hesitant to suggest policy directions at this time. But I would suggest that the committee might want to develop consensus on some key operating principles and if we can do that then we could more easily move forward.

So let me try to suggest a short list that may stir discussion and hopefully consensus in December:

1] Whatever course we take in policy changes, we should do it NOW and not wait for a crisis to develop. I firmly believe we need policies that leave Wisconsin open for economic growth and new opportunities for its citizens and a better way of life.

2] Whatever I may think of nuclear power, I would hope the committee would agree that it is an integral part of the electrical energy mix now in WI, the US and the world and will remain so far into the future (at least far into this century). Thus, we need to address its benefits and costs in a rational manner and not "wish" it away or "wish" it is better than it is. 3] Wisconsin needs a sound energy portfolio and we should all agree that improved energy conservation and efficiency (C&E) is the cornerstone that we need to build upon. This was clearly shown by Mr. Messenger on Wednesday.

4] However, energy C&E cannot solve our energy situation alone and we need a balanced portfolio that would allow for the needed growth in electrical energy from a wide variety of sources without undue constraints.

5] Given that we need to develop an energy policy that allows for a balanced electrical energy portfolio for the future, we need to let the natural market forces of production costs and adherence to environmental laws guide our policy, as regulated by our Public Service Commission.

I would add one observation - not a principle. Wisconsin may be at a crossroads with regard to our reliance on hydrocarbon fuels. If carbon (or CO2) emissions taxes are enacted (say \$50/ton-CO2), then we may need nuclear power to offset what cannot offset by C&E and sporadic renewables use. I am not sure that we will go this way, but why should we put undue constraints on that option? It makes no sense to eliminating certain key energy options that have a large upside potential and would lower our overall risks.

I hope this helps. Mike