

August 21, 2017 Solar Eclipse Preparation



August 21, 2017 Eclipse (NERC Whitepaper)

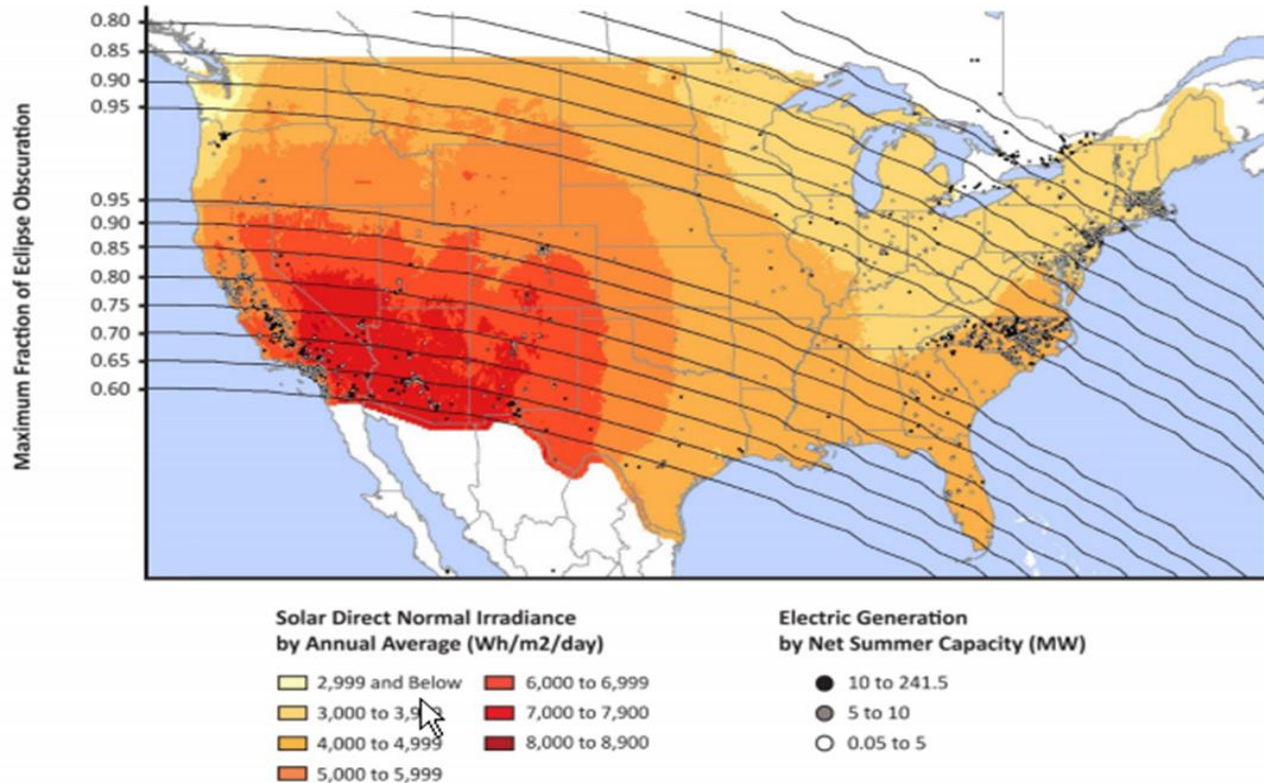


Figure 3.2: United States map showing direct normal irradiance, eclipse bands and locations of transmission photovoltaic generators

