

**STATE OF ILLINOIS  
ILLINOIS COMMERCE COMMISSION**

Grain Belt Express Clean Line LLC	)	
	)	
Application for an Order Granting Grain Belt	)	
Express Clean Line LLC a Certificate of Public	)	
Convenience and Necessity pursuant to	)	
Section 8-406.1 of the Public Utilities Act to	)	Docket No. 15-0277
Construct, Operate and Maintain a High Voltage	)	
Electric Service Transmission Line and to	)	
Conduct a Transmission Public Utility Business in	)	
Connection Therewith and Authorizing Grain Belt	)	
Express Clean Line Pursuant to Sections 8-503 and	)	
8-406.1(i) of the Public Utilities Act to Construct	)	
the High Voltage Electric Transmission Line.	)	

**INITIAL BRIEF OF THE  
ENVIRONMENTAL LAW & POLICY CENTER**

**September 11, 2015**

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## **I. Introduction**

The Illinois Commerce Commission (“ICC” or “Commission”) has before it the petition (“Petition”) of Grain Belt Express Clean Line LLC (“GBECL”) for an order granting GBECL a Certificate of Public Convenience and Necessity (“CPCN”) pursuant to Section 8-406.1 of the Public Utilities Act (“PUA”) (220 ILCS 5/8-406.1). The CPCN will allow GBECL to operate as a transmission public utility in Illinois and to construct, operate, and maintain an electric transmission line (“Project”) in Illinois. GBECL Petition at page 1. GBECL also seeks authorization and direction from the Commission to construct the Project pursuant to Section 8-503 of the PUA (220 ILCS 5/8-503). *Id.* Intervenor Environmental Law and Policy Center (“ELPC”) supports GBECL’s Petition, and requests that the Commission grant GBECL public utility status and direct it to construct the Project.

GBECL’s Project will be a nominal  $\pm 600$  kV, high voltage, direct current (“HVDC”) transmission line and associated facilities that will run from western Kansas to Indiana by way of Missouri and Illinois. GBECL Petition at pages 2-3. Once in Indiana, the line will interconnect with the PJM Interconnection, LLC (“PJM”) transmission system at the Sullivan/Breed Substation of American Electric Power Company in Sullivan County, Indiana. *Id.* at page 3. The Project is designed to deliver to the Midcontinent Independent System Operator (“MISO”) and PJM markets up to 4,000 MW – 20 million MWh – of electricity from high capacity factor, low-cost wind resources from western Kansas, 3,500 MW of which will be delivered directly to the PJM market. *Id.* The Project will deliver enough power on an annual basis to meet the electricity needs of approximately 1.6 million homes. GBECL Petition at page 22. Importantly, as GBECL Witness Berry testified, GBECL’s merchant generator status means “it is assuming the market

risk of the Project and does not have a process to recover its costs from ratepayers . . . .” GBECL Exhibit 11.0 at page 55. GBECL will earn its rate of return from

(1) wind energy producers located in the wind-rich Resource Area at the western end of the Grain Belt Express Project, and (2) buyers of electricity . . . located in areas at, or connected to, the eastern two delivery points of the Project. Buyers of electricity are expected to be principally wholesale buyers, such as utilities, competitive retail electricity suppliers, including certified alternative retail electricity suppliers in Illinois, and brokers and marketers. However, potential buyers could also include retail purchasers of renewable resources seeking unbundled transmission service.

GBECL Exhibit 1.0 at page 14. Illinois customers stand to gain significant benefits in the form of access to electricity from low-cost (including zero-fuel cost) renewable energy resources at no financial risk.

Pursuant to Section 8-406.1 of the PUA, GBECL’s Project will “promote the public convenience and necessity” by “promot[ing] the development of an effectively competitive electricity market that operates efficiently, is equitable to all customers, and is the least cost means of satisfying those objectives.” 220 ILCS 5/8-406.1(f)(1). The Project meets this requirement by providing economic and environmental benefits to Illinois and the region by satisfying the large demand for low-cost electricity. Specifically:

- The Project will provide access to renewable energy resources needed to meet Illinois’ Renewable Portfolio Standard (“RPS”) requirement and will allow Illinois and other states to comply with RPS compliance requirements in a cost-effective manner.
- The additional supply of renewable energy to Illinois and PJM will increase competition among suppliers of electricity and will exert downward pressure on wholesale energy prices, which will in turn result in lower retail electricity prices.
- By transmitting electricity from low-cost wind resources in western Kansas to the PJM, the Project will reduce the need to dispatch more expensive and more environmentally damaging generation sources, thereby reducing overall power plant air, water and solid waste pollution.

