Exhibit No.:

Issue(s): Routing, Project

Construction, Schedule,

and Cost

Witness: James Jontry

Sponsoring Party: Ameren Transmission

Company of Illinois

Type of Exhibit: Direct Testimony

Case No.: EA-2017-0345

Date Testimony Prepared: September 15, 2017

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO. EA-2017-0345

DIRECT TESTIMONY

OF

JAMES JONTRY, P.E., P.M.P.

ON

BEHALF OF

AMEREN TRANSMISSION COMPANY OF ILLINOIS

St. Louis, Missouri September 2017

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DIRECT TESTIMONY

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CASE NO. EA-2017-0345

1	I. INTRODUCTION AND WITNESS QUALIFICATIONS
2	Q. Please state your name, business address and present position.
3	A. My name is James Jontry, and my business address is 1901 Chouteau Avenue,
4	St. Louis, Missouri 63103. I am employed by Ameren Services Company (Ameren Services)
5	as a Senior Project Manager in the Transmission Department.
6	Q. Please summarize your professional experience and educational
7	background.
8	A. I graduated from the University of Illinois in 1996 with a Bachelor of Science
9	in General Engineering. I graduated from Webster University in 2009 with a Master of
10	Business Administration. I am a registered Professional Engineer (PE) in the state of
11	Missouri. I am a certified Project Management Professional (PMP). In 2003, I started
12	working for Ameren Services as an engineer in the Transmission and Distribution Design
13	Department, where I designed and managed projects of varying degrees of cost and
14	complexity.
15	Q. What are the duties and responsibilities of your position?
16	A. As a Senior Project Manager, I am responsible for the planning, execution,
17	completion, and operational integration of large-scale transmission construction projects. My
18	primary responsibility at present is to serve as the Project Manager for the Mark Twain

- 1 Tramsmission Project (Mark Twain or the Project) being proposed by Ameren Transmission
- 2 Company of Illinois (ATXI).

3 II. PURPOSE AND SCOPE

4 Q. What is the purpose of your testimony?

- A. The purpose of my testimony is to discuss the new proposed route for the Project, and to discuss Project scheduling and construction services related to the Project. My testimony will provide the Commission with an understanding of the new proposed route and of the basis for selection of the new proposed route. In addition, my testimony will demonstrate that ATXI is capable of efficiently managing and supervising the construction of the Project. I also discuss the approvals necessary for the Project and provide the total expected cost for the Project.
- Q. You refer to the "new proposed route." Is this ATXI's first application for a certificate of convenience and necessity (CCN) for the Project?
- A. No. As discussed in the direct testimony of ATXI President Shawn Schukar, ATXI first sought a certificate of convenience and necessity (CCN) for the Mark Twain Transmission Project in Case No. EA-2015-0146, and the Commission granted ATXI a conditional CCN on April 27, 2016. That CCN was appealed to the Court of Appeals for the Western District of Missouri, which reversed the Commission's grant of the CCN on the ground that ATXI was required to submit county assents to the Commission before the CCN could be granted. But even before the litigation at the Court of Appeals and the Supreme Court played out, we began working on the possibility of developing a new route for the Project. That new route, and history behind that new route, are described in further detail below.

- Q. Are you sponsoring any schedules in support of your direct testimony?
- 2 A. Yes. I am sponsoring Schedule JJ-01 (Proposed Project Route), Schedule JJ-
- **02** (Sample Construction Contract), and **Schedule JJ-03** (Project Schedule).

4 III. PROJECT ROUTE

- Q. Generally speaking, how does the new proposed route differ from the route approved by the Commission in Case No. EA-2015-0146?
 - A. The route previously approved by the Commission was primarily routed across greenfield sites, which required easements from landowners whose land was not previously subject to a transmission line easement. The vast majority—nearly 100%--of the new proposed route follows existing transmission line corridors and, more specifically, is colocated with existing 161-kV transmission lines along existing rights-of-way. This means that for nearly all of the route, only those landowners on whose property an existing line is installed will be impacted by the Mark Twain line and, as suggested later in my testimony, will be subject to fewer obstructions to use of their property.
 - Q. Before we discuss the specifics of the new proposed route and how it was selected, what prompted ATXI to consider a route that largely co-locates the Project with existing 161-kV transmission lines?
 - A. ATXI gave much consideration and spent a great deal of effort in developing the initial Project route that was approved by the Commission in Case No. EA-2015-0146. In selecting its initial route, ATXI carefully considered several factors, including minimizing conflict with current and planned uses of the land, minimizing social and natural resource impacts, avoiding densely populated areas, avoiding Federal and State lands and conservation and restricted easement areas, and avoiding agricultural irrigation systems in

1 conjunction with the desire to minimize length and angles in the line so as to minimize costs. 2 Despite the fact that a citizens' group opposing the Project criticized the Project because, 3 among other criticisms, the line did not parallel with existing transmission line right-of-way, 4 ATXI pointed to the reliability benefits of not paralleling an existing line. ATXI presented 5 substantial evidence to demonstrate its efforts to minimize the impact of the originally-6 proposed route while promoting reliability, and the Commission approved that route. Based 7 upon its experience designing and constructing other, larger transmission projects, ATXI 8 expected to be able to negotiate with landowners to resolve their concerns regarding the 9 initial route. 10 Despite ATXI's consideration of these factors and taking into account public input in 11 determining the initial route, significant public concerns remained about the final route 12 approved by the Commission in 2016. In fact, none of the county commissions for the five 13 counties through which the Mark Twain line was originally routed approved ATXI's request 14 for assents that would allow ATXI to cross public roads and rights-of-way with the 15 transmission line. Chief among the concerns of many of those county commissioners was the 16 fact that the original route impacted so many greenfield sites. Because of this continuing 17 opposition to the original route, ATXI determined that it was appropriate to evaluate other 18 route options, including co-location. 19 As ATXI witness Shawn Schukar explains in his direct testimony, because of these 20 continuing concerns, we approached Northeast Missouri Electric Power Cooperative 21 (Northeast Power) about the possibility of co-locating ATXI's Palmrya to Zachary segment 22 of the transmission line with an existing Northeast Power transmission line. Northeast Power

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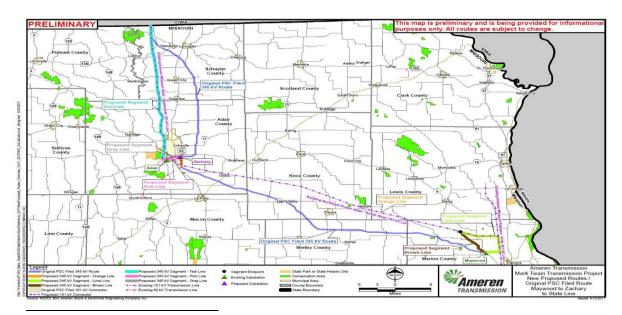
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- 1 had worked with ITC Midwest and MidAmerican Energy Co. in Iowa to co-locate an MVP¹
- 2 being constructed by them there. ATXI then worked with Northeast Power, as well as
- 3 Ameren Missouri with regard to the Zachary to Iowa segment, to develop this new route
- 4 location which co-locates along existing right-of-way, thereby minimizing impact to
- 5 landowners, communities and existing farmland. One of the ways that it does this is that the
- 6 new, co-located route requires fewer utility structures in that existing right-of-way,
- 7 particularly along the segment between Palmyra and Kirksville..

8 Q. When did ATXI announce a new proposed route for the Mark Twain 9 Project?

A. ATXI announced the new, largely co-located proposed route on May 1, 2017, and began seeking public comment on the proposal. The new proposed route as announced by ATXI on May 1, 2017, and the initial route that was approved by the Commission (shown in purple) are depicted below:



¹ Messrs. Schukar and Kramer discuss Midcontinent Independent System Operator, Inc. (MISO) multi-value projects (MVPs) in their direct testimonies.

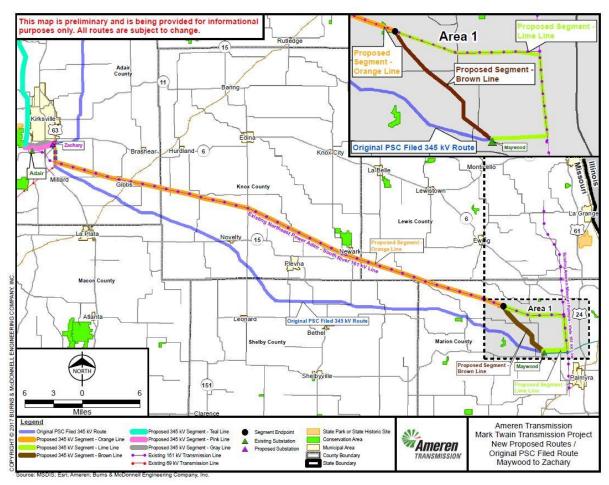
Q. How does Northeast Power benefit from the co-location of its line with ATXI's Mark Twain line?

A. Approximately 58 miles of Northeast Power's line will be completely rebuilt², and the current wooden H-frame transmission structures will be replaced by fewer steel monopoles. Based upon the information we have, due to the age of Northeast Power's current 161-kV line, replacement would likely be necessary within 10 to 15 years and would cost approximately \$30 million. Working with ATXI allows Northeast Power to avoid significant future investment required to repair, maintain and replace this line. In addition, future vegetation management costs will be split with ATXI, which results in ongoing savings for Northeast Power and its member-distribution cooperatives.

Q. Where is Northeast Power's existing line located in relation to the initial route proposed by ATXI?

A. Northeast Power operates an existing 161-kV transmission line—known as the Adair-South River 161-kV line—that, for purposes of ATXI's Mark Twain Transmission Project, generally runs from near Palmrya in a westerly direction to near Kirksville through Marion, Lewis, Knox and Adair counties. The existing Northeast Power line is depicted below by the dotted red line overlaid in orange, and the initial route approved by the Commission in Case No. EA-2015-0146 is shown in purple.

² In total, the route from Maywood to Zachary is approximately 65 miles.



Q. You testified that co-locating the line along existing right-of-way would result in fewer utility structures. Please explain.

