BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of the Application of Grain Belt Express Clean Line LLC for a Certificate of Convenience and Necessity Authorizing It to Construct, Own, Operate, Control, Manage, and Maintain a High Voltage, Direct Current Transmission Line and an Associated Converter Station Providing an Interconnection on the Maywood - Montgomery 345 kV Transmission Line.	))))))))	**Case No. EA-2014-0207**

STAFF'S POSITIONS ON ISSUES

COMES NOW the Staff of the Public Service Commission of Missouri and states its positions on the listed issues as follows:

1. Does the evidence establish that the high-voltage direct current transmission line and converter station for which Grain Belt Express Clean Line LLC ("Grain Belt Express") is seeking a certificate of convenience and necessity ("CCN") are necessary or convenient for the public service?

Staff's position: As Staff witness Daniel I. Beck testifies on pages seven to eight of his rebuttal testimony (Exhibit No. 201), it is Staff's opinion that Grain Belt Express has not met the five Tartan criteria and, therefore, the evidence in this case will not establish that the high-voltage direct current transmission line and converter station are necessary or convenient for the public service.

When first addressing certificates of convenience and necessity, the Missouri Supreme Court said:

> A reasonable construction of the Public Service Commission Act forces the conclusion that it was the intention of the Legislature to clothe the commission with exclusive authority to determine whether or not the furnishing of electricity to a given town or community is a public necessity or necessary for public convenience, and, if so, to prescribe safe, efficient,

> and adequate property, equipment, and appliances in order to furnish adequate service at reasonable rates and at the same time safeguard the lives and property of the general public, those using the electricity, and those engaged in the manufacture and distribution thereof.
>
> If, as appellant contends, an electrical corporation which has a certificate of convenience and necessity to operate its plant in a given town or community might extend its lines to and furnish other communities with electricity without a certificate or authority from the commission, the purpose of the statute would be defeated. Under such a construction of the statute the commission would have no opportunity to determine whether or not public convenience and necessity demanded the use of electricity in the community to which the line was extended, and no opportunity to prescribe the safe and efficient construction of said extension or determine whether or not appellant was financially able to construct, equip, and operate such extension and furnish adequate service at reasonable rates in the new community, without crippling the service in the community where the commission had theretofore authorized it to operate.

Public Service Commission v. Kansas City Power & Light Company, 325 Mo. 1217, 1225; 31 S.W.2d 67, 70 (Mo. Banc 1930). In more recent cases, the Missouri courts have said with regard to certificates of convenience and necessity that "[t]he term 'necessity' does not mean 'essential' or 'absolutely indispensable,' but that an additional service would be an improvement justifying its cost." *State ex rel. Intercon Gas, Inc. v. Public Service Commission*, 848 S.W.2d 593 (Mo. App. 1993) citing *State ex rel. Beaufort Transfer Co. v. Clark*, 504 S.W.2d , 216, 219 (Mo. App. 1973). In evaluating applications for certificates of convenience and necessity the Commission has relied numerous times on the five factors it listed in the case *In Re Tartan Energy*, GA-94-127, 3 Mo.P.S.C.3d 173, 177 (1994), for deciding whether to grant a certificate of convenience and necessity. Those five factors are:

• Whether there is a need for the facilities and service;

• Whether the applicant is qualified to own, operate, control and manage the facilities and provide the service;

• Whether the applicant has the financial ability for the undertaking;

• Whether the proposal is economically feasible; and

• Whether the facilities and service promote the public interest.

The Commission should not necessarily limit itself to the foregoing five factors when deciding whether all of the benefits to the general public of the proposed high-voltage direct current transmission line and converter stations exceed all the costs they cause, particularly the benefits and costs in Missouri. However, as stated above, because it is Staff's opinion that Grain Belt Express has not met the five Tartan factors, the Commission should not issue Grain Belt Express a CCN for the portion of the transmission line and the converter station in Missouri.