- Construction in a timely manner will allow the Project to help supply some of the renewable resources necessary to bring Illinois into compliance with the recently finalized federal regulations and state implementation plan requirements under Section 111(d) of the Clean Air Act.

For these reasons, as detailed below, the Commission should grant GBECL's Petition.

#### **IV. Section 8-406.1(f) Criteria for a Certificate**

Illinois law, under Section 8-406.1(f) of the PUA, requires that the Commission grant GBECL a CPCN if GBECL demonstrates that the Project "will promote the public convenience and necessity" and that it meets all of the following criteria:

- (1) That the Project is necessary to provide adequate, reliable, and efficient service to the public utility's customers and is the least-cost means of satisfying the service needs of the public utility's customers or that the Project will promote the development of an effectively competitive electricity market that operates efficiently, is equitable to all customers, and is the least cost means of satisfying those objectives.
- (2) That the public utility is capable of efficiently managing and supervising the construction process and has taken sufficient action to ensure adequate and efficient construction and supervision of the construction.
- (3) That the public utility is capable of financing the proposed construction without significant adverse financial consequences for the utility or its customers.

220 ILCS 5/8-406.1(f). While ELPC believes that GBECL meets all three requirements, this brief will focus on requirement (1) and ways that the Project is in the public interest more generally.

#### **B. Section 8-406.1(f)(1)**

In order for a utility to receive a CPCN, Section 8-406.1(f)(1) of the PUA requires that the utility either (a) demonstrate that the project is necessary to provide adequate, reliable, and efficient service to its customers *or* (b) demonstrate that the proposed construction will promote

the development of an effectively competitive electricity market. 220 ILCS 5/8-406.1(f)(1). GBECL demonstrated that its Project will promote the development of an effectively competitive electricity market.

**1. Promote the Development of an Effectively Competitive Electricity Market**

The Project promotes the development of an effectively competitive electricity market in at least three ways. First, the Project will increase the supply of renewable energy credits (“REC”). Second, the Project will lower the costs of those RECs. Third, the Project will lower wholesale energy prices by increase the increasing generator competition and putting downward pressure on wholesale prices.

**i. The Project will increase the supply of renewable energy credits necessary to comply with the Illinois renewable portfolio standard**

One way that the Project will promote the development of an effectively competitive electricity market pursuant to Section 8-406.1(f)(1) of the PUA is by increasing the supply of renewable energy credits available for purchase by Illinois utilities. Pursuant to Section 1-75(c) of the PUA, utilities must comply with the Illinois RPS. 20 ILCS 3855/1-75(c). The RPS requires Illinois utilities to ensure that a certain percentage of the total energy supplied to their customers comes from renewable energy resources. Specifically, the RPS requires that at least 10% of a utility’s total supply come from renewable resources by June 1, 2015. 20 ILCS 3855/1-75(c)(1). Each year after 2015, utilities must increase the total percentage of supply coming from renewable resources by at least 1.5%. *Id.* By 2025, utilizes must receive 25% of their total supply from renewables. *Id.*

Renewable energy resources are defined by Illinois law as:

[E]nergy and its associated renewable energy credit or renewable energy credits from wind, solar thermal energy, photovoltaic cells and panels, biodiesel, anaerobic digestion, crops and untreated and unadulterated organic waste biomass, tree waste, hydropower that does not involve new construction or significant expansion of hydropower dams, and other alternative source of environmentally preferable energy.

20 ILCS 3855/1-10. A renewable energy credit is, “[A] tradable credit that represents the environmental attributes of a certain amount of energy produced from a renewable energy resource.” *Id.* Illinois utilities use RECs to meet their RPS obligation. Therefore, as REC prices fall, the cost of complying with the RPS will also fall.

