

**Exhibit 3 (Witness = T. Noeldner)**

**Wind Assessment Model Results**

*Note: This assessment considers only the value of power transfer capability due to wind capacity factor differentials. Transfer capability brings other benefits, but they are not accounted for in this assessment.*

Case Description	- Model Results - Projected wind-related value of power transfer capability (\$/kW)	Key Assumptions evaluated in Sensitivity Analysis				
		Minnesota Wind Cap. Factor Average	Wisconsin Wind Cap. Factor Average	Wind Gen. Installed Capital Cost (\$/kW)	Average Xmsn Losses	Fixed Charge Rate of Transmission (%)
B & McD Base Model (NREL 50 meter data extrapolated) [1] [2]	\$480	35.0%	25.0%	\$ 2,000	5.0%	15.0%
<b>Base Case (NREL 80 meter wind data) [3]</b>	<b>\$180</b>	<b>39.2%</b>	<b>33.0%</b>	<b>\$ 2,000</b>	<b>5.0%</b>	<b>15.0%</b>
<i>Sensitivity to Capacity Factor</i>						
EIPC wind data (MISO_W vs. MISO_WUMS) [4]	\$130	37.7%	32.7%	\$ 2,000	5.0%	15.0%
100 meter vs 80 meter NREL wind data [5]	\$190	41.1%	34.5%	\$ 2,000	5.0%	15.0%
MN >35% vs WI >30% average NREL 80 meter wind data [6]	\$250	40.9%	33.0%	\$ 2,000	5.0%	15.0%
<i>Sensitivity to wind generation Capital Cost</i>						
EIPC base capital cost [7]	\$220	39.2%	33.0%	\$ 2,415	5.0%	15.0%
EIPC low capital cost sensitivity [7]	\$180	39.2%	33.0%	\$ 1,932	5.0%	15.0%
<i>Sensitivity to fixed charge rate (transmission)</i>						
EIPC base fixed charge rate [8]	\$160	39.2%	33.0%	\$ 2,000	5.0%	16.8%
Equi-distant below base assumption	\$210	39.2%	33.0%	\$ 2,000	5.0%	13.2%
<i>Sensitivity to transmission losses</i>						
Base + 2.0%	\$150	39.2%	33.0%	\$ 2,000	7.0%	15.0%
Base - 2.0%	\$220	39.2%	33.0%	\$ 2,000	3.0%	15.0%

**Description of Assumptions and Data Sources**

1. Except as described otherwise in this Exhibit 3, all assumptions are as described in the Wind Assessment (Exhibit 2), Section 4 and 5.1.
2. The B & McD Base Model used NREL 50 meter wind data and extrapolated it to a height of 80 meters. NREL later published 80 meter data (February 2010).
3. The Base Case for this testimony uses NREL 80 meter wind data for Minnesota and Wisconsin. This information is found at [http://www.windpoweringamerica.gov/wind\\_maps.asp](http://www.windpoweringamerica.gov/wind_maps.asp)
4. The EIPC wind data is available on the EIPC website, [http://www.eipconline.com/Resource\\_Library.html](http://www.eipconline.com/Resource_Library.html)
5. NREL also provides 100 meter wind data at the website referred to in #3 above.
6. Minnesota's wind resource is much more robust than Wisconsin's. According to NREL, MN has 388,907 MW of wind gen potential at or above 35% capacity factor. NREL states that WI has 103,757 MW of wind gen potential at or above **30%** capacity factor and only 20,741 MW at or above 35% capacity factor.
7. The EIPC capital cost information is available at the EIPC website referred to in #4 above.
8. The EIPC fixed charge rate information is available at the EIPC website referred to in #4 above.