1. need for the facilities and service

It is Staff's position that Grain Belt Express has not established the need for the high-voltage transmission line and converter station in Missouri.

Grain Belt Express asserts the high-voltage direct current transmission line from southwest Kansas to Indiana, and associated converter stations in Kansas, Missouri and Illinois are needed for meeting the requirements of the Missouri Renewable Energy Standard, and the renewable portfolio standards of the other states in the Midcontinent Independent System Operator, Inc. and PJM Interconnection, LLC footprints. (Grain Belt Express witness Berry Direct, Exhibit No. 118, p. 3) The Missouri Renewable

Energy Standard, RSMo 393.1025 et seq., as implemented by rule 4 CSR 240-20.100, requires each electric utility to generate or purchase electricity generated from renewable energy resources to meet no less than fifteen percent of its retail electric sales in each calendar year beginning in 2021. Staff witness Beck testifies (Beck Rebuttal, Exhibit No. 201, p. 9) that only Union Electric Company, d/b/a Ameren Missouri, has not yet disclosed whether it has existing capacity and new contracts that will meet or exceed that requirement. Further, he points out that renewable energy credits that are not associated with electricity generated or delivered into Missouri may be used to satisfy the percent of retail electric sales requirements. (Beck Rebuttal, Exhibit 201, p. 9). Therefore, the asserted need for this proposed transmission line to satisfy the Missouri Renewable Energy Standard is, at best, questionable.

Grain Belt Express also asserts, "Wind generators in western Kansas, where the Grain Belt Express Project originates, also have a clear and substantial need for transmission capacity to reach larger electricity markets in Missouri and other states in MISO and PJM. Due to constraints of the existing grid, most of these wind generators cannot proceed with their wind generation projects in the absence of the Grain Belt Express Project." (Grain Belt Express witness Berry Direct, Exhibit No. 118, pp. 3-4) In response Staff counters, "In Staff's opinion, the lack of transmission infrastructure is not the sole reason that many of these proposed projects have not begun construction. Instead, many of these projects are project financed and, therefore, need sufficient financing commitments before beginning construction." (Staff witness Beck Rebuttal, Exhibit No. 201, p. 8).

2. qualified to own, operate, control and manage the facilities and provide the service

It is Staff's position that Grain Belt Express satisfies this factor now, since final design, construction and operations have not begun, but will need to obtain additional expertise for constructing, owning, operating, controlling and managing the high-voltage transmission line and converter stations. (Staff witness Beck Rebuttal, Exhibit 201, p. 10).

3. financial ability for the undertaking

It is Staff's position that Grain Belt Express satisfies this factor. (Staff witness Murray Rebuttal, Exhibit No. 204, p. 3).

4. economically feasible

It is Staff's position that Grain Belt Express has not satisfied this factor.

Generally, Grain Belt Express states the high-voltage transmission line and converter stations are economically feasible because high-voltage direct current technology is the most cost-effective means of moving large amounts of renewable energy (electricity) over long distances, and high-capacity factor wind energy from western Kansas is the cheapest form of renewable energy in the Midwest and competitive with the cost of electricity generated by fossil-fuel power plants; therefore, electricity delivered over the high-voltage transmission line and converter stations will be lower cost than alternatives for meeting renewable portfolio standards and general demand for clean energy. As a result, Grain Belt Express will be able to attract transmission customers to make the high-voltage transmission line and converter stations economically feasible.

