## Massachusetts Wind Working Group – February 21, 2007 meeting Ed Kremzier's Talking Points

Two issues for discussion; Status of Wind Projects connected to National Grid transmission and interconnection jurisdictions

Two wind projects on today's agenda illustrate the range of interconnection challenges posed by different sized projects.

## Hull Municipal Light Department

- Served by two dedicated 23kV lines from East Weymouth substation.
- Current wind generating capacity in Hull totals ~2.5MW.
- No adverse impacts to the 23kV system and no upgrades needed.
- Hull Municipal handled all aspects of the interconnection with limited National Grid input.

## **Hoosac Wind Project**

- 30MW Wind Farm located remotely from transmission
- Local distribution could not accept entire output
- Interconnection proposed to consist of
  - 5.5 miles of new 34.5kV line to be owned by National Grid on public Rights of Way
  - o 34.5kV/69kV substation owned by Hoosac Wind proponent
  - o Attachment to existing 69kV line owned by National Grid

A good rule of thumb illustrated by these installations is that 6-8 MW of generation can be connected to a 13.8kV 3-phase mainline, double that for 23kV and almost double again for 34.5kV. Larger installations likely require system upgrades.

## **Interconnection Jurisdictions**

- Refer to back of today's agenda
- Federal vs state (MA) category primarily driven by transmission vs distribution system capabilities
- Progression of studies leading to an interconnection agreement is similar
- Fran Cummings' presentation contains contacts at MA investor-owned utilities
- Dave Forrest spoke of NEPOOL approvals and ISO marketing
- Two other early considerations are whether to sell to the local utility and what the interconnection ownership arrangements will be.

