Show-McExhibit No. 4//

Eate 3-22-17 Reporter MC

COMMISSION OF THE STATE OF MISSOURIFILE NO. EA-2016 · 0358

In the Matter of the Application of)	
Grain Belt Express Clean Line LLC for a)	FILED
Certificate of Convenience and Necessity)	April 4, 2017
Authorizing It to Construct, Own, Operate,)	Data Center
Control, Manage, and Maintain a High) Case No. EA-2016-0358	Missouri Public
Voltage, Direct Current Transmission Line)	Service Commission
and an Associated Converter Station)	
Providing an Interconnection on the)	
Maywood - Montgomery 345 kV transmission)	
Line.)	

EDWARD C. PFIEFFER'S RESPONSES TO SHOW ME CONCERNED LANDOWNERS' FIRST SET OF DATA REQUESTS

Item No.	<u>Description</u>
EP.1	In the Loss of Load Expectation (LOLE) analysis described in your direct testimony, in the base case and the GBX case, what was assumed for the configuration of the MISO-region grid with respect to transmission projects already approved by MISO? In other words, was it assumed that projects already approved by MISO and under development are in-service during the 2022 study period? If so which ones? If not, why not?
RESPONSE:	My analysis does not make any specific assumptions about the "configuration of the MISO-region grid with respect to transmission projects already approved by MISO." As is common in LOLE studies, I did not make specific assumptions about the transmission topology during the studied period. Instead, I assumed generation located within or delivered to the State of Missouri was deliverable to load within Missouri.
EP.2	Regarding the modeled availability of the additional 500MW of capacity in your GBX case (reference page 4 line 15 of your direct testimony), what was the assumed availability of power for injection at time of peak in your LOLE analysis, and what was the assumed source of the 500MW of power?
RESPONSE:	I assumed 500 MW of power was available for delivery to Missouri. I did not assume any specific source of this power, as the power could be provided by multiple generators within the SPP or PJM footprints, or by the wind generators connected to the Grain Belt Express Project. In my surrebuttal testimony, I also ran an alternative case where I assumed only 19.5% of the maximum 500 MW of injection was delivered to Missouri, and that case still showed a substantial reliability benefit.