Illinois is not the only state within the MISO and PJM regions with RPS requirements. GBECL Witness Berry estimates that the demand for renewable energy from states in the MISO and PJM regions will require renewable resources reaching “106.6 million MWh in 2015, 166.1 million MWh in 2020, and 210.9 million MWh in 2025.” GBECL Exhibit 11.0 at page 20. Mr. Berry derived these estimates using data from the U.S. Energy Information Administration’s 2014 Annual Energy Outlook. *Id.* GBECL’s Project is particularly well positioned to serve this increasing demand for wind resources. This demand for renewable energy will drive the cost of compliance for all states, including Illinois, to meet their RPS requirements. The Project is capable of delivering as much as 20 million MWh of electricity from wind generation into the MISO and PJM markets – which include the entire state of Illinois – from high capacity-factor, low-cost wind resources. GBECL Petition at page 3. This would meet a significant percentage of all of PJM and MISO state RPS demand through 2025. As observed by Mr. Berry, “total renewable generation in MISO and PJM states during 2014 was about 85.6 million MWh.” GBECL Exhibit 11.0 at page 21. That number is well short of the requirements for 2015, let alone the requirements through 2025. As Mr. Berry stated, “This shortfall underscores the need

for transmission infrastructure like the Project to enable low-cost wind energy to be constructed and its output to be delivered to markets in the MISO and PJM states.” *Id.* The Project’s impact will be substantial: a nearly 25% increase of 2014 renewable generation levels in the combined PJM and MISO footprints. As explained below, this substantial wind resource will serve to drive down REC prices, making compliance cheaper for Illinois ratepayers. Since GBECL is not seeking to recover costs from Illinois ratepayers, this reduction in REC prices will come at no additional cost to the ratepayers.

Though the Illinois RPS is the single most significant driver of renewable energy in Illinois at the moment, the rise of alternative retail electric suppliers (“ARES”) in the state could drive additional demand for supply from renewable resources. As Mr. Berry explained, a number of municipalities “have required the alternative retail provider to obtain a significant additional portion of its electricity supply, beyond the RPS minimum requirements, from renewable resources, or to offer the retail customers an option to specify that a stated percentage of the electricity supplied will come from renewable resources above and beyond the RPS minimum requirements.” GBECL Exhibit 11.0 at pages 15-16. Therefore, in addition to the need for low-cost RECs to meet the RPS, Illinois ratepayers who choose an ARES with an additional renewable procurement requirement will further benefit from increased access to low-cost RECs.

## **ii. The Project will lower REC prices**

The Project not only makes more RECs available to Illinois utilities, it also lowers the prices of all RECs in the region, making compliance with the Illinois RPS and other renewable requirements cheaper. As GBECL Witness McDermott explained, “The Project is projected to provide access to new and currently untapped potential renewable resources that should have the effect of providing competitive pressure on prices in renewable energy credit (‘REC’) markets as

well as competitive pressure on prices in markets for renewable energy.” GBECL Exhibit 4.0 Revised at page 4.

Many states in the PJM and MISO footprints have either renewable energy standards or goals. GBECL Exhibit 11.0 at page 17. As Mr. Berry explained:

Within the PJM footprint, the District of Columbia, Delaware, Maryland, New Jersey, North Carolina, Ohio, Pennsylvania and Virginia all have enacted RPS, goals, or targets, as have Illinois and Michigan, which have service territories in both MISO and PJM. Several additional states in the MISO footprint – Iowa, Minnesota, Montana, North Dakota, Wisconsin, and Missouri – also have RPS requirements.

*Id.* RECs associated with generation in one state can be used to satisfy RPSs in multiple states, which means, “Markets for renewable energy and RECs are highly linked across states, similar to the manner in which markets for wholesale electricity are highly linked across different states within a RTO footprint.” *Id.* at page 18. Mr. Berry explained, “Shortfalls in other states in renewable energy resources to meet RPS requirements will tend to increase REC prices throughout the region, and therefore increase the cost of meeting the Illinois RPS.” *Id.*