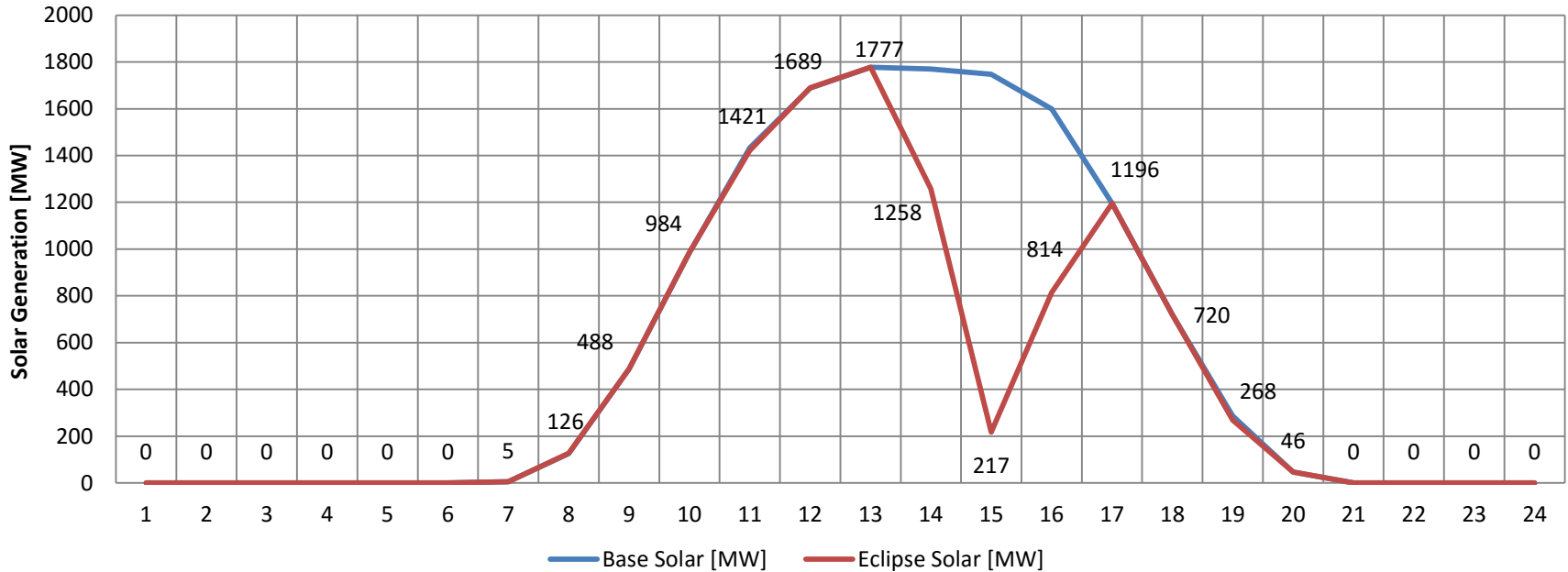
Solar Eclipse Path and Timing



- The down ramp begins at 13:05 EST
- The up ramp begins at 14:49 EST

DEP Eclipse Solar Output Forecast