It is Staff's position that Grain Belt Express is ignoring what may be significant costs affecting the economic feasibility of the high-voltage transmission line and converter stations and Grain Belt Express' studies of the impacts the electricity it anticipates will flow across them will have in the MISO and the PJM energy markets have weaknesses As a result, Staff is unable to conclude the high-voltage transmission line and converter stations would economically feasible with regard to Missouri. Staff witness Sarah L. Kliethermes testifies to Staff's issues

with the limits in the scope and methods with which Grain Belt Express' modeled the regional transmission organization markets, as well as Staff's concerns with the quality of the data and reasonableness of the inputs Grain Belt Express used. (Kliethermes Rebuttal, Exhibit No. 206, pp. 5, 19). Staff witness Michael Stahlman (Stahlman Rebuttal, Exhibit No. 202, pp. 7-11) testifies to the following limitations:

> (1) because the regional transmission organization interconnection transmission upgrades are unknown, the economic feasibility of the project is unknown;
> (2) because operational, maintenance, and emergency restoration plans are not determined, their costs are unknown and the economic feasibility of the project is unknown;
> (3) because the project is less economic than it would be if it allowed energy to be exported from the MISO and the PJM; and
> (4) Missouri customer demand for wind energy may be low.

5. facilities and service promote the public interest

It is Staff's position that Grain Belt Express has not established that building the proposed transmission line and converter stations promotes the public interest in Missouri.

Grain Belt Express asserts the Project (the proposed transmission line and three converter stations) promote the public interest on nine bases. Each of those bases and Staff's responses to them follow:

1. *The Project will offer any customer participating in MISO and PJM access to low-cost wind energy, which today cannot be readily accessed by buyers in these power pools.*

   Staff response: Wind energy is currently accessible to buyers in the MISO and the remainder of the Eastern Interconnection as shown by Schedules SLK-2 and SLK 4 to the rebuttal testimony of Staff witness Sarah L. Kliethermes (Exhibit 206), **Calculating Wind Integration Costs: Separating Wind Energy Value from Integration Cost Impacts** and the **2013 State of the Market Report for the MISO Electricity Markets**, respectively. Further, it is being made more readily accessible by regional transmission organization projects, such as the multi-value projects (MVP) described in Schedule SLK-6 to the

rebuttal testimony of Staff witness Sarah L. Kliethermes (Exhibit 206), and the regional planning that allows for more economic placement of wind resources described in the **MISO 2011Value Proposition**, Schedule SLK-8 to the rebuttal testimony of Staff witness Sarah L. Kliethermes (Exhibit 206).

2. *The Project enables cost-effective compliance with RES and RPS goals in Missouri and other states in the MISO and PJM region.*

   Staff response: As Staff pointed out in its position on the Tartan need for the facilities and service factor, only Union Electric Company, d/b/a Ameren Missouri, has not yet disclosed whether it has existing capacity and new contracts that will meet or exceed the 15% renewable energy standard target by 2021, but whether any energy transmitted over this proposed transmission line would be used to satisfy the Missouri Renewable Energy Standard is, at best, questionable.

3. *The Project reduces wholesale electricity prices in Missouri and throughout MISO and PJM.*

   Staff response: Grain Belt Express' modeling of the regional transmission organization markets is too limited in scope and in method to confidently conclude the high-voltage direct current transmission line and converter stations will reduce wholesale electricity prices in Missouri, and the quality of the data and reasonableness of the inputs in its modeling for the year 2019 are suspect. Additional studies, identified below, are required to sufficiently evaluate the impacts of the high-voltage direct current transmission line and converter stations on wholesale electricity prices in Missouri.

   Grain Belt Express has modeled the impacts of the high-voltage direct current transmission line and converter stations on the day ahead power market, but it has not modeled their impacts on the real time, ancillary services, or the capacity markets. Staff witness Sarah L. Kliethermes testifies at page five of her rebuttal testimony (Exhibit No. 206) that it is necessary to model the impacts of the high-voltage direct current transmission line and converter stations on the real time and ancillary services markets, and possibly the MISO capacity market, and that, due to this modeling limitation, one cannot confidently conclude the high-voltage direct current transmission line and converter stations will reduce wholesale electricity prices in Missouri.