Dr. McDermott attempted to quantify the Project’s effect on the REC market. Dr. McDermott conducted a study of the REC market as defined by REC facilities located in PJM and MISO. This market is relevant because Section 1-75(c) of the PUA requires non-ARES utilities to give preference to RECs from Illinois and adjoining states. 20 ILCS 3855/1-75(c). While PJM and MISO markets are not a perfect proxy for “Illinois and adjoining states,” Dr. McDermott justified this slightly expanded market by noting that “REC buyers in Illinois are able to purchase from outside this regional market if insufficient cost-effective resources are available in this regional market.” GBECL Exhibit 4.0 at page 20. Dr. McDermott also investigated the broader REC market defined as the REC facilities located within the entire Eastern Interconnection, which consists of “the entire Alternating Current (“AC”) transmission

system east of the Rocky Mountains, including parts of Canada and Texas.” *Id.* at page 8, footnote 3. Dr. McDermott found that the supply of RECs in both REC markets would increase as a result of the project. *Id.* at pages 44-46. Dr. McDermott found that the project would increase the supply of REC capacity in PJM and MISO by as much 9% and the supply of REC energy by as much as 13% in 2020. *Id.* at page 44. Even under the Green Economy future, which assumes significant growth in competing REC supply, the project increases the supply of REC capacity by 6% across the entire PJM and MISO markets. *Id.* Dr. McDermott also found a significant increase in the REC supply to the Eastern Interconnection. While the magnitude of the Project’s effects on this larger market are more modest, Dr. McDermott still found an increase in the Eastern Interconnection supply of REC capacity of as much as 5% and the supply of REC energy of as much as 7% in 2020. *Id.* at pages 44-45. The following are copies of Dr. McDermott’s tables detailing the impact of the Project on the supply of RECs:

**Table 11: Change in REC Capacity (MW) – PJM and MISO**

			With Project	Without Project	Change
2020					
	Business as Usual	1	49,295	45,295	9%
	Green Economy	2	72,953	68,953	6%
	Robust Economy	3	49,295	45,295	9%
	Slow Growth	4	49,295	45,295	9%
2024					
	Business as Usual	5	55,716	51,716	8%
	Green Economy	6	85,103	81,103	5%
	Robust Economy	7	55,716	51,716	8%
	Slow Growth	8	55,716	51,716	8%

**Table 12: Change in REC Capacity (MW) – Eastern Interconnection**

		With Project	Without Project	Change	
<b>2020</b>					
	Business as Usual	1	92,725	88,725	5%
	Green Economy	2	143,493	139,493	3%
	Robust Economy	3	92,725	88,725	5%
	Slow Growth	4	92,725	88,725	5%
<b>2024</b>					
	Business as Usual	5	102,676	98,676	4%
	Green Economy	6	160,438	156,438	3%
	Robust Economy	7	102,676	98,676	4%
	Slow Growth	8	102,676	98,676	4%

**Table 13: Change in REC Energy (GWh) – PJM and MISO**

		With Project	Without Project	Change	
<b>2020</b>					
	Business as Usual	1	178,427	157,716	13%
	Green Economy	2	253,329	232,618	9%
	Robust Economy	3	178,427	157,716	13%
	Slow Growth	4	178,427	157,716	13%
<b>2024</b>					
	Business as Usual	5	199,809	179,098	12%
	Green Economy	6	297,939	277,228	7%
	Robust Economy	7	199,809	179,098	12%
	Slow Growth	8	199,809	179,098	12%

**Table 14: Change in REC Energy (GWh) – Eastern Interconnection**

		With Project	Without Project	Change	
<b>2020</b>					
	Business as Usual	1	327,494	306,783	7%
	Green Economy	2	500,925	480,213	4%
	Robust Economy	3	327,494	306,783	7%
	Slow Growth	4	327,494	306,783	7%
<b>2024</b>					
	Business as Usual	5	362,611	341,900	6%
	Green Economy	6	561,162	540,450	4%
	Robust Economy	7	362,611	341,900	6%
	Slow Growth	8	362,611	341,900	6%

*Id.* at pages 45-46.

Not only will the Project drive down REC prices by increasing the overall supply of RECs in the market, the Project also will reduce REC prices because of the lower energy cost of

the wind generation that will use the Project. As Mr. Berry explained, “Wind speeds in western Kansas are substantially higher than in Missouri, Illinois, Indiana and other states to the east of Kansas that will be served by the Project.” GBECL Exhibit 10.0 at page 35. These higher wind speeds lead to higher capacity factor. *Id.* According to Mr. Berry, a higher capacity factor “substantially reduces the cost of wind energy produced by facilities located in areas with higher average wind speeds. As more energy is produced by a wind turbine, the unit cost of energy decreases, because the upfront capital cost can be recovered over a large number of MWh.” GBECL Exhibit 10.0 at page 36. These lower prices are passed on to Illinois ratepayers in the form of cheaper RECs.