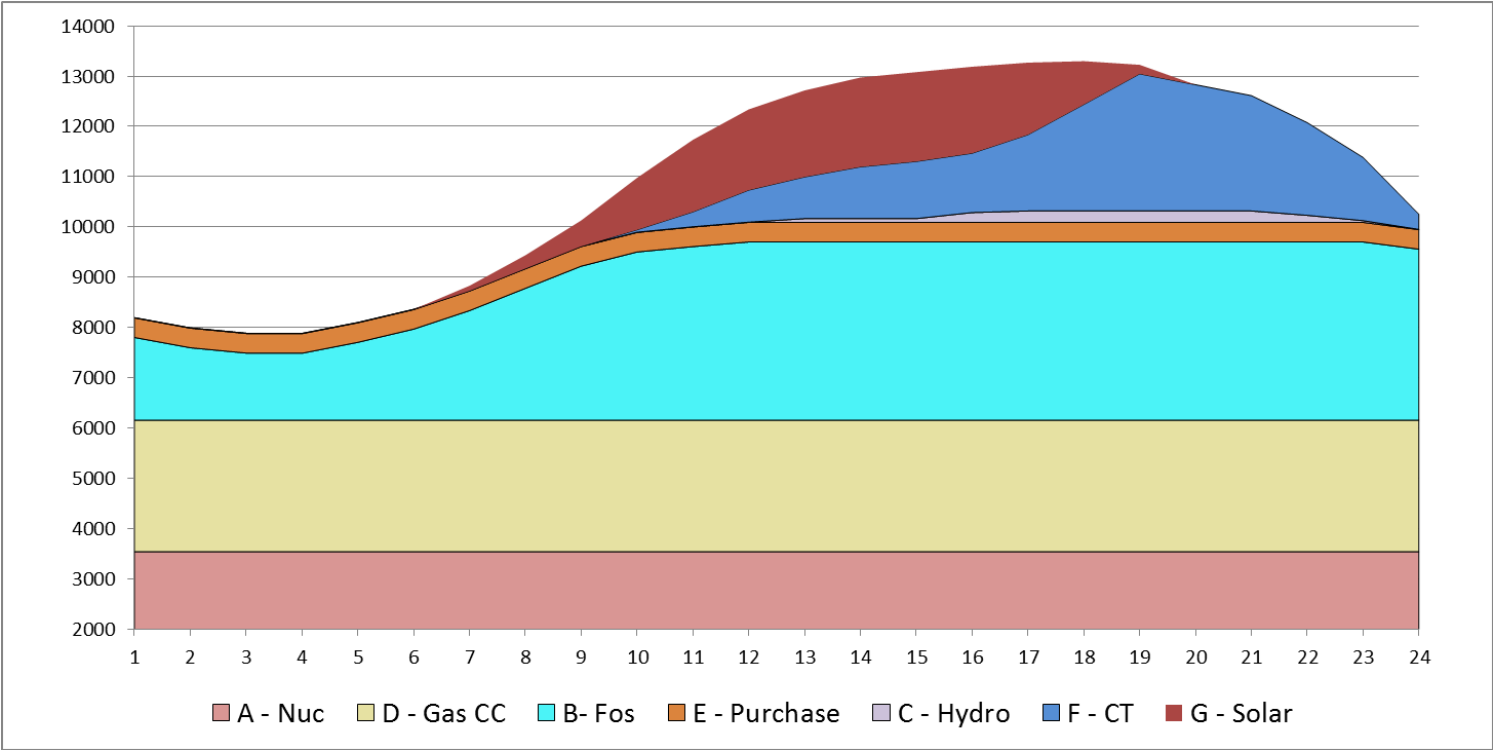
DEP Solar Output



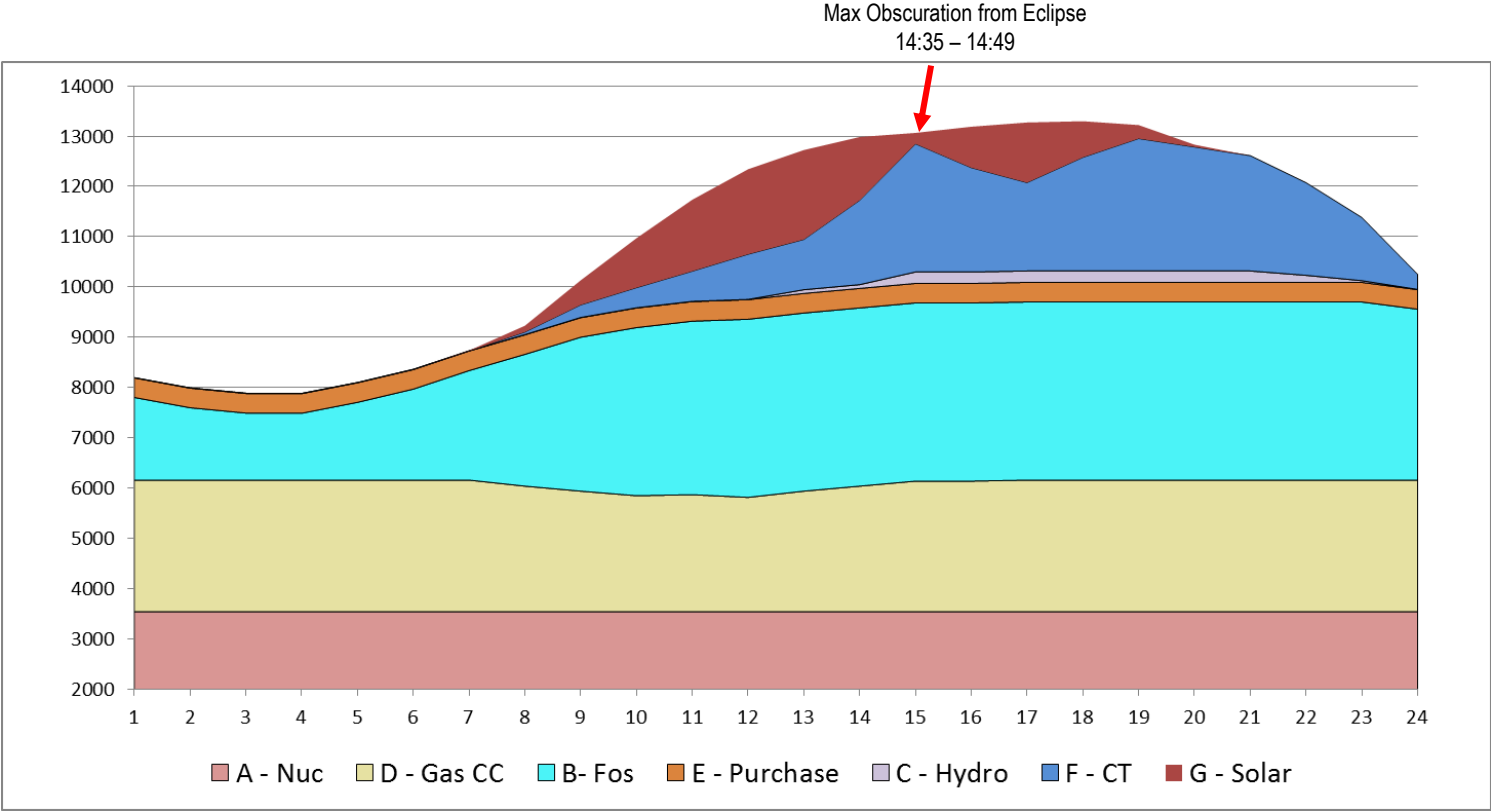
System Operations Objectives for Managing Impacts from Eclipse