   Additionally, by modeling the entire Eastern Interconnection as a single market, Grain Belt Express under-recognizes the challenges of wind integration. (Kliethermes Rebuttal, Exhibit No. 206, p. 5) Further, Grain Belt Express has not established the quality of the data and the

reasonableness of the inputs used in its modeling of RTO markets for (1) the load assumptions for the year 2019, (2) the generator capacities, efficiencies or dispatch stack, or bid amounts for the year 2019, (3) the wind delivery used for the year 2019, (4) the level of precision used in modeling factors such as generator heat rate curves, transmission loading curves, or other inputs to the PROMOD model it used. (Kliethermes Rebuttal, Exhibit No. 206, p. 19).

To sufficiently evaluate Grain Belt Express' assertion that the high-voltage direct current transmission line and converter stations would reduce wholesale electricity prices in Missouri, the following studies are required:

Production modeling that incorporates:
- Day Ahead market prices to serve load,
- Real Time market prices to serve load,
- Ancillary Services prices to serve load,
- Day Ahead market prices realized by Missouri-owned or located generation,
- Real Time market prices realized by Missouri-owned or located generation,
- Ancillary Services prices realized by Missouri-owned or located generation,
- An estimate of the impact of Grain Belt Express' Proposal on the operational efficiency of Missouri-owned or located generation; and

Production, transmission, and economic modeling or analysis to determine:
- The cost of transmission upgrades that may be economical to resolve the transmission constraints that its energy injections will cause or exacerbate.
- The impact of using the entire design capacity of the Missouri Converter Station.
- The net impact to Missouri utilities of picking up Missouri energy by day for export to PJM or SPP.
- Whether the variability of the injected wind could be better managed in the SPP prior to injection.

4. *Lower renewable energy compliance costs and lower wholesale electric prices will both result in decreased costs to end-use electric customers.*

Staff response: Since Staff is unable to conclude from what Grain Belt Express has provided that the high-voltage direct current transmission line and converter stations will result in lower renewable compliance costs (See Staff response to Grain Belt Express' first basis—*access to low-cost wind energy*) and lower wholesale electric prices in Missouri (See Staff response to Grain Belt Express' second basis—*cost-*

effective compliance with RES and RPS goals), Staff is unable to agree with this assertion in the context of this case.

Further, although Grain Belt Express in its surrebuttal filing has modeled the effects of the fact that Missouri retail rates are offset by the profits that investor-owned utilities make by selling energy into the wholesale power market[i] in response to Staff's criticism in rebuttal testimony (Kliethermes Rebuttal p. 5), that modeling was done without the benefit of studies addressing Staff's issues with Grain Belt Express' modeling of the regional transmission organization markets. If Grain Belt Express does not commit that it will not seek any regional cost allocation of transmission system upgrades caused directly or indirectly by the high-voltage direct current transmission line and converter stations, then the modeling would need to include consideration of the cost to Missouri utilities of any socialized transmission system costs.

5. *By delivering over 18 million megawatt-hours ("MWh") of clean energy to Missouri, Illinois, Indiana, and other MISO and PJM states, the Project will reduce the need to generate electricity from fossil-fueled power plants and therefore will reduce carbon dioxide, sulfur dioxide, nitrous oxide and mercury emissions as well as water usage.*

   Staff response: Grain Belt Express' modeling of the regional transmission organization markets is too limited in scope and in method to confidently conclude the high-voltage direct current transmission line and converter stations will reduce the need to generate electricity from fossil-fueled power plants.

   Particular limitations Staff identified follow:

   a. Only a day-ahead analysis was performed, so there is no attempt to identify the generation resources necessary to accommodate real-time variation from dispatch order.
   b. No analysis of ancillary services was performed.
   c. The day-ahead analysis appears to have been performed with flat hourly blocks of wind energy injection.
   d. The quality of the data and the reasonableness of the inputs used for (1) load assumptions for the year 2019, (2) generator capacities, efficiencies, dispatch stack, or bid amounts for the year 2019, (3) the wind delivery used for the year 2019, (4) the level of precision used in modeling factors such as generator heat rate curve, transmission loading curves, or other inputs to the PROMOD model.