**iii. The Project will increase generator competition and will exert downward pressure on wholesale energy prices, which will in turn result in lower retail electricity prices**

As explained above, the Commission can grant a CPCN if the proposed project will “promote the development of an effectively competitive electricity market that operates efficiently, is equitable to all customers, and is the least cost means of satisfying those objectives.” 220 ILCS 5/8-406.1(f)(1). Just as the Project will increase the supply of low cost RECs, thereby driving down the price Illinois customers have to pay to comply with the RPS, the Project will also increase the supply of lower-cost generation, thereby driving down the price customers have to pay for electricity. As Dr. McDermott summarized, “[T]he additional transmission capacity of the Project will promote additional efficiencies by increasing the size of the supply side of the market competing to serve in Illinois and opening the Illinois market to lower cost generation resources.” GBECL Exhibit 4.0 at page 3.

As GBECL Witness Cleveland explained in his initial testimony, he “used the PROMOD production cost modeling software package to perform simulations of future energy markets for two representative study years, 2020 and 2024, to assess the economic impact of the Grain Belt Express Project on system operations in Illinois.” GBECL Exhibit 3.0 at page 3. Mr. Cleveland’s modeling relied on four different futures scenarios: (1) Business as Usual; (2) Slow Growth; (3) Robust Economy; and (4) Green Economy. GBECL Exhibit 3.0 at pages 6-7. Mr. Cleveland’s analysis shows that the Project will lower the total demand costs, locational marginal prices (“LMP”), and variable production costs, all of which result in lower retail prices for Illinois ratepayers. *Id.* at page 12.

As Mr. Cleveland explained, demand costs represent “the total cost to purchase energy to supply total Illinois annual demand under RTO settlement rules.” *Id.* at page 10. Mr. Cleveland found that the Project would reduce demand costs in Illinois by between \$108 million and \$231 million in the 2020 futures scenarios, and by \$95 million to \$360 million in the 2024 futures scenarios. GBECL Exhibit 3.3 at pages 1-2.

LMP represents the “[i]ncremental cost of energy averaged across all operating hours and electrical buses in Illinois.” GBECL Exhibit 3.0 at page 10. Therefore, if lower-cost generation such as wind-powered generation is available, it will serve to lower LMP. Mr. Cleveland found that the Project would reduce LMP by an average of -0.76 \$/MWh and -1.50 \$/MWh in the 2020 futures scenarios for PJM Illinois, and by an average of -0.36 \$/MWh and -1.05 \$/MWh for MISO Illinois. GBECL Exhibit 3.3 at page 3. Mr. Cleveland also found that the Project reduces LMP by an average of -0.61 \$/MWh and -2.36 \$/MWh in the 2024 futures scenarios for PJM Illinois, and by an average of -0.33 \$/MWh and -1.84 \$/MWh for MISO Illinois. *Id.* at page 4.

Production costs represent the “[t]otal variable cost of generation to supply energy to meet all annual demand in the modeling footprint, including fuel costs, emission costs, variable operation and maintenance costs, and unit startup costs.” GBECL Exhibit 3.0 at page 10. Mr. Cleveland found that the Project would reduce production costs across the Eastern US by between \$855 million and \$1.369 billion in the 2020 futures scenarios, and between \$798 million and 1.660 billion in the 2024 futures scenarios. GBECL Exhibit 3.3 at page 5.

Dr. McDermott explained why these reduced wholesale costs demonstrate that the Project meets the Section 8-406.1(f)(1) of the PUA requirement that a transmission line “promote the development of an effectively competitive electricity market that operates efficiency [and] is equitable to all customers.”

It must be that the law is referring to the market over which a transmission project has some influence. In this case, this is the wholesale electric market (including the REC market). (A transmission asset cannot, for example, have an influence on the competitiveness of the retail electricity market, except indirectly through its effect on the wholesale market.) Perhaps the most obvious way to apply this provision of the Act is to ask how the wholesale electricity prices affecting customers in Illinois, and perhaps the broader regional markets, are influenced by the Project. For the ComEd and Ameren retail customers who buy power through the real-time or close to real-time wholesale market any reduction in wholesale prices will provide a direct and immediate benefit. For those customers that buy power from ComEd or Ameren through the Illinois Power Agency procurement process, the benefit will show up in the short term through the daily balancing process the utilities undertake, which will subsequently reduce the purchased energy adjustment. The benefit will also be realized in the longer term since more recent vintage contracts are added to the portfolio. Likewise, for other customers in Illinois who buy power under contracts, such as contracts under the state’s municipal aggregation option, the benefit will show up as new contracts are let. In the broader regional markets consumers (and society) benefit through the reduction in the production costs of electricity. That is, higher cost units that would have run in certain hours of the year will no longer run, or run fewer hours, since lower cost generation is provided access to the market through the Project’s transmission capacity.