A. The Mark Twain 345-kV transmission line, as designed, requires a 150-foot easement coridoor. By co-locating the line with the existing Northeast Power Adair-South River 161-kV line, which also has a 150-foot easement corridor, no additional right-of-way (i.e., physical area) will be required. Approximately 58 miles of Northeast Power's line, running between Palmyra and Kirksville, will be completely rebuilt, and the current wooden H-frame transmission structures will be replaced by fewer steel monopoles, with the added benefit of eliminating guy wires and anchors. What this means is that the landowners on

- whose land the Northeast Power line exists today will arguably experience less impact from
- 2 transmission lines on their properties than they do today.
- Q. Does the ATXI route co-locate with the Northeast Power line for the entire segment of the Maywood to Zachary line?
 - A. Yes, with a minor exception. The Mark Twain line must connect to the existing Maywood Switching Station near Palmyra, which is located just over two miles south of the Northeast Power line. To make this connection, ATXI proposed two different line segments. The proposed segments included a "Brown Line" segment that more or less directly connected the Maywood Switching Station to Northeast Power's line using new, greenfield routing, and a "Lime Line" segment that connected Maywood with the Northeast Power line primarily using Ameren Missouri's existing 150-foot easement coridor for its Maywood-Palmyra 345-kV line and the existing 100-foot easement coridor for its Palmyra-Viele 161-kV line. The Lime Line segment would require ATXI to obtain an additional 50 feet of easement area on the Palmyra-Viele line so as to provide the 150-foot width required by the transmission line. The illustration below depicts the two segments ATXI proposed to connect the Maywood Switching Station to Northeast Power's 161-kV line—the Lime and the Brown lines:

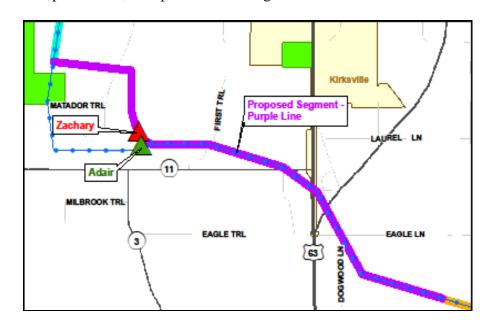


1	Q.	Which of the proposed segments from the Maywood Switching Station
2	was selected f	or the final route?

- A. Members of the public strongly favored the Lime Line segment because it colocated along existing right-of-way. Based upon the public input it received, ATXI selected the Lime Line segment.
- Q. Will ATXI rely on the existing easements held by Northeast Power or
 Ameren Missouri to co-locate its route?
 - A. No. Although property owners along the route have granted easements to Northeast Power, Ameren Missouri or a predecessor of either company years ago, ATXI will need to acquire its own easement rights from property owners. As I mentioned earlier, ATXI will also need to acquire easement rights for the Lime Line connector, including an additional 50 feet where Ameren Missouri's Palmyra-Viele 161-kV line co-locates with the Mark Twain line. Consequently, when it co-locates the Mark Twain line with an existing Ameren Missouri line that has 100 feet of right-of-way, ATXI will acquire a 150-foot-wide easement, 100 feet of which will occupy the same area as Ameren Missouri's existing easement with an additional 50 feet adjacent to it. ATXI witness Douglas (Doug) Brown addresses that process in his direct testimony.
 - Q. In ATXI's initial route that was approved by the Commission, the Mark Twain line ran from the Maywood Switching Station to a new substation near Kirksville called the Zachary Substation and required an approximately 2.2 mile connector line from the Zachary Substation to Ameren Missouri's Adair Substation. Does the west-to-east segment of the new proposed route also connect to the Zachary
- **Substation?**

the line?

A. It does, but one of the other changes to the new proposed route that ATXI made as a result of public input was a different location for the proposed Zachary Substation. Local landowners and public officials were particularly concerned that the proposed Zachary Substation—which, even after the co-location agreements were announced, ATXI proposed to retain in the same location as previously approved by the Commission in 2016—was too close to a bee farm. ATXI addressed the concerns it received after its May 1, 2017 announcement and proposed a new, alternative location for the Zachary Substation, placing it immediately adjacent to the existing Ameren Missouri Adair Substation. The new, alternative location for the Zachary Substation, which was an option that ATXI then presented at its June 2017 open houses, is depicted in the diagram below:

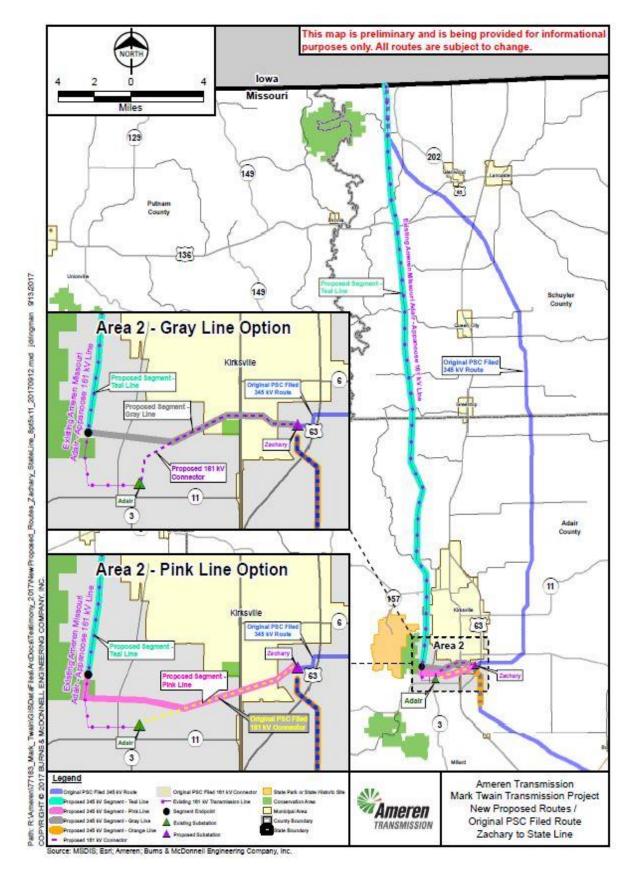


Q. How did the new location of the Zachary Substation impact the routing of

A. It allowed us to co-locate the line along the Northeast Power corridor all the way to the Zachary Substation, eliminating the need for an approximately 2.2 mile connector line between the former Zachary location and Ameren Missouri's Adair Substation, which

- would have been located across greenfield sites and near a local bee farm. The route shown
- 2 above, presented to the public at the June 2017 open house as the Purple Option, was the
- 3 option that received the most support from the public and the local commission.
- 4 Q. Regarding the Zachary to Iowa State Line segment of the Project, you
- 5 testified earlier that after ATXI began discussing with Northeast Power the possibility
- 6 of co-locating lines, it then began discussions with Ameren Missouri regarding co-
- 7 location with its existing 161-kV line. Please explain.
- 8 A. After it looked like co-location with Northeast Power's transmission line was
- 9 a real possibility, ATXI thought it made sense to discuss with Ameren Missouri the idea of
- 10 co-locating lines along the Zachary to Iowa State Line segment. In the initial route approved
- by the Commission in 2016, the Mark Twain line ran parallel with Ameren Missouri's
- existing line for the very last portion of the route so that Mark Twain could connect with the
- 13 MVP being constructed in Iowa by ITC Midwest and MidAmerican Energy Co. As
- 14 discussions progressed, co-locating the Mark Twain transmission line with Ameren
- 15 Missouri's existing 161-kV line became a reasonable alternative to the Zachary-to-Iowa State
- 16 Line route that ATXI initially proposed.
- O. You testified earlier that one of the benefits of this new proposed route
- 18 for the Mark Twain line was a reduction in the number of utility structures due to co-
- 19 locating the line with Northeast Power's line. Is this also true for co-location of ATXI's
- 20 Zachary to Iowa State Line route with Ameren Missouri's existing line?
- 21 A. Yes, but to a lesser extent. Similar to ATXI's arrangement with Northeast
- 22 Power, ATXI will completely rebuild Ameren Missouri's line between Kirksville and the
- 23 Iowa border and replace the existing H-frame transmission structures with steel poles, which

- do not require guy wires or anchors. However, due to the topography of the area, a drastic
- 2 reduction in structures may not be possible along this segment. Also similar to its agreement
- 3 with Northeast Power, ATXI and Ameren Missouri will share vegetation management costs
- 4 once the line is in operation.
- 5 Q. Where is Ameren Missouri's existing line located in relation to the initial
- 6 route proposed by ATXI?
- A. Ameren Missouri's existing 161-kV transmission line generally runs from the
- 8 Adair Substation near Kirksville in a northerly direction to the Iowa state line. The existing
- 9 Ameren Missouri line is depicted below by the dotted purple line overlaid in teal, and the
- initial route is shown in purple:



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1	Q.	Why didn't ATXI consider co-locating the Mark Twain line with Amerek
2	Missouri's lir	e in the first instance?

- 3 One of the considerations at the time was ATXI's desire to avoid federal and A. 4 state lands and conservation areas. Ameren Missouri's existing 161-kV transmission line 5 runs through a portion of Thousand Hills State Park. In addition, Ameren Missouri's existing 6 line occupies only 100 feet of right-of-way; ATXI's transmission line requires 150 feet of 7 right-of-way. Finally, the co-location of transmission lines is more complex and presents 8 technical concerns, which ATXI witness Jeffrey Hackman addresses in his direct testimony. 9 However, after the possibility arose to co-locate with Northeast Power's existing line and 10 after listening to community members, property owners, county commissioners and other 11 local and state representatives regarding their concerns over the proposed route, ATXI 12 decided that co-locating along existing right-of-way was a plausible alternative.
 - Q. You testified earlier that ATXI would seek to acquire an additional 50 feet of right-of-way on the Zachary to Iowa state line segment to accommodate the colocation of the Project with Ameren Missouri's existing line. Will this impact additional property owners?
 - A. ATXI's acquisition of easement rights from property owners in Ameren Missouri's existing transmission corridor and acquisition of an additional 50 feet adjacent to the existing right-of-way is not expected to affect any new property owners in addition to those already impacted by Ameren Missouri's existing transmission corridor.
 - Q. You have testified that this new location of the route was, in part, the result of ATXI listening to concerns with the initial route location raised by property

owners, county officials, legislators and the general public. What has ATXI done to obtain feedback on this new route proposal after it was announced on May 1, 2017?

A. Actually, ATXI's efforts to advise property owners began before its official announcement on May 1, 2017. ATXI and Northeast Power jointly mailed letters containing information about the proposed new route and maps highlighting the proposed new route on April 27, 2017, to property owners on the newly-proposed route, as well as those property owners on the initial, previously-approved route. ATXI also updated the Mark Twain Transmission Line Project website with information regarding the new proposed transmission route (https://www.ameren.com/mark-twain), along with providing contact information for anyone interested to provide feedback on the proposal.

In addition to those outreach efforts that ATXI, Northeast Power, and Ameren Missouri jointly held open houses for affected property owners and members of the public in June 2017.