   (Kliethermes Rebuttal, Exhibit 206, p. 19).

6. *The Project allows Missouri to access affordable clean energy as increasing environmental regulation drives increased costs for and additional retirements of coal plants.*

   Staff's response: Staff agrees that if the high-voltage direct current transmission line and converter stations are built, electricity from sources in southwest Kansas will become more available to supply demand in the footprints of the MISO and the PJM, and that most likely those sources predominately will be wind-based; however, what future environmental regulations, such as the proposed EPS rule under section 111(d) of the Clean Air Act, will require is unknown at this time. (Lange Surrebuttal, Exhibit 208, p. 2).

7. *By enabling new generation sources and providing a major link between three major RTOs in the Eastern Interconnection, the Project will improve electric reliability and reduce seams issues between regions. This benefit is further discussed in the direct testimony of Dr. Wayne Galli and Robert Zavadil.*

   Staff's response: Staff did not evaluate the impact of the high-voltage transmission line and converter stations on seams issues between the SPP, the MISO and the PJM, but their impact may be limited by Grain Belt Express' plan to only export electricity from the SPP and only import that electricity into the MISO and the PJM, except in emergency situations. (Staff witness Stahlman Rebuttal, Exhibit 202, p. 6).

8. *Project will contribute to economic development in Missouri and in the broader region by providing construction, manufacturing and operations jobs and additional business for Missouri companies. This benefit is further discussed in the testimony of Dr. David Loomis.*

   Staff's response: Staff agrees that, if built, the high-voltage direct current transmission line and converter stations will contribute to economic development in Missouri, but points out that Dr. Loomis' study provides a rough gross estimate (Staff witness Stahlman Rebuttal, Exhibit 202, p. 17), and that his estimate of the number of full-time equivalent workers Grain Belt Express will hire for the long-term operation and maintenance of the high-voltage direct current transmission line and converter stations is much higher than Grain Belt Express' expectation. (Staff witness Stahlman Surrebuttal, Exhibit 209, p. 3).

9. *All of these benefits will be provided to the public without any socialization of transmission costs to ratepayers since only users of the line will be charged for the costs of the Project*.

   Staff's response: Staff understands that Grain Belt Express defines the Project to include the approximately 750-mile high-voltage direct

current transmission line from southwest Kansas to Indiana, and associated converter stations in Kansas, Missouri and Illinois, as well as the AC tie line into the Sullivan substation in Indiana, but not the AC collector system in Kansas or any of the upgrades the SPP, the MISO or the PJM may require for interconnection with the transmission system in their footprints. Since the regional transmission organization-required upgrades are transmission costs that may be socialized, depending upon the upgrade and how the regional transmission organization assesses the costs of the upgrade, it may be that costs caused by the Project may be socialized. Further, while Grain Belt Express is not seeking socialization of the Project costs at this time, it has not foregone the possibility of seeking socialization of transmission costs in the future.

(Kliethermes Rebuttal, Exhibit No. 206, p. 10).

2. If the Commission grants the CCN, what conditions, if any, should the Commission impose?

Staff's position: The Commission should impose the following conditions:

The following conditions are sponsored by Staff witness Daniel I. Beck:

That the certificate is limited to the construction of this line in the location specified in the application, and as represented to the landowners on the aerial photos provided by Grain Belt Express, unless a written agreement from the landowner is obtained, or the company gets a variance from the Commission for a particular property.

That absent a voluntary agreement for the purchase of the property rights, the transmission line shall not be located so that a residential structure currently occupied by the property owners will be removed or located in the easement requiring the owners to move or relocate from the property.

That Grain Belt Express, shall survey the transmission line location after construction and record the easement location with the Recorder of Deeds in the appropriate counties. Grain Belt Express shall also file a copy of its survey in this case.

