

C.E.D Nameplate Wind MW in 2016

NAMPLATE WIND MW	2016
SPP-C	519
SPP-Dak	616
SPP-KSMO	755
SPP-NE	224
TOTAL	2,115

Source: "PMRG Response to Data Request 2" spreadsheet – Tab Initial Entry

2-24) Please provide all inputs and assumptions used for new plant additions in Juhl's PROMOD model in an excel spreadsheet. Include sources for the inputs and assumptions.

Please *see* Resource Additions and Generic Additions worksheets in "PMRG Response to PSC Data Request 2.xlsx" spreadsheet. The source for these data are the 2015 Ventyx Reference Case forecast.

According to SPP, 4 GW of wind was added in 2016

<https://www.spp.org/about-us/newsroom/spp-sets-north-american-record-for-wind-power/>

February 13, 2017

SPP sets North American record for wind power

Southwest Power Pool set a wind-penetration record of 52.1 percent at 4:30 a.m., Feb. 12, becoming the first regional transmission organization (RTO) in North America to serve more than 50 percent of its load at a given time with wind energy. The milestone beats a previous North American RTO record of 49.2 percent that SPP set April 24, 2016. Wind penetration is a measure of the amount of total load served by wind at a given time.

The proliferation of wind power in the SPP region has grown significantly over the last decade. As recently as the early 2000s, SPP's generating fleet included less than 400 MW of wind, and for years, wind was reported in the "Other" category in SPP's fuel mix data. Wind is now the third most-prevalent fuel source in the SPP region. It made up approximately 15 percent of the organization's generating capacity in 2016, behind only natural gas and coal.

Installed wind-generation capacity increased in 2016 alone by more than 30 percent — up 4,000 MW from 12 GW to more than 16 GW. SPP's maximum simultaneous wind generation peak rose from 9,948 MW in 2015 to 12,336 MW, in early 2016.