In addition to those outreach efforts that ATXI, Northeast Power, and Ameren Missouri made to community leaders, ATXI, Northeast Power, and Ameren Missouri jointly held open houses for affected property owners and members of the public in June 2017. Property owners along the new route, those on the initial route, community members, governmental leaders and those members of the public who had expressed interest were sent letters inviting them to attend one or more of the open houses. These open houses were held in Marion County at the Palmrya Middle School Gym in Palmyra on June 13, 2017; in Knox County at the Knox County Elementary School Gym in Edina on June 14, 2017; in Adair County at the Kirksville Middle School Auditorium in Kirksville on June 15, 2017; and in Schuyler County at the Schuyler County Middle School Gym in Queen City on June 16, 2017. The locations of the open houses in Knox County and Marion County were planned and advertised so that interested persons and property owners in Lewis County, where the proposed line crosses 21 tracts of land, could attend either or both open houses.

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Q. Did ATXI follow the same open house format for these open houses that it had employed when it sought public input on the initial route?

Not entirely. Unlike the open houses held for the initial route, attendees were A. not required to sign in in order to enter or participate in the open houses. Those attending the open houses received a Project information sheet, and representatives from ATXI, Northeast Power, and Ameren Missouri were on-hand to provide information about the new route location and to answer any questions posed by the public, community leaders and affected property owners. Attendees had the opportunity to gather information and speak one-on-one with Project staff and experts at stations or in an open forum during a O&A session. For example, aware of public concerns regarding electromagnetic field (EMF) and its possible effects on health, ATXI had an expert on EMF available to answer questions posed by the attendees. Representatives from ATXI's real estate acquisition team and its engineering team were also present to answer questions. Six computer stations at which Global Positioning Data could be accessed were available at each open house to allow the public the opportunity to get more detailed information about the route location, print a map to take, and to provide feedback on the proposed route. ATXI sought attendees' feedback on the options for connecting the route from the Maywood Switching Station in Marion County to Northeast Power's existing line, as well as feedback on the alternative location for the Zachary Substation and the various options for connecting the line with the alternative Zachary Substation at the open houses. Those attending the open house were given a questionnaire on which they could provide their feedback on route and substation locations. The questionnaire was also available online.

Q.	How would you describe the public feedback on the new route that ATXI
received dui	ring these open houses?

- A. The feedback we received was, on the whole, favorable toward the new proposed route over the initial route, and public comment supported the relocation of the Zachary Substation. Property owners and the public expressed concerns about some of the options for connecting the existing lines with the switching station in Maywood as well as some of the options for connecting the line with the newly-located Zachary Substation. Some remained opposed to the Project entirely. But, generally speaking, the new route that colocates along existing right-of-way was viewed as a significant improvement by a majority of those responding.
- Q. When the open houses were held for the original route, concerns were expressed by attendees that some members of the public were asked to to leave. How would you describe the atmosphere of the open houses held in June 2017?
- A. While it was not ATXI's intent to ever treat attendees otherwise, ATXI worked hard to ensure that attendees at these open houses were treated with respect and that all of their questions were answered to the fullest extent possible. No attendees were asked to leave. Generally, I would characterize the open houses as very civil and responsive to the questions posed by landowners and other members of the public.
- Q. Following the open houses, did ATXI make any changes to the route it presented to open house attendees?
- A. Where the route co-located with Northeast Power's 161-kV transmission line and Ameren Missouri's 161-kV transmission line, no. Feedback from the public and property owners, however, resulted in finalization of the connection points with the Maywood

- 1 Switching Station and with the Zachary Substation. Of the two options proposed for
- 2 connection of the line with the Maywood Switching Station, the Line segment was
- 3 selected. Because public input strongly favored relocation of the Zachary Substation to the
- 4 alternative proposed site adjacent to the Adair Substation, ATXI adopted the relocated site.
- 5 As I stated earlier, the Purple Option was selected to connect the co-located line with the
- 6 Zachary Substation in its new location. Attached to my testimony as Schedule JJ-01 is a
- 7 map depicting the final proposed route for the Project.
- 8 Q. According to ATXI's application for a certificate of convenience or
- 9 necessity for this newly-proposed route, ATXI was able to obtain the assents of the
- 10 county commissions of all five counties—Marion, Lewis, Knox, Adair, and Schuyler—
- 11 for the Project. Explain that process.

- A. Following the open houses in 2017 and after finalizing the route, ATXI
- 13 representatives made formal requests for county assents in August and September 2017.
- 14 ATXI representatives, including myself, and Northeast Power representatives appeared
- 15 before each county commission to provide information about the Project and answer
- 16 questions. Each of the five counties granted ATXI an assent for the Mark Twain transmission
- 17 line based upon the final route that is being presented to the Commission in this filing, and
- those assents are attached as appendices to ATXI's CCN application.
 - Q. What do you conclude regarding this new proposed route for the Project?
- A. The final route alignment, which co-locates almost exclusively on existing
- 21 transmission right-of-way, minimizes the impact of the Project on affected landowners. In
- 22 addition, it minimizes the overall social and environmental impacts of the Project while
- providing a reasonable route for design and construction.

Q. Is it possible that any changes will be made to the final propos)posed route?
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- A. Not to the basic route depicted in the drawings and schedules included with my testimony. However, based upon local, site-specific conditions that may be identified or encountered during survey, final engineering, design, right-of-way acquisition, specific landowner issues, or construction, ATXI may be required to make minor adjustments to the final route alignment. These adjustments would be made to address specific, localized conditions or circumstances not readily apparent at this time, but are not anticipated to result in substantial (if any) additional impacts. Any minor adjustments made would generally be intended to reduce overall environmental impacts, reduce Project inconvenience to property owners, or protect public safety.
- Q. You mention that specific landowner issues may arise and state that minor adjustments to the route may be made to reduce Project inconvenience to property owners. Please explain.
- A. ATXI is committed to work with landowners in good faith to coordinate construction of the Project and, where feasible, minimize inconvenience to those landowners. It is entirely possible, for example, that a landowner may request an adjustment to the location of a particular pole from its planned location; in those instances, ATXI will determine whether the adjustment is appropriate given engineering, cost, and safety considerations and, where it is appropriate, accommodate the particular landowner's request.

IV. MANAGEMENT AND CONSTRUCTION

Q. How will ATXI manage construction of the Mark Twain Project?

A. As discussed by ATXI President Shawn Schukar in his direct testimony, Ameren Services will manage the design and construction of the Project.

Q. Please describe the structure of the management team for the Mark Twain Project.

- 3 A. The Project's management team is headed by Mr. Schukar, Mr. Cliff Waits,
- 4 Senior Director Transmission Project Management and Construction, and me, the Project
- 5 Manager. Both Mr. Schukar and Mr. Waits have many years of experience in transmission
- 6 system planning, construction and operations, as do I, as outlined above.

Q. What are the roles of each of the management team's members?

- 8 A. Mr. Schukar provides executive oversight for the Project. In my role, I direct
- 9 the day-to-day activities of the Project team and have responsibility for Project performance,
- adherence to Project budget, and delivery of Project objectives. I also am accountable for
- 11 ATXI's compliance with project management policies and procedures that apply to all
- 12 operating subsidiaries of Ameren Corporation.
- Mr. Schukar also directs a Project Scheduling and Controls group and Mr. Waits
- 14 directs a Construction Services group that will support the project management team for the
- 15 Project. The Project Scheduling and Controls group will support the Project through detailed
- scheduling, resource identification, data gathering, and cost monitoring and control. The
- 17 Construction Services group will assure that actual construction activities are conducted in a
- safe and efficient manner, consistent with the Project design specifications. Ameren Services,
- on behalf of ATXI, will employ contractors in various capacities for the Project, as it does
- 20 routinely for transmission projects. It may also engage outside firms, to the extent necessary,
- 21 to assist with management of the Project.

1	Q. Is the project management team structure and the policies and
2	procedures being used on the Project the same as those employed by Ameren Services
3	on other transmission projects?
4	A. Yes. The project management team structure and the policies and procedures
5	that will be followed are the same as Ameren Services utilizes for other transmission projects
6	for which it provides services, including those constructed on behalf of Ameren Missouri or
7	Ameren Illinois.
8	Q. You indicated that you are a registered Project Management
9	Professional, or PMP. What is that credential, and how is it attained?
10	A. The Project Management Professional credential is issued by the Project
11	Management Institute, Inc. (PMI) and is an industry-recognized and globally-recognized
12	certification for project managers. A PMP demonstrates an individual has the experience,
13	education, and competency necessary to lead and direct projects and project teams.
14	According to the PMP Handbook published by the PMI (available at www.pmi.org), the PMP
15	credential:
16	is accredited by the American National Standards Institute ("ANSI") against
17	the International Organization for Standardization ("ISO") 17024. The ISO
18	17024 standard includes vigorous requirements for examination development
19	and maintenance and for the quality management systems for continuing
20	quality assurance. In addition, PMP credential is also registered against the
21	ISO 9001:2000 standard for quality management systems.
22	To apply for the PMP, an individual must have either: (i) a four-year degree and at
23	least three years of project management experience, with 4,500 hours leading and directing

- 1 projects and 35 hours of project management education, or (ii) a secondary diploma with at
- 2 least five years of project management experience, with 7,500 hours leading and directing
- 3 projects and 35 hours of project management education. An applicant also must pass a four-
- 4 hour examination requiring application of project management concepts and experience to
- 5 potential on-the-job situations. In addition, as part of PMI's Continuing Certification
- 6 Requirements, to remain credentialed, a PMP also must earn sixty professional development
- 7 units per three-year certification renewal cycle.
- 8 Q. Please discuss Ameren Services' capability to efficiently manage and
 - supervise construction of the Project?

- 10 A. Ameren Services and its personnel, have many years of experience
- successfully overseeing the construction of transmission lines and related projects. In fact,
- 12 Ameren Services and its predecessors have been constructing transmission lines for decades,
- and have managed the construction and re-construction of hundreds of miles of transmission
- lines, including substations and related facilities. Ameren Services has also constructed
- several large transmission projects in Illinois for Ameren Illinois Company, and is in the
- process of constructing the Illinois portions of the Illinois Rivers Project and the Spoon River
- 17 Project for ATXI. Ameren Services was also responsible for managing and supervising the
- 18 construction of the approximately seven miles of the Illinois Rivers Project built here in
- 19 Missouri, which was the subject of Commission Case No. EA-2015-0145. That Project was
- 20 completed in 2016.
- Q. How does ATXI intend to construct the Project?
- A. The Project will be constructed using the Design-Bid-Build process. In the
- 23 Design-Bid-Build process, Ameren Services directs each phase of the work activities. In this

traditional approach to project delivery, the owner (here, ATXI) arranges for the completion
of the design. In the bid phase, the owner then coordinates the bidding of the materials and
any labor necessary for the Project based on the design. The owner then selects the preferred
vendors and orders materials. Finally, the build phase requires the owner to coordinate the
receipt of the materials and manage construction, including the activities of any construction

contractors.