That Grain Belt Express, shall follow the construction, clearing,

maintenance, repair, and right-of-way practices set out in Schedule DB-2 attached to the Rebuttal Testimony of Staff witness Beck, Exhibit No. 201.

Reporting Requirements.

1. Grain Belt Express will file with the Commission quarterly updates on the Project while development and construction are ongoing. These updates should summarize the Project construction and operational status and financing milestones, including:

a. identification of major construction vendors and contractors hired;
b. identification of major operation and maintenance contractors retained;
c. significant new debt and equity financings completed at the Petitioner level; and
d. significant changes in Grain Belt Express's or Petitioner's senior management.

File annually with the Commission information about any affiliates that own or control electric generation resources in the MISO or PJM regions.

Quarterly progress reports: Grain Belt Express shall file quarterly progress reports in this docket. The reports shall include:

(1) Percent completion of project;
(2) Amount spent to date;
(3) Amount previously expected to have been spent to date;
(4) Total budget of project (and explanations of increases/decreases);
(5) SPP agreements and invoices;
(6) Agreements with other Missouri jurisdictional public utilities; and
(7) FERC filings.
(8) Status of routing;
(9) Status of public outreach/public meetings; and
(10) Status of right-of-way and real estate acquisition in Missouri.

a. The cost of the Project and any AC Collector System owned by Grain Belt Express will not be recovered through the SPP cost allocation process or from Missouri ratepayers.
b. Prior to commencing construction of the DC component of the Grain Belt Project in Missouri, Grain Belt Express will obtain the state or federal

siting approvals required by law to begin construction on the entirety of the direct current portion of the Grain Belt Project outside the state of Missouri. For the avoidance of doubt, transmission line siting approvals from the Kansas, Illinois, and Indiana state utility commissions shall be sufficient to satisfy this condition.

The Commission emphasizes the duty of Grain Belt Express to restore affected land to the condition which existed prior to the construction once construction of the line is complete, to the extent reasonably possible.

Grain Belt Express will not install transmission facilities for the Grain Belt Express Clean Line Project on easement property until such time as Grain Belt Express has obtained commitments for funds in a total amount equal to or greater than the total project cost. To allow the Commission to verify its compliance with this condition, Grain Belt Express shall file the following documents at such time as Grain Belt Express is prepared to begin to install transmission facilities:

a) On a confidential basis, equity and loan or other debt financing agreements and commitments entered into or obtained by Grain Belt Express or its parent company for the purpose of funding the Grain Belt Express Clean Line Project that, in the aggregate, provide commitments for funds for the total project cost;
b) An attestation certified by an officer of Grain Belt Express that Grain Belt Express has not, prior to the date of the attestation, installed transmission facilities on easement property; or a notification that such installation is scheduled to begin on a specified date;
c) A statement of the total project cost, broken out by the components listed in the definition of “total project cost,” above, and certified by an officer of Grain Belt Express, along with a reconciliation of the total project cost in the statement to the total project cost as of the Application of $2.2 billion; and property owned in fee by Grain Belt Express including the converter station sites;
d) A reconciliation statement, certified by an officer of Grain Belt Express, showing that (1) the agreements and commitments for funds provided in (a) are equal to or greater than the total project cost provided in (c) and (2) the contracted transmission service revenue is sufficient to service the debt financing of the project (taking into account any planned refinancing of debt)..