1. Preserve System Reliability – Plan will be for Independent BA Operations
 - Ensure Capacitor Banks are available
 - Coordinate closely with Distribution Control Center
 - Monitor RTCA closely
 - Maintain extra spinning reserves
 - Develop, communicate, and implement solar curtailment plans
 - Coordinate UC/Fuel planning closely with FSO
 - Hold Planning calls on Wednesday, August 16
2. Ensure Compliance with NERC Standards
 - BAL-001-2 – Maintain margin with BAAL limits
 - BAL-002-1 – Ensure ramping doesn't impede ability to recover with DCS event
3. Operate Economically
 - Coordinate UC/Fuel planning closely with FSO

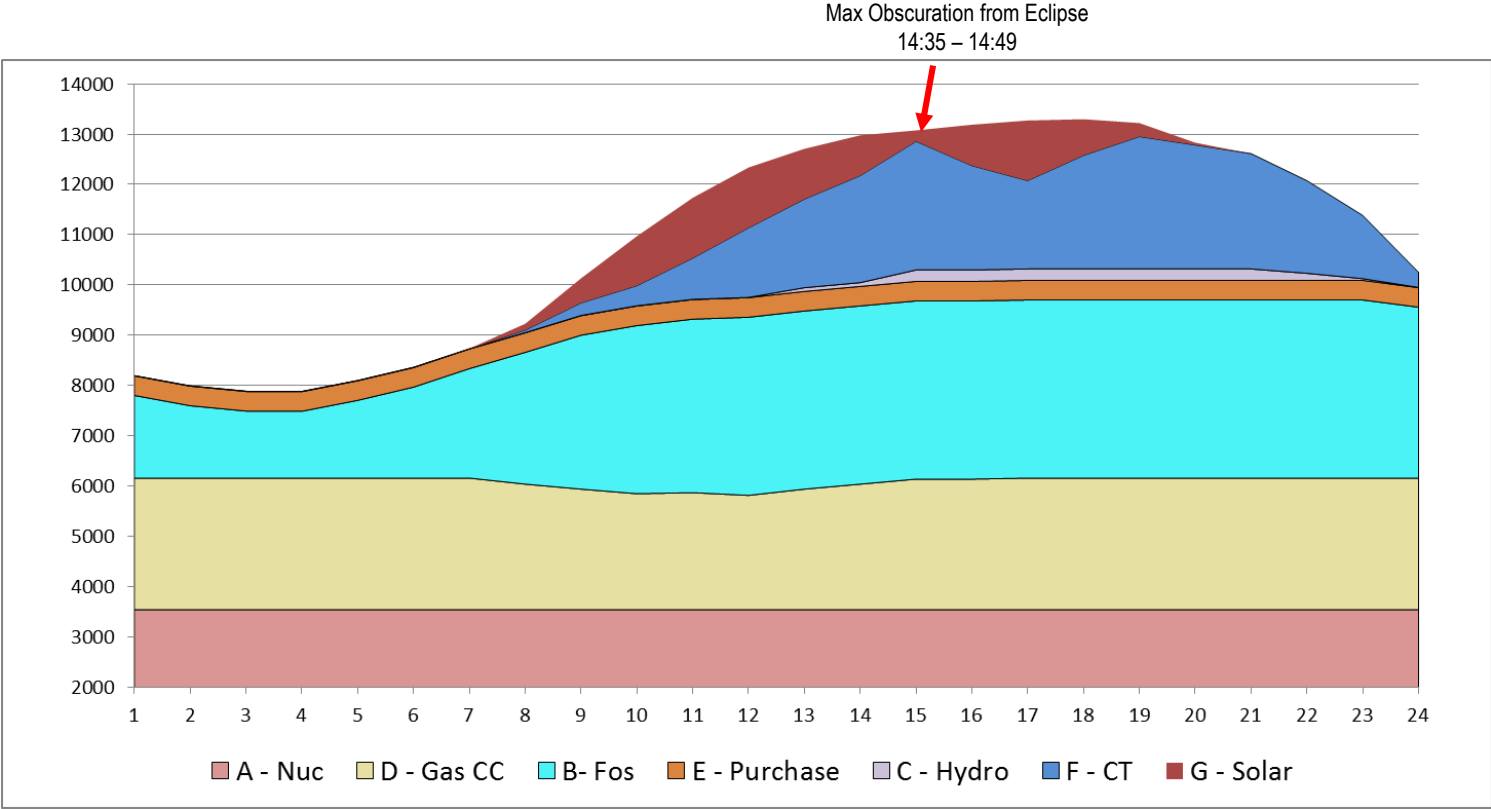
Normal Solar; High Summer Peak Resource Stack