Q. Why does ATXI intend to use contractors to construct the Project?

A. Using contractors is the most efficient and cost-effective means to construct projects such as this one. It would be cost-prohibitive and inefficient to permanently employ the internal staff necessary to support the peak manpower requirements associated with all transmission line projects. Therefore, as it has routinely done in the past, Ameren Services, on behalf of ATXI, will utilize contractors to construct the Project. It is ATXI's intention to use union construction contractors.

Q. How will ATXI select contractors for the Project?

A. Ameren Services, on behalf of ATXI, will use a formal sourcing process to secure the labor necessary to construct the Project. Generally, the sourcing process is comprised of: (i) formation of a contract development team to identify the scope of work to be completed and the contractor selection criteria necessary; (ii) evaluation and acceptance of the statements of qualifications and bids received from those interested in the work as scoped; and (iii) negotiation of the terms and conditions most favorable to ATXI. A sample construction contract is attached as **Schedule JJ-02**. This rigorous sourcing process assures Ameren Services secures the best bid for efficient and effective construction.

Q. Please explain how ATXI will ensure adequate and efficient construction of the Project.

A. As demonstrated above, Ameren Services, on behalf of ATXI, has strong project management emphasis and experience. Ameren Services has documented corporate project oversight policies and procedures that govern all phases of transmission line projects, including this Project. These policies and procedures are consistent with the Project Management Institute's Project Management Book of Knowledge (PMBOK), which is an ANSI³ standard. Ameren Services' policies describe key steps in ensuring adequate and efficient construction, such as engineering design calculation checking, constructability reviews, project risk registers with defined risk mitigation plans, and fully integrated logic-driven schedules. Further, monthly status reports with key project health metrics are reviewed with management. The monthly status reports identify issues affecting project execution, potential high impact risks, and cost and schedule performance.

Q. Please explain how ATXI will supervise construction of the Project.

A. Ameren Services' Transmission Construction Services group will have primary responsibility for job site supervision during construction of the Project. In addition to this supervision, employees engaged in design engineering, project controls, and safety will also oversee construction. Finally, construction contractors will be continuously managed through field inspections, testing (as required), and construction review.

Q. Will ATXI ensure that the Project is designed and constructed in accordance with all applicable laws and regulations?

³American National Standards Institute.

A. Yes. The Ameren Services personnel involved in the design and construction of the Project are regularly involved in the design and construction of transmission lines in Missouri. As such, they are aware of the laws and regulations applicable to such design and construction. When changes are made to these laws and regulations, Ameren Services employees involved in regulatory issues advise those affected by the changes to implement any modifications in process or procedure necessary to stay compliant. Through its experience and the process to address changes, Ameren Services and ATXI will ensure that they comply with all applicable federal and state regulations and orders of the Commission, including the National Electrical Safety Code (NESC), which has been adopted by this Commission (see 4 CSR 240-18.010).

Q. How will ATXI operate the Project once it is constructed?

A. The Ameren Services Transmission Operations group will be responsible for the operation of the transmission line and associated facilities once they are placed in-service. This team is comprised of North American Electric Reliability Corporation (NERC)-certified System Operators with substantial experience performing the Transmission Operator and Balancing Authority tasks pertinent to such facilities. Operation will be compliant with applicable state and federal law, FERC-approved NERC Standards and other applicable requirements.

Q. What do you conclude regarding ATXI's capability to efficiently manage and supervise construction of the Project?

A. I conclude that ATXI, utilizing the services provided by Ameren Services, is capable of efficiently managing and supervising construction of the Project. As I stated, Ameren Services and its personnel, on behalf of its transmission-owning affiliates, has built

- 1 many transmission line projects. Further, the Mark Twain Project will be designed and
- 2 constructed in accordance with all applicable federal, state and local regulations and the
- 3 NESC. As explained, Ameren Services, on behalf of ATXI, will manage and supervise
- 4 construction of the Project.

5 V. CONSTRUCTION SCHEDULE

- 6 Q. What is the planned in-service date for the Mark Twain Project?
- 7 A. The planned in-service date for the Mark Twain Transmission Project is
- 8 December 2019.
- 9 Q. By when does ATXI request that the Commission approve its application
- 10 for a CCN?
- 11 A. January 31, 2018.
- 12 **Q.** Why is that date significant?
- 13 A. In order to meet the in-service date, it is critical that the CCN is granted by
- January 31, 2018, so right-of-way acquisition efforts can begin in earnest on February 1,
- 15 2018. The schedule calls for construction to commence in the summer of 2018 in order for
- 16 the in-service date to be met. Based on our experience with major transmission projects like
- this one, if we do not proceed with right-of-way acquisition in earnest by February of 2018.
- 18 we will not have sufficient right-of-way acquired in order to commence construction in an
- orderly fashion next summer, likely increasing cost and reducing scheduling effectiveness.
- Q. You noted that construction needs to start in the summer of 2018. Have
- 21 you developed a complete Project schedule that will accommodate the in-service date
- 22 for the Project?

- A. Yes. The schedule, attached to my testimony as **Schedule JJ-03**, includes phases for engineering, right-of-way acquisition, environmental permitting, material procurement, right-of-way clearing, foundation installation, transmission line construction, substation construction and final inspections. Transmission line construction consists of steel structure installation and wire installation. Substation construction consists of site work, foundation, structure and equipment installation.
 - Q. According to the construction schedule, right-of-way acquisition spans a period of approximately 18 months, but construction starts in 2018. Please explain.
 - A. Our experience indicates that we will acquire right-of-way in phases and, consequently, construct the Project in phases. This means that some of the right-of-way acquisitions will take place in parallel with construction.

12 VI. PROJECT COST

Q. How was the Project cost determined?

A. Once the new 345-kV route was selected, a definitive cost estimate was developed for the 345-kV transmission lines along the selected route. The cost estimate parameters were quantified in part using route analysis information supplemented with an estimated average span length between transmission line structures to estimate the total number of structures. Material, foundation, and construction cost estimates were based on the total number and general type of each structure in conjunction with the route length using data from projects of comparable size and construction. Market studies from an independent land appraiser indentified average costs per acre for different classifications of land within the study area, which were used to estimate easement costs. Using this methodology, a total cost of \$216 million was established for the 345-kV transmission lines.

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1	Q.	The Mark Twain Project includes the proposed Zachary Substation.
2	What is its es	timated cost?
3	A.	The estimate for the Zachary Substation is \$28.4 million.

4 Q. Are there any other costs associated with the Project that you have not 5 discussed?

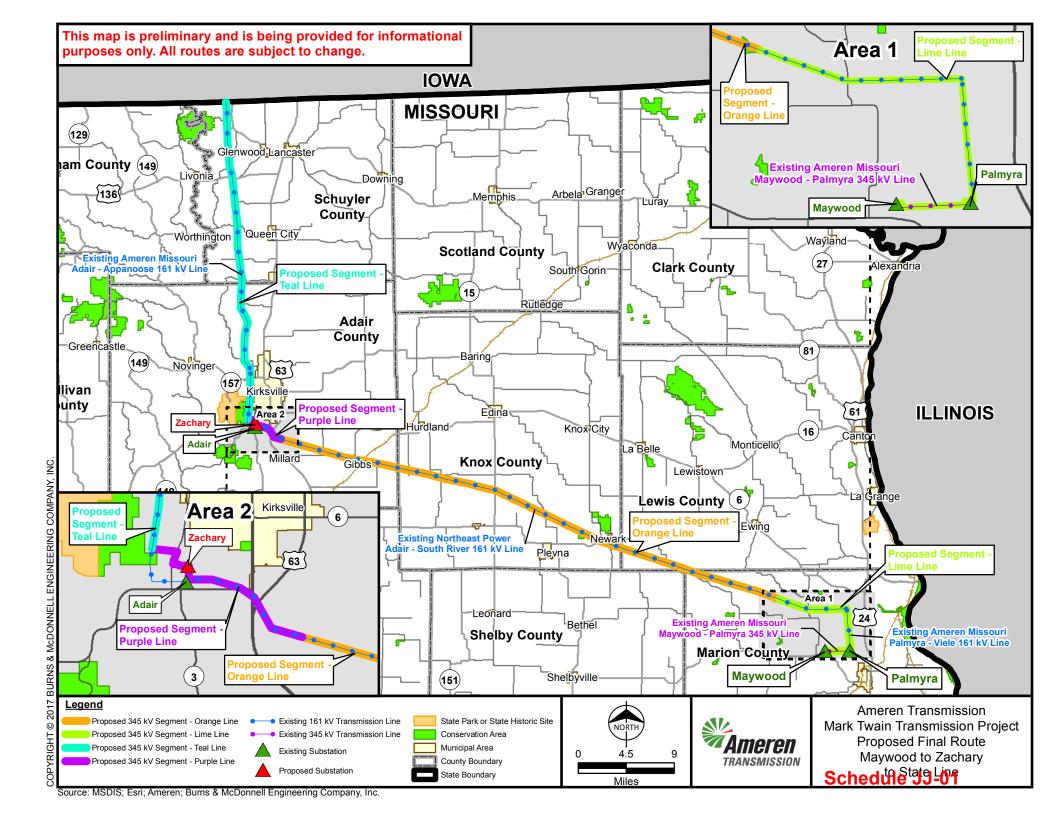
A. Yes. In order to interconnect the Project with Ameren Missouri's existing transmission system, modifications must be made to Ameren Missouri's existing Adair Substation. Ameren Missouri will perform these modifications, and will be reimbursed for this work by ATXI as part of the Project costs. A short connector line (on all Ameren-owned property) between the Zachary Substation and the Adair Substation will complete the connection. Similar to the modifications at Adair, there are modifications that will be necessary at the Maywood Switching Station due to the co-location of the route with Ameren Missouri and Northeast Power. The estimate for the connector and modifications is \$5.6 million.

15 Q. What is the total estimated cost for the Project?

- A. Adding each of the foregoing components together produces a total estimated cost of \$250 million.
- 18 Q. Does this conclude your direct testimony?
- 19 A. Yes, it does.