GBECL Exhibit 4.0 at pages 9-10 (footnotes omitted). Dr. McDermott also calculated the net present value of these reduced wholesale prices. Dr. McDermott found that the benefits to

Illinois consumers under all four futures scenarios through 2024 would be in the range of \$256 million to \$726 million. *Id.* at page 29.

In addition to calculating the dollar value to customers, Dr. McDermott quantified the benefit to competition using the Delivered Price Test (“DPT”). As Dr. McDermott explained, the DPT, outlined in the Federal Energy Regulatory Commission’s Merger Policy Statement, “is relevant to the analysis of the Project because it includes a recognized standard for measuring the relevant size of electricity markets for competitive analysis.” *Id.* at page 22. Dr. McDermott calculated the Economic Capacity available to supply the Illinois market, “which is defined as the supply that can be delivered into the destination market at a delivered cost less than 105 percent of the destination market price.” *Id.* According to Dr. McDermott’s calculations, the Project is expected to increase the Economic Capacity available to supply the Illinois market by between 1.0% and 6.1% under the 2020 futures scenarios and between 0.2% and 2.7% under the 2024 futures scenarios. *Id.* at pages 43-44. This increased economic import capability allows a greater level of lower cost generation resources to compete in the Illinois market. This creates competitive pressure on prices and is sufficient to show that the Project is *promoting* competition in the Illinois wholesale electric market.

While Mr. Cleveland and Dr. McDermott did not use a futures scenario with flat or very limited load growth, the record does not include any evidence suggesting that the Project would not promote competition under those conditions. Even if load were flat through 2020, the Project would still bring lower cost generation into Illinois, which would drive down wholesale prices and therefore drive down costs to Illinois ratepayers.

All of the evidence in this case points to the GBECL Project as being an effective tool for increasing competition in the Illinois electricity market. The Project will increase the availability

of low-cost RECs needed to meet Illinois RPS and other renewable requirements, and will reduce the cost of electricity to Illinois consumers by increasing the amount of low-cost, clean electricity available in the Illinois market. The Project, therefore, meets the requirement of Sections 8-406.1(f)(1) of the PUA that transmission projects “promote the development of an effectively competitive electricity market.” 220 ILCS 5/8-406.1(f)(1).

**F. Other Considerations Under Section 8-406.1**

Section 8-406.1 of the PUA requires the Commission to grant GBECL a CPCN before the company can begin construction of the Project. 220 ILCS 5/8-406.1. While Section 8-406.1(f) specifically requires a finding that the Project will at a minimum either (a) demonstrate that the project is necessary to provide adequate, reliable, and efficient service to its customers or (b) demonstrate that the proposed construction will promote the development of an effectively competitive electricity market, the law does not *require* the Commission to grant a CPCN if the Project meets one or both of those minimum requirements. Rather, Illinois courts have held, “The Commission has broad discretion to decide whether a petition should be approved under the public convenience standard.” *Commonwealth Edison Co. v. ICC*, 295 Ill. App. 3d 311, 317 (Ill. App. Ct. 2d Dist. 1998). This means that the Commission can look outside of the enumerated requirements when determining whether or not to grant utilities a CPCN. Therefore, to the extent that the Project has environmental and other policy benefits beyond the minimum 8-406.1(f) requirements, the Commission should take those benefits into account when determining whether or not to grant a CPCN.