The following conditions are sponsored by Staff witness Sarah Kliethermes:

Regarding retail rate impact on Missouri customers of investor-owned utilities, Staff recommends that the Commission order Grain Belt Express to perform a number of studies, designed after Staff and other parties have had the opportunity to provide meaningful input regarding the quality of the data and the reasonableness of the inputs used for (1) load assumptions for the year 2019, (2) generator capacities, efficiencies, dispatch stack, or bid amounts for the year 2019, (3) the wind delivery used for the year 2019, (4) the level of precision used in modeling factors such as generator heat rate curve, transmission loading curves, or other inputs to the PROMOD model used for the studies, and to provide for Commission approval in compliance with the Tartan Criteria and other applicable law, the following items:

1. Production modeling that incorporates:

- Day Ahead market prices to serve load,
- Real Time market prices to serve load,
- Ancillary Services prices to serve load,
- Day Ahead market prices realized by Missouri-owned or located generation,
- Real Time market prices realized by Missouri-owned or located generation,
- Ancillary Services prices realized by Missouri-owned or located generation,
- An estimate of the impact of Grain Belt Express' Proposal on the operational efficiency of Missouri-owned or located generation.

2. Production, transmission, and economic modeling or analysis to determine:

- The cost of transmission upgrades that may be economical to resolve the transmission constraints that its energy injections will cause or exacerbate.
- The impact of using the entire design capacity of the Missouri Converter Station.

- The net impact to Missouri utilities of picking up Missouri energy by day for export to PJM or SPP.
- Whether the variability of the injected wind could be better managed in the SPP prior to injection.

Staff recommends that the Commission order Grain Belt Express to provide to the Commission documentation of:

1. Grain Belt Express' commitment that it will not seek RTO cost allocation for the Project itself, nor for any transmission system upgrades necessary to safely accommodate the Project.

2. Grain Belt Express' commitment to utilize only the studied portion of the Missouri Converter Station.

The following conditions are sponsored by Staff witness Shawn E. Lange:

(1) That the Commission order Grain Belt Express to provide for Commission acceptance, the following items:

- Completed Storm Restoration Plans for the proposed project,
- The Interconnection Agreement with SPP,
- The Interconnection Agreement with MISO, and
- The Interconnection Agreement with PJM,
- MISO Feasibility Study,
- MISO System Planning Phase Study,
- MISO Definitive Planning Phase Study,
- SPP Dynamic Stability Assessment of Grain Belt Express Clean Line HVDC Project,
- SPP Steady State Review,
- SPP System Impact Study,
- PJM Feasibility Study,
- PJM System Impact Study,
- PJM Facilities Study, and
- Any further study necessary for interconnection with any of SPP, MISO, or PJM.

(2) that the Commission order Grain Belt Express to comply with the appropriate NERC standards for a project of this scope and size, National Electric Safety Code for a project of this size and scope, 4 CSR 240-18.010, and the Overhead Power Line Safety Act section 319.075 et al.;

(3) that the Commission order Grain Belt Express to provide to the Commission completed documentation of the Grain Belt Express plan, equipment, and engineering drawings to achieve compliance with NERC standards for a project of this scope and size, National Electric Safety Code for a project of this size and scope, 4 CSR 240-18.010, and the Overhead Power Line Safety Act section 319.075 et al.;

(4) that the Commission order Grain Belt Express to meet a short-circuit ratio acceptable to the SPP for the Kansas converter station, acceptable to the MISO for the Missouri Converter Station, and acceptable to the PJM for the converter station near Sullivan, Indiana; and

(5) that the Commission order Grain Belt Express to provide to the Commission the definitive planning phase studies or facilities studies, as appropriate, which demonstrate that the high-voltage converter station sited in a regional transmission organization's footprint meets the levels of short circuit ratio acceptable to that regional transmission organization.

The following conditions are sponsored by Staff witness Robert R. Leonberger:

Staff recommends that the Commission limit the authority it gives for building the HVDC transmission line in any CCN to construction of a HVDC transmission line built with dedicated metallic return conductors.

Staff recommends that the Commission limit any CCN it issues in this case by explicitly requiring the installation of protection and control safety systems that will automatically de-energize the system when an abnormal or fault condition occurs.

Staff recommends that the Commission condition any such CCN by requiring proof to the Commission that these safety systems are operational prior to commercial operation of the Grain Belt Express HVDC electric transmission line.