BEFORE THE PUBLIC SERVICE COMMISSION OF THE STATE OF MISSOURI

In the Matter of the Application of Ameren Transmission Company of Illinois for a Certificate of Public Convenience and Necessity Authorizing it to Construct, Install, Own, Operate, Maintain and Otherwise Control and Manage a 345-kV Electric Transmission Line from Palmyra, Missouri, to the Iowa Border and an Associated Substation Near Kirksville, Missouri.))) File No. EA-2017-0345))
AFFIDAVIT OF JAMES	JONTRY
STATE OF MISSOURI)	
CITY OF ST. LOUIS) ss	
James Jontry, being first duly sworn on his oath, states:	
1. My name is James Jontry. I work in the City	of St. Louis, Missouri, and I am employed
by Ameren Services Company as Senior Project Manager in	the Transmission Department.
2. Attached hereto and made a part hereof for	r all purposes is my Direct Testimony on
behalf of Ameren Transmission Company of Illinois co	onsisting of 28 pages, and Schedule(s)
JJ-01, JJ-02, and JJ-03, all of which have been pro-	epared in written form for introduction into
evidence in the above-referenced docket.	
3. I hereby swear and affirm that my answers	contained in the attached testimony to the
questions therein propounded are true and correct. James	Jontry
Subscribed and sworn to before me this 13 day of Septem	ber, 2017. United Poat Notary Public
My commission expires: 12/7/2019	JESSICA POAT Notary Public - Notary Seal State of Missouri Commissioned for Franklin County My Commission Expires: December 07, 2019 Commission Number: 11211966





General Conditions of Contract – Transmission Construction (excluding design)

GENERAL CONDITIONS OF CONTRACT – CONSTRUCTION

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Attachments

A – Ameren Corporation and Subsidiaries Collection of Lien Waivers

Exhibits to Attachment A

- A Contractor's Affidavit for Progress Payments
- B Contractor's Partial Waiver of Lien
- C Subcontractor's Partial Waiver of Lien
- D Contractor's Affidavit for Final Payment
- E Contractor's Unconditional Final Waiver Lien
- F Subcontractor's Unconditional Final Waiver of Lien

B – Ameren Supplier Billing Instructions

GENERAL CONDITIONS OF CONTRACT - CONSTRUCTION

1.00 DEFINITIONS

- a) "Ameren" means the Ameren Corporation entity identified in the Purchase Order, and its agents, successors, and assigns. "Ameren", "Purchaser", "Owner", and "Buyer", if used in the Contract Documents, are considered synonymous and refer to Ameren.
- b) "Application for Payment" means the application for payment submitted by Contractor pursuant to the terms of the Contract for payments due to Contractor for Work performed.
- c) "Confidential Information" means any and all data, documentation, methods, processes, materials, and all other information relating to the past, present, and future business of either Party. Confidential Information also includes all information owned by customers, suppliers, or other third parties to whom such Party owes an obligation of confidentiality. Confidential Information does not include any information that is: (i) publicly available or becomes publicly available through no breach of the Contract Documents; or (ii) information that was known to the disclosing Party prior to the date of the Contract.
- d) "Contract" means, collectively, the Purchase Order to which these General Conditions are attached or incorporated and all of the other Contract Documents.
- e) "Contract Documents" means the Purchase Order, the Scope of Work and/orSpecifications issued by Ameren, these General Conditions of Contract, the Supplemental General Conditions of Contract Transmission, and all other documents identified in the Ameren's Purchase Order or the Scope of Work Specification as included in the Contract Documents. The terms, conditions and provisions of the Contract Documents constitute the Contract.
- f) "Contract Price" means the aggregate amount to be paid by Ameren to Contractor for the Work in conformance with the Contract Documents. Unless otherwise provided in the Contract Documents, the Contract Price shall cover in full the cost of the Work, including all materials, equipment, labor, and Contractor's overhead and profit.
- g) "Contractor" means the entity identified in the Contract, and its agents, employees and authorized representatives, undertaking the performance of the Work.
- h) "Day" means a calendar Day commencing at 12:00 a.m.
- i) "Defective" or "Defect" means the Work or any portion thereof, not conforming to the requirements of the Contract Documents
- j) "<u>Dispute</u>" means any disagreement between Ameren and Contractor regarding the interpretation or implementation of the Contract or the Contract Documents or a claim by either Party arising from the Project
- k) "Effective Date" means the date of issuance of the Purchase Order unless an alternate Effective Date is specified in the Contract Documents.

- l) "Environmental Laws" means any and all Permits and all applicable codes, Laws, rules, and regulations relating to actual or potential effect on: human health, safety, or the environment; the disposal of materials; the discharge or release of chemicals, gases, or other substances or materials into the environment; or the presence of such materials, chemicals, gases, or other substances
- m) "Extra Work" means Work beyond the original scope of Work specified or implied in the Contract Documents.
- n) "Extra Work Order" or "EWO" means a written authorization to perform Extra Work signed by the SPOC prior to the performance of such Extra Work, which EWO shall be in such form as may be prescribed by Ameren.
- o) "<u>Final Completion</u>" means the Work has progressed to the point where it is one hundred percent (100%) complete, in accordance with the Contract Documents.
- p) "<u>Final Payment</u>" shall mean the last payment made from Ameren to Contractor upon Contractor's submission of its final Application for Payment.
- q) "Force Majeure" shall have the meaning set forth in Section 3.08.
- r) "Governmental Authorities" means any department, commission, board, regulatory authority, bureau, legislative body, agency, political subdivision or instrumentality, and their successors, of any federal, state, local, or municipal government that now or hereafter exercise regulatory authority over the Premises or the Work.
- s) "Key Personnel" are Persons to be used by the Contractor in performance of the Work as may be defined in the Contract Documents and may include, as reasonably required by Ameren as necessary for the Project, a Project Manager, Construction Supervisor, Safety Manager, Scheduler and/or Environmental Supervisor.
- t) <u>Law</u> or <u>Laws</u> means: (1) all applicable federal, state, and local Laws, treaties, ordinances, codes, rules and regulations, judgments, decrees, injunctions, writs and orders of any court, arbitrator or Governmental Agency or authority; (2) all applicable and generally recognized building and safety standards governing performance of the Work; and (3) all applicable Environmental Laws and applicable Permits.
- u) "<u>Limited Notice to Proceed</u>" means the issuance of a Purchase Order by Ameren to Contractor authorizing a specific portion of the Work to begin, but not the Work in its entirety.
- v) "Mechanics Lien" means any lien or claim arising pursuant to any statutory or equitable right permitting mechanics, carriers, warehousemen, materialmen, artisans, and laborers to place a lien against the Premises for the value of services, labor, equipment or materials furnished in connection with the Project.
- w) "Non-Public Market Information" means information related to the electric energy and power business including, but not limited to, information regarding sales, cost of production, generator outages, generator heat rates, unconsummated transactions, or historical generator volumes.
- x) "Notice to Proceed" means the issuance of a Purchase Order by Ameren to Contractor releasing Contractor to perform the entire scope of Work.

- y) "Notice" shall have the meaning set forth in Section 8.03.
- z) "Permits" means all permits and licenses required by or entered into with any Governmental Agency in connection with the proper conduct and performance of the Work.
- aa) "Plans" shall have the meaning set forth in Section 2.01.
- bb) "Premises" means the Ameren property on which the Work is to be performed.
- cc) "Project Schedule" means a chronological breakdown of all major activities to be performed by Contactor connected with the Work, which, if provided in the Contract Documents, may include design and construction of the Project and/or installation and start up. The approved Project Schedule shall be the official and final schedule which is to be used for the calculation of liquidated damages, if any.
- dd) "Single Point of Contact" or "SPOC" means the Ameren representative designated as the sole liaison between the Contractor and Ameren. This may be a Construction Supervisor, Project Manager, or other agent or employee of Ameren. Contractors may only take direction from the SPOC for a Project unless otherwise provided, in writing, by the SPOC.
- ee) "Specifications" shall have the meaning set forth in Section 2.01.
- ff) "Status Report" means the written report prepared by Contractor pursuant to Section 3.06(b) and delivered to Ameren monthly (or weekly as may be reasonably requested by Ameren due to outage or other concerns), by the tenth (10th) Day of each month.
- gg) "Subcontractor" means any individual, partnership, firm, corporation or business entity, other than an employee of the Contractor, who contracts or agrees with Contractor (or another Subcontractor or any tier thereof) to furnish any services, labor, materials or equipment for or in connection with the performance of the Work.
- hh) "Substantial Completion" means the Work has progressed to the point where it is substantially complete, in accordance with the Contract Documents.
- ii) "Supplemental General Conditions of Contract --- Transmission" means the Supplemental General Conditions of Contract addressing certain environmental, labor, safety and other Work requirements applicable to on-Site Work at any Ameren Premises.
- jj) "Work" means all labor, methods, material, goods, equipment, structures, services, transportation and all other facilities to be provided by or performed by Contractor stated or reasonably inferred from the Contract Documents. The Work may constitute the whole or a part of the Project.

2.00 CONTRACT ACCEPTANCE, RIGHTS AND RESPONSIBILITY

2.01 Acceptance of Contract and Contract Terms; Conflicts and Omissions

a) Acceptance of the Contract and Ameren's Limited Notice or Notice to Proceed shall be by Contractor's written or electronic acceptance of the Purchase Order. The Contractor may not begin Work before receiving Ameren's Purchase Order. Any Work performed by the Contractor before

receipt of the Purchase Order, or outside the scope of Work outlined in the Purchase Order, shall be considered as having been done at the Contractor's own risk. Contractor will be deemed to have accepted the Contract in the event it commences Work prior to its written or electronic acknowledgement thereof.

No terms or conditions inconsistent with the Contract (whether contained in Contractor's acknowledgment or other document) shall be effective unless agreed to in writing and signed by Ameren's authorized agent. Notification of objection to different terms and conditions not agreed to in writing is hereby given. Any reference in the Contract to Contractor's quotation, bid, proposal, or other document of Contractor does not signify Ameren's acceptance of any terms or conditions thereof which are inconsistent with the Contract Documents, unless expressly agreed to in writing by both parties stating that it supersedes specific, inconsistent terms and conditions of the Contract Documents.

The Contract Documents shall be interpreted as being complementary. Any requirement occurring in any one of the Contract Documents is as binding as though occurring in all Contract Documents. Generally, Specifications address quality, types of materials and Contract conditions, while Plans show placement, sizes, and fabrication details of materials.

b) Conflicts. In the event of any conflict between or among the Contract Documents, the following order of interpretation shall prevail: (a) the terms of a duly authorized and executed EWO with regard to the subject matter of the EWO; (b) duly authorized and executed amendments to the Contract; (c) the Project Schedule; (d) the terms of the Owner's Specifications and Scope of Work; (e) the Contract (excluding the Exhibits, but including these General Conditions of Contract and the Ameren Supplemental Conditions of Contract; and (f) the terms of the remaining Exhibits.

Should the Contractor discover any conflicts, omissions, or errors in the Contract or have any question concerning interpretation or clarification of the Contract, the Contractor shall request in writing interpretation, clarification, or additional detailed instructions, before proceeding with the Work affected. The written request shall be given to the SPOC.