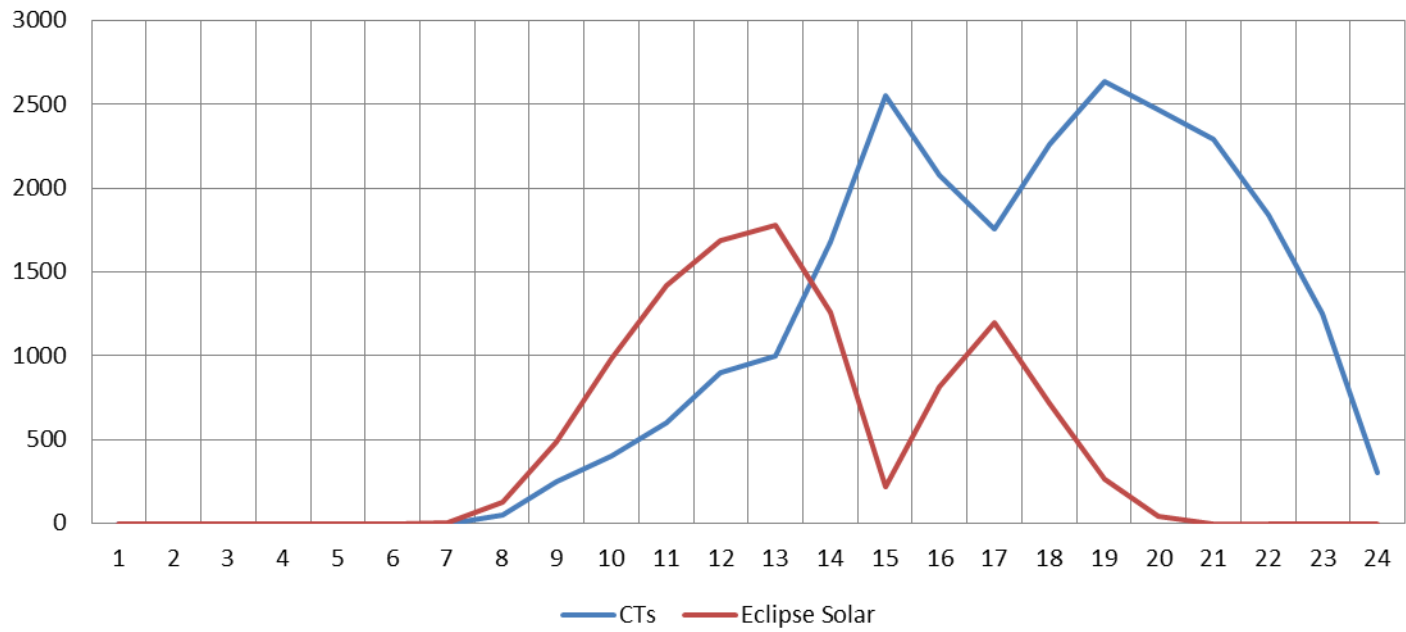
Eclipse Solar; High Summer Peak Resource Stack



Eclipse Solar w/ Curtailment; High Summer Peak Resource Stack



Eclipse Solar vs CT Generation



Next Steps

- Conduct scenario studies
 - Worst case forced outages going into Monday August 21, 2017
 - DEC needing full output from pumped storage for DEC BA load (2140 MW)
- Determine and communicate solar curtailment plan
- Coordinate preliminary fuels and UC plans for scenarios
- Communicate plans to stakeholders