**i. The Project creates environmental benefits**

While the 8-406.1(f) does not specifically list environmental issues as part of the CPCN requirements, the Commission traditionally considers environmental impacts when evaluating a CPCN application. For example, in Docket No. 06-0706, the ICC held, “The Commission wishes to limit the environmental impacts of any transmission line it approves.” Final Order, ICC Docket No. 06-0706 at page 55 (Mar. 11, 2009). In that case, the Commission used “Environmental impacts” as one of eleven factors to determine a transmission line route. *Id.* at page 62. In the end, and after a detailed review of the environmental impacts of the competing alternatives, the Commission approved the “Green Route” in part because it had fewer adverse environmental impacts than the alternative routes. *Id.*

In this case, GBECL’s Project will not only limit environmental impacts, but will also provide significant environmental *benefits*, a clear boost to the public convenience. By displacing polluting, fossil fuel generation in favor of clean, wind-generated electricity, the Project will lead to significant reductions in emissions of nitrogen oxide (“NO<sub>x</sub>”), sulfur dioxide (“SO<sub>2</sub>”), carbon dioxide (“CO<sub>2</sub>”), and mercury (“Hg”). GBECL Exhibit 3.4. The Project will also reduce water usage in Illinois and throughout the eastern U.S. *Id.*

In each PROMOD futures scenario Mr. Cleveland found that the construction and operation of the Project resulted in lower emissions and less water consumption. *Id.* For example, under the 2020 Business as Usual future, Mr. Cleveland calculated a reduction of more than 14 million tons of CO<sub>2</sub>, more than 22,000 tons of SO<sub>2</sub>, more than 10,000 tons of NO<sub>x</sub>, 180lbs of Hg, and more than 4 billion gallons in water usage. *Id.* There are even greater savings under the Slow Growth and Green Economy futures, and only slightly less savings under the

Robust Economy future. The following is a chart of Mr. Cleveland's emissions reduction conclusions:

**EMISSIONS AND WATER USE REDUCTION FROM GRAIN BELT EXPRESS PROJECT**

Emissions (Eastern US)	Effluent (Units)	2020			
		Business As Usual	Slow Growth	Robust Economy	Green Economy
Without Grain Belt	NO <sub>x</sub> (tons)	1,088,703	818,234	1,255,728	931,182
Without Grain Belt	SO <sub>2</sub> (tons)	2,210,289	1,555,883	2,553,375	1,958,658
Without Grain Belt	CO <sub>2</sub> (tons)	1,408,175,311	1,186,439,920	1,566,416,963	1,285,834,425
Without Grain Belt	Hg (lbs)	28,208	20,521	32,457	24,101
Without Grain Belt	Water (MGal)	415,926	338,833	461,787	384,718
With Grain Belt	NO <sub>x</sub> (tons)	1,077,856	805,427	1,249,179	920,540
With Grain Belt	SO <sub>2</sub> (tons)	2,187,514	1,527,862	2,543,138	1,936,802
With Grain Belt	CO <sub>2</sub> (tons)	1,393,769,098	1,169,649,021	1,556,012,848	1,271,652,706
With Grain Belt	Hg (lbs)	28,028	20,287	32,351	23,924
With Grain Belt	Water (MGal)	411,738	334,198	458,775	380,641
Reduction	NO <sub>x</sub> (tons)	10,847	12,807	6,549	10,642
Reduction	SO <sub>2</sub> (tons)	22,775	28,021	10,237	21,856
Reduction	CO <sub>2</sub> (tons)	14,406,213	16,790,898	10,404,115	14,181,718
Reduction	Hg (lbs)	180	234	105	177
Reduction	Water (MGal)	4,188	4,635	3,012	4,077
Emissions (Eastern US)	Effluent (Units)	2024			
	Type	Business As Usual	Slow Growth	Robust Economy	Green Economy
Without Grain Belt	NO <sub>x</sub> (tons)	1,028,033	945,473	1,251,607	737,535
Without Grain Belt	SO <sub>2</sub> (tons)	2,078,782	1,821,816	2,520,131	1,582,612
Without Grain Belt	CO <sub>2</sub> (tons)	1,368,087,416	1,304,489,427	1,588,968,390	1,106,888,332
Without Grain Belt	Hg (lbs)	26,448	24,147	32,170	19,394
Without Grain Belt	Water (MGal)	409,822	372,808	473,375	343,200
With Grain Belt	NO <sub>x</sub> (tons)	1,016,128	934,124	1,245,739	728,900
With Grain Belt	SO <sub>2</sub> (tons)	2,053,336	1,796,730	2,510,693	1,557,898
With Grain Belt	CO <sub>2</sub> (tons)	1,352,774,657	1,288,930,025	1,580,072,327	1,093,378,554
With Grain Belt	Hg (lbs)	26,231	23,932	32,074	19,227
With Grain Belt	Water (MGal)	405,355	368,412	470,471	339,365
Reduction	NO <sub>x</sub> (tons)	11,905	11,349	5,868	8,635
Reduction	SO <sub>2</sub> (tons)	25,446	25,086	9,438	24,714
Reduction	CO <sub>2</sub> (tons)	15,312,759	15,559,402	8,896,063	13,509,779
Reduction	Hg (lbs)	217	215	97	167
Reduction	Water (MGal)	4,467	4,396	2,904	3,835