The SPOC shall, within a reasonable time, issue in writing the interpretation, clarification, or additional detailed instructions requested. Should the Contractor proceed with the Work affected before receipt of the interpretation, clarification, or instructions from the SPOC, the Contractor shall replace or adjust any Work not in conformance therewith and shall be responsible for any resultant damage or added cost.

Should any interpretation, clarification, or additional detailed instructions, in the opinion of the Contractor, constitute Work beyond the scope of the Contract, the Contractor shall submit written Notice thereof to the SPOC within seven (7) calendar Days following receipt of such interpretation, clarification, or additional detailed instructions and in any event prior to commencement of Work thereon. Within one working Day after the Contractor issues its written Notice, the Contractor shall submit an explanation of how the interpretation, clarification, or additional detailed instruction constitutes Work beyond the scope of the Contract, along with a detailed cost breakdown and an explanation of any delay impacts.

The SPOC shall consider such Notice and if the Notice is justified, the interpretation, clarification or additional detailed instructions shall be revised or the Extra Work authorized by Extra Work Order. If the claim is not justified, Ameren shall give the Contractor a written order, including an explanation of its reasoning, that the claim is not justified and direct the Contractor to perform such Work.

The Contractor must proceed with the Work upon receipt from Ameren of a written order to do so, in accordance with Ameren's interpretation of the Contract requirements, but within seven (7) Days of receipt of the order, the Contractor must notify Ameren, by letter, in the event that it protests the decision. When performing Disputed Work, the Contractor shall prepare time and materials records for each Day, and Ameren shall verify these records at the conclusion of each Day. The Contractor shall have no claim for additional compensation because of such interpretation, clarification, or additional detailed instruction, unless it gives written Notice to the SPOC within seven (7) calendar Days as specified above.

- c) Omissions. In the event of omissions in the Contract Documents, the following shall apply:
 - (1) If the Contract Documents are not complete as to any minor detail of a required construction system or with regard to the manner of combining or installing of parts, materials, or equipment, but there exists an accepted trade standard for good and skillful construction, such detail shall be deemed to be an implied requirement of the Contract Documents in accordance with such standard. "Minor Detail" shall include the concept of substantially identical components, where the price of each such component is small even though the aggregate cost or importance is substantial, and shall include a single component that is incidental, even though its cost or importance may be substantial.
 - (2) The quality and quantity of the parts or material so supplied shall conform to trade standards and be compatible with the type, composition, strength, size, and profile of the parts of materials otherwise set forth in the Contract Documents.

2.02 Contractor's Inspection and Knowledge of Contract, Plans and the Premises

By becoming a party to the Contract, the Contractor represents that it:

- a) is familiar with and understands the requirements of the Project scope;
- b) has all necessary knowledge and experience required for the Work to be performed by it on the Project;
- c) will maintain at all times during the term of the Contract, such personnel on its staff to provide the Work contemplated hereby within the time periods required thereby;
- d) has all applicable licenses required by the State in which the Premises is located to perform the Work;
- e) has reviewed the Contract Documents;
- f) is fully informed as to all existing external conditions and limitations affecting the Work, including local manpower/labor working arrangements and Laws and regulations of any Governmental Authority affecting Contractor;
- g) has visited and inspected the Project site and any structure(s) or other manmade features to be modified, has become familiar with local conditions under which the Project will be constructed and operated, and; has satisfied itself as to existing construction, working space, storage space, and access facilities pertaining to the Premises;

- h) has familiarized itself with any surveys provided to it by Ameren or its representatives, including the location of all existing buildings, utilities, conditions, streets, equipment, components and other attributes having or likely to have an impact on the Project;
- i) has familiarize itself with Ameren's Specifications, Scope of Work and with pertinent Project dates; and
- j) has reviewed and analyzed all Project geotechnical, hazardous substances, structural, chemical, electrical, mechanical and construction materials tests, investigations and recommendations provided to it by Ameren.

As a result of the above, claims resulting from Contractor's failure to familiarize itself with the Premises or pertinent documents provided to it shall be deemed waived and any plea of ignorance by Contractor regarding existing or reasonably foreseeable conditions which create difficulties or hindrances in the execution of the Work, will not excuse the Contractor from fulfilling all requirements of the Contract, or as a basis for any claim for additional compensation or time.

2.03 Financial Assurance

Prior to the execution of the Contract and during its term, Contractor shall submit, upon Ameren's request and for Ameren's review its most recent two years of complete, annual financial statements (and any quarterly financial statements released after the most recent annual financials), or such other financial information as may be available and reasonably requested by Ameren, in order to establish the Contractor's creditworthiness. If Ameren has commercially reasonable grounds to believe Contractor's creditworthiness or performance under the Contract is or has become unsatisfactory, Ameren may provide Contractor with written Notice requesting performance assurance in a form and an amount determined by Ameren in a commercially reasonable manner. Upon receipt of such Notice, Contractor shall have five (5) business Days to provide such performance assurance to Ameren. Failure to provide performance assurance within the five (5) business Day time period shall be an Event of Default under the Contract.

3.00 CONDUCT OF THE WORK

3.01 Drawings and Technical Specifications

- a) Contractor shall review Specifications and drawings provided to it and shall promptly inform Ameren of any identified conflicts.
- b) Contractor shall satisfy itself as to the accuracy of all dimensions given on any drawings issued by Ameren which are reasonably likely to impact the Work, it being understood that, unless otherwise specified in the Contract Documents, Ameren does not guarantee the exactness of such dimensions.
- c) Any drawings required by the Contract to be submitted to Ameren for review shall be submitted by Contractor without unreasonable delay, and any Work affected thereby started prior to completion of review by Ameren shall be at Contractor's risk. Review by Ameren shall not relieve Contractor from fulfilling all obligations of Contractor. As far as practicable, each Contractor drawing shall bear a cross-reference to the sheet number or numbers of Ameren drawings showing the same Work.
- d) In order for Ameren to verify that the Work is proceeding in accordance with Contract requirements, the Contractor shall maintain a complete and up-to-date set of drawings and technical Specifications on the Premises and shall at all times give Ameren access thereto.

e) Every sheet of the Plans and Specifications that differs from the actual construction shall be marked, and sheets so changed shall be noted on the title sheets of the Plans and Specifications. All change orders shall be shown by reference to sketch drawings, and any supplementary drawings or change order drawings shall be included. The Contractor shall review the "as-built" drawings with the SPOC at the request of the SPOC (but no less than at least once a month) to demonstrate that the Contractor is fully and accurately recording all changes that have occurred. The altered drawings shall be sufficiently detailed so that future Work on the Project or in adjacent areas may be conducted. Before the completion of the Project, and before release of any Final Payments, the "as-built" drawings and Specifications shall be transmitted to Ameren.

3.02 Contractors Information and Drawings

- a) As specified in the Contract Documents or at Ameren's request, Contractor shall provide Ameren with such information and documentation within Contractor's possession or control as Ameren may specify relating to the design, construction, licensing, quality assurance, operation or maintenance of the Work, or the Premises.
- b) No information, drawings or other documents transmitted or furnished by Contractor to Ameren or its affiliated companies shall be deemed proprietary or confidential unless specifically designated as such by Contractor. Ameren shall not be prohibited from disclosure or use of proprietary or confidential information or documents relating to the Work to the extent required by Ameren for the design, construction, operation or maintenance of the Work, the Premises or other facility for which the Work is intended, and to the extent required for securing or maintaining any license or Permit for the Premises or other facility for which the Work is intended.
- c) Except as may be required by Contractor for the performance of its obligations under the Contract, Ameren or its affiliated companies are not obligated under the terms of the Contract to provide Contractor with any information which Ameren considers proprietary or confidential. If Ameren transmits any information to Contractor which Ameren considers proprietary or confidential, the information will be designated as such and shall be subject to the confidentiality provisions of paragraph 8.02.

3.03 Alternate Material

In the event the Contract Documents designate any equipment, material or item by proprietary name or name of manufacturer, Contractor shall use such designated equipment, material or item unless specifically otherwise agreed to by Ameren in writing. Proposed alternates or substitutes shall not be procured, used or installed by the Contractor until Ameren has agreed to such alternates or substitutes in writing.

3.04 Shipping

- a) Ameren may route and specify the mode of transportation for shipments of all materials or equipment purchased by Contractor for the Work. If Ameren's routing or mode of transportation increases Contractor's transportation costs, Contractor shall immediately notify Ameren. If Ameren still specifies the more expensive route or mode of transportation, Ameren shall reimburse Contractor for the amount of the increased transportation costs.
- b) Contractor shall arrange to wrap, pack, crate, load, enclose and brace all materials and equipment purchased for the Work on a carrier in a good, workmanlike manner.

c) Contractor shall not instruct any Subcontractor to deliver any material or equipment related to the Contract to the Premises unless Contractor will be present at the Premises to accept such material or equipment. In no event will Ameren accept on behalf of Contractor, or be responsible for, any material or equipment ordered by Contractor and delivered to the Premises. Any shipments that are sent directly to the job site (including those ordered by Subcontractors) shall be clearly marked to the Contractor's attention.

3.05 Permits and Compliance with Laws

- a) Except as otherwise specifically provided in the Contract Documents, Contractor shall obtain at its expense all Permits and licenses from Governmental Authorities and from private parties which are required to be held by Contractor for the performance of the obligations of the Contractor under the Contract and shall obtain the same at the times necessary to meet the Project Schedule. Contractor shall deliver to Ameren all certificates of approvals resulting from inspections.
- b) Contractor will not discriminate against any of its employees, other contractors' employees, Subcontractors' employees, or Ameren's employees, and will not discriminate against any applicant for employment because of race, age, color, religion, sex, national origin, or disability, or because of any other factor protected by applicable Law. Contractor will not harass, or permit the harassment of, any person on the basis of his race, age, color, religion, sex, national origin, disability, or any other factor protected by applicable Law, and will not participate in creating or tolerating a hostile Work environment on Ameren's Premises or an environment which could be perceived as hostile. Contractor agrees to comply with all applicable local, state and federal Laws and statutes, Executive Orders and Regulations relating to non-discrimination in employment.
- c) Contractor certifies that all Work provided and performed will be in compliance with the Williams-Stagger Occupational Safety and Health Act of 1970, as amended (OSHA) and all regulations and standards promulgated by the Secretary of Labor thereunder and where Contractor has OSHA Material Safety Data Sheets, Contractor shall forward copies promptly to Ameren's environmental, safety and health departments.
- d) Compliance with Laws. In the performance of the Work and its obligations under the Agreement, Contractor shall comply with all applicable Laws, ordinances, rules, regulations, restrictions and requirements of all governmental authorities in the rendering Work, including, but not limited to, those relating to environmental protection and health and safety. Without limiting the foregoing, Contractor will not discriminate against any of its employees, other suppliers' employees, Subcontractors' employees, or Ameren's employees, and will not discriminate against any applicant for employment because of race, age, color, religion, sex, national origin, or disability, or because of any other factor protected by applicable Law. Contractor will not harass, or permit the harassment of, any person on the basis of his race, age, color, religion, sex, national origin, disability, or any other factor protected by applicable Law, and will not participate in creating or tolerating a hostile work environment on Ameren's Premises or an environment which could be perceived as hostile. Contractor agrees to comply with all applicable local, state, and federal Laws and statutes, Executive Orders and Regulations relating to non-discrimination in employment. Contractor agrees to abide by the following, to the extent applicable to Contractor, its business and this Agreement: all federal, state and local prohibitions against discriminating and harassing against any employee for employment because of race, age, color, religion, sex, national origin, disability status, or any other factor protected by applicable Law or retaliating against any employee for opposing an unlawful employment practice or because the employee has made a charge, testified, assisted or participated in any manner in an investigation, proceeding or hearing regarding any alleged unlawful employment practice. Contractor further agrees to comply with all applicable Federal Acquisition Regulations (FARs), including FAR Sec. 52.212-3, FAR Sec. 52.212-5, FAR Sec. 52.222.22, FAR Sec. 52.222-25,

and FAR Sec. 52.223-13, which are reproduced, in full text, at Internet Address: http://www.acquisition.gov/comp/far/index.html and which are incorporated herein by reference.

