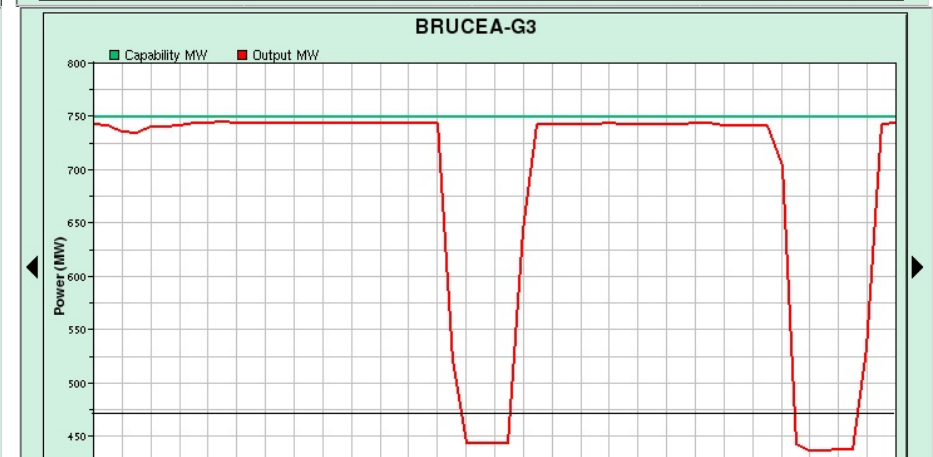
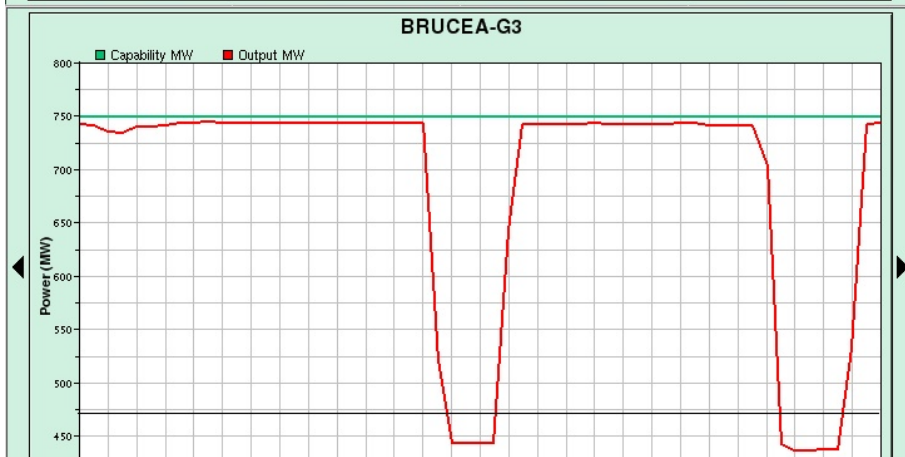
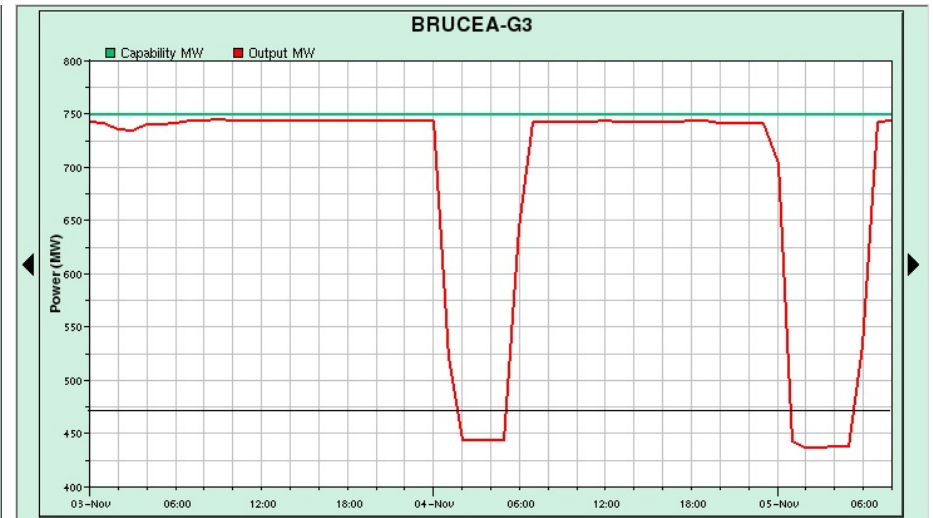
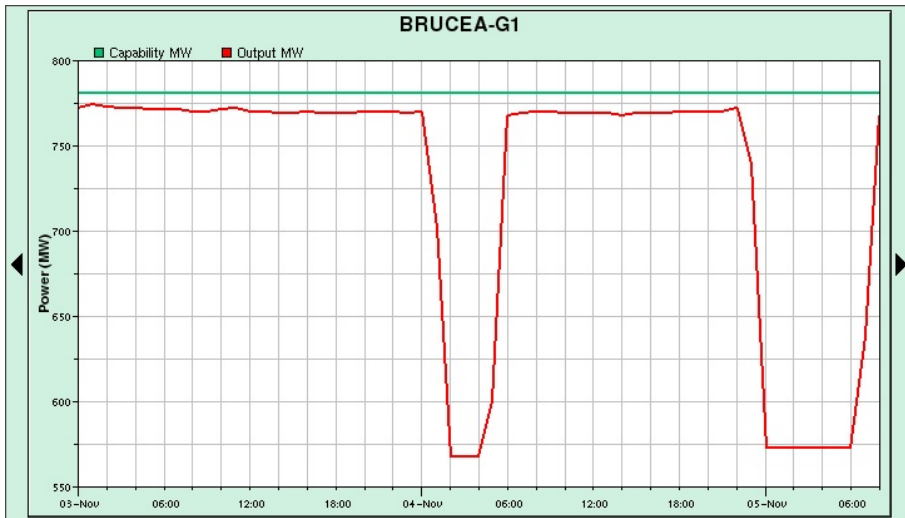
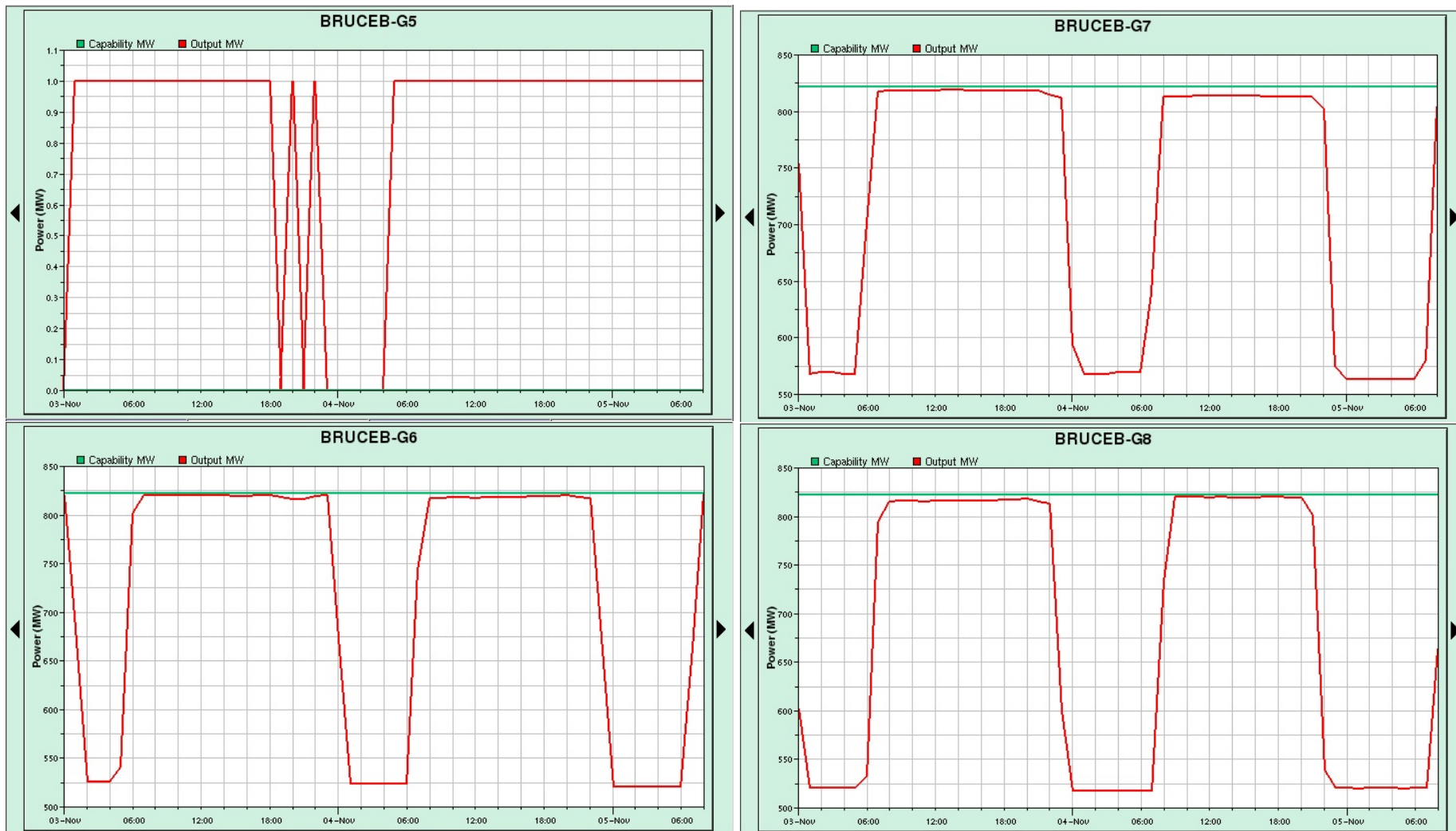


The next two pages show the impact of these nuclear deratings on the days of November 4 and 5. Each Bruce Power unit (except G5 already in a maintenance outage) was reduced about 300 MW in electrical output both nights. The reactor stays at full power, and steam is sent directly to the condenser, bypassing the turbines. Use of condenser steam discharge on a daily basis was not a design intent of these plants, that feature was intended for occasional use to permit plant survival of a loss of line event. It puts stresses on the plant, and increases risk to plant operators. Bruce Power is accepting this to show maneuverability to allow contract renewal by the Minister of Energy, but it is not a desirable condition, when instead the unnecessary wind should be derated.





Bruce Power Nuclear Units 6,7 and 8 derated at night due to excess generation, (Unit 5 in a maintenance outage, the 1 MW output spike is an artifact of metering error.)

Summary: Today with 12,000 MW of nuclear, and 2800 MW of wind, Ontario routinely derates nuclear units at night due to excess generation. This places unnecessary stress on nuclear units designed originally for base load, and now maneuvering due to excess generation. Reactors must stay at high power, and steam is directed to condenser, heating lake.