Note: Water is in Millions of Gallons of water consumed (evaporated), not to be confused with total amount of water used in the power plant cooling system.

*Id.* These environmental benefits from the Project will help promote the public convenience and necessity.

**ii. The Project will help Illinois power generators comply with forthcoming federal carbon pollution standards**

ELPC also supports the Project because of its value to Illinois in meeting the recently finalized federal Clean Air Act carbon pollution standards for existing electric generating units, known as the Clean Power Plan (“CPP”). The U.S. Environmental Protection Agency (“U.S. EPA”) developed the CPP under the authority of Section 111(d) of the Clean Air Act, which authorizes the agency to set standards of performance for existing sources of air pollution. 42 U.S.C. § 7411(d). State implementation plans (“SIPs”) are the mechanism by which states implement and enforce the Act’s source-specific standards. Each state develops a SIP and submits it to U.S. EPA for approval. U.S. EPA issued the final version of the CPP on August 3, 2015, which requires states to submit their SIPs by September 6, 2016. A 2-year extension for final plan submittal is available for states that request the extension and submit initial documentation by September 6, 2016; under this approach, a progress update is due on September 6, 2017, and the final plan submittal is due on September 6, 2018. Carbon Pollution Elimination Guidelines for Existing Stationary Sources: Electric Utility Generating Units, Final Rule, Docket No. EPA-HQ-OAR-2013-0602 at page 38 (Aug. 3, 2015).

The CPP gives states significant flexibility for how they can comply with the rule’s emissions reduction targets. Methods include market-based solutions, performance standards, and other options. *Id.* Regardless of Illinois’ choice of how to comply with the CPP, zero-carbon emitting sources of energy such as wind power will be a significant part of the Illinois’

compliance strategy. A Commission decision in favor of GBECL would provide Illinois with a substantial new source of renewable energy to factor into its SIP.

The timing of the Commission's approval is also important. Swift approval would allow Illinois, and other states in the region, to plan for and factor the project into their SIPs. It would also allow entities subject to the CPP to plan for the use of renewable energy resources that the Project will deliver into PJM in Illinois, or allow that wind to fill gaps left by entities that are forced to generate less. Therefore, granting GBECL's petition now will promote the public convenience and necessity by facilitating Illinois' and regional compliance with the new carbon pollution standards.

#### **VI. Request for Authority Under Section 8-503**

Under Section 8-503 of the PUA, when the Commission finds that a transmission project will "promote the development of an effectively competitive electricity market," the Commission will issue an order authorizing and directing construction of the project. 220 ILCS 5/8-503. As explained above with regard to Section 8-406(b), the GBECL Project will promote an effectively competitive electricity market. Therefore, the Commission should authorize and direct construction of the Project so that GBECL can take the next important steps in the Project's development.

#### **IX. Conclusion/Request for Relief**

GBECL seeks a CPCN pursuant to Section 8-406.1(f) of the PUA, and authorization and direction from the Commission to construct the Project pursuant to Section 8-503 of the PUA. Those sections require GBECL to demonstrate that its Project will promote the development of

an effectively competitive electricity market in Illinois and generally promote the public convenience and necessity. As detailed above, the Project will satisfy these requirements by reducing the cost to Illinois ratepayers of both RECs and electricity, reduce emissions and water use in Illinois, and help the state comply with the recently finalized CPP. GBECL has taken the appropriate steps to finance the project at no risk to Illinois ratepayers and will do everything required to ensure that the Project will have no adverse impacts on reliability. The Commission, therefore, should act now to grant GBECL a CPCN and issue an order authorizing and directing GBECL to construct the Project.

Dated: September 11, 2015

Respectfully submitted,



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