Contractor and its Subcontractors shall also comply with the requirements of the Federal Energy Regulatory Commission (FERC) Code of Conduct and Standards of Conduct requirements (18 C.F.R. part 358) with respect to the exchange of Non-Public Market Information between Ameren Corporation's regulated (Missouri) subsidiaries and Ameren's non-regulated (Illinois) subsidiaries.

3.06 Meetings, Schedules and Reports

- a) Contractor shall attend such meetings as Ameren may reasonably require for the planning and construction of the Project. These include, but are not limited to, Project meetings, conferences and meetings of the various federal, state and local Governmental Authorities, quasi-governmental and other authorities having jurisdiction over the Project.
- b) Contractor shall provide to Ameren detailed minutes of all meetings with Ameren in connection with Contractor's Work under this Contract. Contractor shall be responsible for providing Ameren with a Monthly Report and Forecast to Complete Report (the "Status Report"). The Status Report shall set forth the status of the construction, including but not limited to information on the Work, percentage of completion of the Work, current estimating, subcontracting, computerized updated monthly Critical Path Method scheduling, if appropriate, and Project accounting reports, including projected time to completion and estimated cost to complete the Work (for non-lump sum compensation arrangements), monthly digital progress photographs on compact disc; Project directory, logs for Requests for Information, submittals and shop drawings, EWOs, cost change proposals, field directives, safety meetings, deficiencies, weather conditions, meeting minutes, and any other information that Ameren may reasonably request.
- c) For other than lump-sum compensation arrangements, Contractor shall provide regular monitoring of the actual and projected costs of the Project; identify variances between actual costs and the Project budget which will likely result, in Contractor's judgment, in a cost overrun; advise Ameren in the Status Report if it appears that the final costs of construction may exceed the construction budget; and make recommendations for corrective action
- d) In addition to any other Schedules which may be required by the Contract Documents, Contractor shall prepare and submit to Ameren for its approval the "Construction Schedule" providing for the phasing of construction from commencement to completion, all within the Project Schedule, and shall update and resubmit the Construction Schedule, as might be necessary. The Construction Schedule shall include the phasing of the installation of all process equipment and any additional construction remaining on the Project.

3.07 Timely Performance and Cooperation

- a) If the Contractor fails in any respect to prosecute the Work with promptness and diligence or if completion of any portion of the Work within the Project Schedule is improbable, Contractor shall, at the direction of Ameren and without prejudice to any other remedy of Ameren, use such overtime, including extended shifts and additional personnel, machinery and equipment, necessary to maintain schedules and ensure timely completion. Contractor shall not be entitled to reimbursement for any extra expenses incurred thereby.
- b) The Contractor agrees to complete the Work on the date specified for completion of the Contractor's performance in the Contract unless such time is adjusted, in writing, by change order by Ameren. The Contractor may complete the Work before the completion date with Ameren's written

- consent, which may be withheld if early completion will interfere with Ameren or their other contractors engaged in related or adjacent work.
- c) Contractor shall cooperate so as not to interfere with Ameren's business operations and to ensure the safety of all persons.

3.08 Force Majeure

- a) The performance of either Party shall be excused to the extent such Party is delayed, disrupted, hindered or interfered with by a cause beyond such Party's reasonable control (an event of "Force Majeure"), including acts of God, fires, epidemics, unexpected and unusual floods, riots, wars, sabotage, terrorism, labor disputes, or unexpected actions of Governmental Authorities.
- b) Within seven (7) Days after such Party's knowledge of the occurrence of the event of Force Majeure, Contractor shall give the other Party written Notice of its occurrence and its anticipated duration and results. Within seven (7) Days of the termination of any such delay, the affected Party shall give the other Party Ameren written Notice of the actual duration of the delay. Failure to give either Notice shall be sufficient grounds for denial of an extension of time to the extent the other Party is prejudiced thereby.

3.09 Contractor's Responsibility for the Work

- a) The Contractor shall be responsible for all Work performed under the Contract, and no Subcontractor will be recognized as such. The Contractor shall give its personal attention to the fulfillment of the Contract and keep all phases of the Work under its control.
- b) Ameren will not arbitrate disputes among Subcontractors nor between the Contractor and one or more Subcontractors concerning responsibility for performing any part of the Project.
- c) The Contractor shall be fully responsible for the quality of materials provided by it and its workers' skill in the Project.
- d) From the issuance of the official Notice to Proceed until Substantial Completion, Contractor shall have the charge and care of and shall bear the risk of damage to the materials in its possession and control and equipment provided to or by it for the Work. Contractor shall be responsible for safeguarding such materials.

3.10 Use of Premises

- a) Ameren reserves the right to award other contracts, or perform its own construction services in connection with other portions of the Project.
- b) The Contractor shall confine its activities, the storage of materials and the operation of its employees to the physical limits established by Governmental Authorities and Ameren. Ameren will not furnish temporary offices or other facilities in temporary buildings except as specified elsewhere in the Contract Documents. Before beginning the Work at the Premises, the Contractor shall ascertain the facilities available for its use in the delivery, unloading, storing and erection of materials and equipment at the Premises. If any Dispute arises as to the use of any accommodations, Ameren will make the final allocation.
- c) Contractor shall keep the Premises free from waste materials or rubbish produced as a result of the Work.

- d) In the event part of the Work involves Contractor removing Ameren's property from the Premises, Contractor shall be fully responsible for all aspects of transporting and insuring such property.
- e) When materials, equipment or apparatus are furnished by Ameren or by others for installation or erection by Contractor as part of the Work, Contractor shall receive, unload, protect, store, remove from storage and handle and assume responsibility for them as though these items were furnished by Contractor under the Contract.
- f) The Contractor shall comply strictly with Ameren's written security procedures and rules/regulations in effect at any time governing the admittance of the Contractor's employees or Subcontractors to the Premises and their identification while there.

3.11 Contractor's Supervision and Employees

- a) Contractor warrants that all Key Personnel specifically named in the Contract Documents shall actually perform or supervise the Work, thereof unless the Key Personnel leave the employ of Contractor. Contractor's Construction Supervisor or approved assistant shall be present at the Premises at all times during performance of the Work. The Construction Supervisor shall not be changed without Notice to, and the consent of, Ameren. The Construction Supervisor shall be in full charge of Contractor's Work and shall be fully authorized to represent and to act for the Contractor.
- b) If Contractor wishes to remove any of the Key Personnel, or substitute other personnel for any of the Key Personnel so named, Contractor shall submit such request to Ameren at least ten (10) days in advance of the proposed removal or substitution together with pertinent resume and biographical data on the proposed substitute personnel. Contractor shall not remove or substitute any Key Personnel without the prior written approval of Ameren, which will not be unreasonably withheld.
- The Contractor shall employ and cause each Subcontractor to employ competent and experienced foremen, mechanics and competent workers who are skilled in the type of Work required. At all times the Contractor shall provide sufficient labor to properly prosecute the Work and to ensure completion of each part in accordance with the Project Schedule. The Contractor shall have full responsibility for the conduct of all employees employed in connection with the Work (including employees of any Subcontractor). If, in the reasonable judgment of Ameren, any person is incompetent or disorderly, the Contractor shall promptly remove such person from the Project and shall not re-employ such person thereon without Ameren's written consent. The Contractor shall be familiar with and observe established and accepted labor practices, procedures and agreements.
- d) Ameren may request that any Contractor or Subcontractor personnel be replaced for violation of any Law, safety procedure, security procedure or detrimental conduct, discrimination, harassment, workplace violence or for other justifiable grounds (e.g., poor past performance, background check concerns, etc.) without any penalty to Ameren provided that Ameren's right shall not affect the right of Contractor in its sole discretion as employer, to hire, assign, reassign and/or terminate its own employees.
- e) Contractor and its Subcontractors shall only assign individuals who are legally eligible to work in the United States in accordance with all local, state, and federal Laws to perform the Work. Contractor or its Subcontractor shall complete and retain Form I-9 for each employee. It is Ameren's policy each of its contractors and other vendors participate in the USCIS Electronic Employment Eligibility Verification Program (E-Verify). Information about E-Verify, a free program that allows employers to electronically verify the employment eligibility of their employees, can be obtained at www.uscis.gov/e-verify or by calling 1-888-464-4218. Ameren, in its sole discretion, reserves the right to audit compliance with this provision.

- f) If an actual or potential labor Dispute delays or threatens to delay the performance of the Work, Contractor shall give prompt written Notice to Ameren of the Dispute together with any relevant information regarding the Dispute and its background.
- g) The Contractor is an independent contractor, not an agent or employee of Ameren, and maintains complete control over and responsibility for its own forces and operations, including construction means, methods, techniques, sequences and programs in connection with the Work.

3.12 Subcontracting

- a) Prior to the commencement of the Work, Contractor shall submit the name of each proposed Subcontractor. At Ameren's request, Contractor shall also furnish information in respect to past performances and financial status of the actual or intended Subcontractors which are anticipated to be material to the Project. Such financial information shall include, without limitation, financial statements, credit reports and other information reasonably requested by Ameren. Ameren shall have the right, from time to time, to conduct such credit investigations of all Subcontractors as Ameren shall reasonably deem necessary or appropriate. Ameren may reject any Subcontractor which it considers in its sole reasonable discretion unable to perform satisfactorily the portion of the Work involved. Contractor shall not be entitled to additional compensation for resulting increase to its costs unless Ameren has no reasonable basis for such rejection
- b) If Subcontractors are to be involved in Contractor's performance of Work on the Project, Contractor shall afford the maximum practicable opportunities to bid on Work to business concerns owned, operated and controlled by (i) socially and economically disadvantaged individuals ("MBE/WBE's") (ii) veterans, or (ii) disabled veterans, in each case, certified as such by a generally recognized third party entity (collectively, "Diverse Suppliers") to compete for subcontracts to perform Work on the Project, and Contractor shall cooperate in any studies or surveys conducted by the U.S. Government to determine the extent of Contractor's compliance with this clause.