Staff recommends that if the Commission issues Grain Belt Express a CCN in this case it include as a condition that if any of the studies of the effects of tower footing groundings, if used; analysis of metallic underground facilities, other AC lines, and telecommunications facilities that are located within a distance from the HVDC transmission line, as determined by an appropriately qualified expert, where there may be adverse effects on the facilities; analysis of metallic underground facilities, other AC lines, and telecommunications facilities that are located within a distance from the HVDC converter station, as determined by an appropriately qualified expert, where there may be adverse effects on the facilities; a determination whether there are locations where the HVDC line parallels a pipeline and an existing AC line and, if so, whether there are any combined effects on steel pipelines (and other underground metallic facilities); a determination of how the interference study will be conducted (for example, continuous 24-hour recordings at a certain time of year); and the effects of the HVDC transmission line exiting the converter station show that mitigation measures are identified/needed, those measures must be in place prior to commercial operation of the HVDC transmission line. The Commission should also require that these studies be made available to Staff and affected facility owners at least 45 days prior to commercial operation of the HVDC transmission line and that these engineering studies/analyses are conducted by persons knowledgeable in (1) HVDC power lines, (2) DC-to-AC converter stations, (3) pipeline cathodic protection systems, (4) corrosion of underground metallic facilities, (5) interference with AC utility lines, (6) interference with telecommunications facilities, and (7) the effects of DC and AC interference on the facilities identified in Exhibit 3 of Grain Belt Express' Application.

Staff recommends the Commission order Grain Belt Express to file annual status updates on discussions with Staff regarding the need for additional studies of the impacts of its facilities on other facilities in Missouri, a summary of the results of any additional studies, and any mitigation measures that have been implemented to address underground metallic structures, telecommunications facilities, and AC lines.

The following conditions are sponsored by Staff witness David Murray:

1. ZAM Ventures shall guarantee Clean Line Investor Corp.'s obligations as it relates to its investment in Grain Belt Express Clean Line LLC through its equity interest in Clean Line Energy Partners LLC.

The following conditions are sponsored by Staff witness Michael L. Stahlman:

Staff recommends that if the Commission grants Grain Belt Express' request for a Certificate of Convenience and Necessity, the grant be conditioned on the completion and making public of all RTO interconnection studies with the Missouri converter station at 1000 MW and with the potential for exporting energy from the MISO and the PJM, and importing energy into the SPP with an opportunity for parties to review the studies and bring issues before the Commission, prior to Grain Belt Express commencing any eminent domain proceedings in Missouri.

Staff recommends that the Commission condition any grant of a CCN on Grain Belt Express not commencing any eminent domain proceedings until after the actual construction of at least 25% of the completed cost, excluding engineering, planning, and land purchase costs, of the Missouri converter station.

3. If the Commission grants the CCN, should the Commission exempt Grain Belt Express from complying with the reporting requirements of Commission rules 4 CSR 240-3.145, 4 CSR 240-3.165, 4 CSR 240-3.175, and 3.190(1), (2) and (3)(A)-(D)?

Staff's position: Yes, except for the annual report filing requirement of rule 4 CSR 240-3.165. Grain Belt Express does not need relief from rule 4 CSR 240-3.165 since Grain Belt Express "agrees to file with the Commission the annual report that it files with FERC." (Staff Witness Beck Rebuttal Exhibit No. 201, p. 16)

Respectfully submitted in response to the Commission's January 9, 2014 ***Order Revising Procedural Schedule***,

/s/ Nathan Williams
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CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing have been mailed, hand-delivered, transmitted by facsimile or electronically mailed to all counsel of record this 7th day of November, 2014.

/s/ Nathan Williams

[i] If the price of energy is reduced in hours when Missouri utilities generate energy in excess of that utilities' own load, the ultimate rate paid by the Missouri retail customer goes up.