

Crowned Ridge Wind, LLC Response to Staff Data Request 5-2

5-2 Please identify if an ice detector and/or ice detection system will be used for the wind turbines. If an ice detection system will be used, please explain what turbine parameters will be monitored and how the turbine's control system will know when ice is accumulating on the blades.

Response: Yes, an ice detector and ice detection system will be used for all Crowned Ridge Wind wind turbines. More specifically, the turbine is capable of detecting ice buildup on the blades by activating sensors that compare wind speed, ambient temperature and rotor (blade) rpm to the power output of the turbine. If the ice buildup is at a level that causes the turbine output to be outside expected limits set by GE, the turbine will automatically shut down. In addition, ice buildup can be detected through higher than normal vibration, in which case the turbines will shut down automatically.