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- c) Should the Contract be terminated prior to the Project completion (other than for convenience or Ameren default), Ameren may elect to take legal assignment of subcontracts, Purchase Orders and other contractual rights. In such event, the Contractor shall execute and deliver all papers and take all steps, including the legal assignment to Ameren of subcontracts, Purchase Orders, or other contractual rights reasonably necessary to complete the Project.
- d) Contractor agrees to bind every Subcontractor to the provisions of the Contract as are applicable to that portion of the Work to be performed by the Subcontractor and, upon Ameren's request, to provide to Ameren a true and complete copy of the executed subcontract (redacted for compensation information if appropriate).
- e) No Liens. Provided Ameren is not in default of his payment obligations under the Contract, Contractor shall ensure that no Mechanics Liens arise, are filed, or are maintained against the Premises or any part thereof in connection with the performance of the Work. If a Subcontractor of Contractor or any tier files a Lien or otherwise demands payment from Ameren arising out of or relating to such Subcontractor's performance of the Work, Contractor shall defend and indemnify Ameren against all losses or damages Ameren incurs, including, but not limited, to, Ameren's reasonable attorneys' fees and costs.
- f) <u>Direct Payments</u>. In the event of any Dispute between Ameren and Contractor which is not resolved after 10 days, Ameren may, at its option and with notice to Contractor, pay directly any

Subcontractor or supplier of Contractor any undisputed payment then due, and the amount of such payment shall be reduced from Contractor's compensation.

3.13 Ameren's Rules and Regulations. Contractor shall abide by any and all rules Ameren may have in effect at the Premises where the Work is to be performed including, but not limited to, the Ameren Corporation Equal Employment Opportunity and Anti-Harassment Policy, Ameren's "Rules to Live By", and the Ameren Corporation Workplace Violence Policy Statement, Site-specific or Work specific rules and policies, and construction job work rules. All such rules and policies will be provided to Contractor in writing (by inclusion in the Specifications or otherwise) or shall be available at www.Ameren.com/BusinessPartners. Contractor will review applicable Ameren rules and policies with its employees and its Subcontractors' employees prior to their beginning the Work. Ameren will not tolerate any type of harassment on its Premises. Examples of behaviors and materials viewed by Ameren as prohibited harassment include, but are not limited to, unwelcome physical conduct that is sexual in nature, inappropriate remarks, jokes, or comments that are sexual in nature, racial in nature, or otherwise derogatory, pornographic materials of any kind, and displays or graffiti on Ameren's Premises which could be perceived as harassing such as depictions of the Confederate battle flag, KKK paraphernalia, swastikas, and ropes tied in the configuration of nooses. If Contractor or any of its employees finds any inappropriate items or is made aware of any incident of harassment or other discriminatory behavior, Contractor shall notify Ameren's Project manager.

3.14 Suspension of the Work

- a) Ameren may interrupt, suspend or delay any part or all of the Work covered under the Contract for any reason upon written Notice to Contractor which specifies the nature and expected duration of the interruption, suspension or delay. If, after consulting with Ameren, it is Contractor's opinion that any of the Work is in a state such that interruption thereof would result in substantially increased costs upon resumption of the Work, Contractor, with Ameren's prior written concurrence, may complete that portion of the Work.
- b) Contractor shall resume any Work interrupted, suspended or delayed when so requested by Ameren; provided, however, that the performance schedule shall be revised by a period of time reasonably necessary to allow Contractor to overcome the effect of the interruption, suspension or delay. Contractor shall make every reasonable effort to minimize any additional resulting expense.
- c) Upon suspension of the Work, Ameren shall designate the amount and type of materials, labor and equipment that Contractor shall continue to commit to the Work. Upon receipt of such Notice of suspension, Contractor shall, unless such Notice requires otherwise: (i) immediately discontinue the Work on the date and to the extent specified in the Notice; (ii) place no further orders or subcontracts for material, services or facilities with respect to suspended Work other than to the extent required in the Notice; (iii) promptly make every reasonable effort to obtain suspension upon terms satisfactory to Purchaser of all orders, subcontracts and rental agreements to the extent they relate to performance of Work suspended; and (iv) continue to protect and preserve the Work.
- d) As full compensation for suspension of the Work, Contractor shall be reimbursed for the following costs, reasonably incurred, without duplication of any item, to the extent that such costs directly result from such suspension: (i) a standby charge to be paid to Contractor during the period of suspension which shall compensate Contractor for keeping, to the extent required in Ameren's Notice, its organization and equipment committed to the Work in a standby status; (ii) all reasonable actual costs incurred by Contractor for mobilization and demobilization of Contractor's plant, labor and equipment; (iii) all reasonable actual costs incurred by Contractor for protecting and preserving any portion of the Work completed or delivered by Contractor; and (iv) if, as a result of any such suspension of the Work, the cost of subsequently performing the Work is increased or decreased, an

adjustment to the Contract Price will be made for performing the remaining portion of the Work. Such amount shall be based on mutual agreement of Contractor and Ameren.

3.15 Safety and Accident Reports

- a) The Contractor shall perform the Work in a proper, safe and secure manner.
- b) The Contractor shall be directly responsible for its own safety program and first aid and medical service and/or facilities for its employees and Subcontractors.
- c) Contractor shall furnish all safety equipment and safeguards suitable to the occupational hazards involved and conforming, in all respects, to the safety regulations on the Project.
- d) The Contractor shall provide and maintain all passageways, guard fences, flags, lights, barricades and other facilities for protection required by Governmental Authorities or rendered reasonably necessary by local conditions. All protective measures, such as barricades, shall be removed by Contractor at the completion of the Work.
- e) All equipment or tools used by Contractor on the Premises shall be subject to inspection by Ameren.
- f) Ameren may immediately suspend Work if, in the sole opinion of Ameren, the Contractor's Work is being performed in a hazardous and dangerous manner. Work shall not thereafter proceed until Contractor agrees to conduct the Work in a safe manner. The Contractor shall be entitled to no additional compensation or extension of time for performance of the Contract in the event Ameren suspends Contractor's Work pursuant to this paragraph unless Ameren has no reasonable basis for such suspension. Failure of Ameren to inspect, observe or detect a hazardous or dangerous Work condition or procedure shall not be construed as an act of omission or negligence by Ameren. Ameren's right to suspend the Work as provided in this paragraph does not mean that Ameren is in charge of the Work of Contractor, its agents, employees, servants or Subcontractors.
- g) The Contractor shall submit a written report to Ameren within twenty-four (24) hours after any accident or near miss during performance of the Work, including but not limited to personal injury or death of any employee or any member of the public, or damage to the Work, the Premises or adjacent property. The written report should include the names and addresses of every witness to such occurrences. If a fatality occurs, the Contractor shall, in addition to providing a written report, make an immediate report by telephone to Ameren. The Contractor shall cooperate fully with Ameren in the event Ameren investigates the occurrence.
- h) In the event that the written safety procedures of the Premises or the Contract Documents include any greater restrictions or requirements such greater restrictions or requirements shall prevail over those set forth herein.

4.00 QUALITY STANDARDS APPLICABLE TO THE WORK

4.01 [intentionally omitted]

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4.02 Construction Standards

The quality of workmanship, clearances, protection of workers, etc., shall be governed by applicable Laws, ordinances and regulations of authorities having jurisdiction as well as applicable sections of standards such as those listed below. The Contractor shall be responsible for following industry standards whether they have been specifically identified by Ameren or not.

4.03 Warranties

- a) Contractor warrants that the Work performed under the Contract will be free from Defects in workmanship and materials (to the extent such materials are provided by Contractor).
- b) If any of the Work does not comply with any of the warranties contained in this Section during the first year after Ameren's issuance of the Certificate of Final Completion, or longer if provided in the Contract Documents (which may contain different warranty periods for various types of Work), Contractor shall at its own expense promptly correct by repair or replacement any non-complying Work. All costs and expenses associated with repair or replacement shall be paid by Contractor. The warranty period for any repaired or replaced Work shall be the same time period as that of the warranty period for the original Work. The decision to repair or replace shall be made with the concurrence of Ameren, and the repair or replacement shall be scheduled consistent with Ameren's operating requirements to reasonably minimize loss of production or use of the Work.
- c) If chronic failure of any of the Work occurs during the warranty period (either original or as may be extended as a result of failures during the original warranty period), Contractor shall investigate the root cause of such chronic failure and make such repairs, replacements, or adjustments necessary to correct the root cause of the chronic failure.

5.00 INTERPRETATIONS OF AND ADHERENCE TO CONTRACT REQUIREMENTS

5.01 Inspection and Testing

- Ameren may at all reasonable times inspect and test the Work at the Premises. Contractor and its Subcontractors shall, if required by Ameren, furnish satisfactory evidence of the kind and quality of the material and shall furnish shipping papers, invoices, etc., showing the origin of the materials and equipment. Contractor shall pay for all tests, unless specifically otherwise stated elsewhere in the Contract Documents and deliver to Ameren all test results and reports. Contractor shall deliver to Ameren a schedule of all on- and off-Site tests and inspections to be conducted by Contractor or its Subcontractors. Ameren shall notify Contractor within a reasonable period of time prior to any such scheduled test or inspection that it wishes to observe. Any Work covered up without affording Ameren the opportunity for inspection, shall be uncovered at Ameren's request at Contractor's expense.
- b) Ameren may reject any part of the Work found to be Defective or not in accordance with the Contract, regardless of the state of its completion or the time or place of discovery of such errors and regardless of whether Ameren has previously passed it without objection through oversight. Ameren's inspection of any of the Work shall not relieve Contractor of its obligations to furnish the Work in accordance with the Contract.
- c) Should any portion of the Work done or any materials, articles or equipment delivered be rejected by Ameren as Defective, such Work, materials, articles or equipment shall be rejected in writing and

shall be made satisfactory to Ameren by the Contractor, at no additional expense to Ameren. Any rejected materials, articles or equipment shall be removed from the premises at the Contractor's expense.

d) In the event the Contract Documents provide for Performance Guarantees for any portion of the Work, Contractor shall perform such tests as may be specified by the Contract Documents, or if no such tests are specified, such tests as Ameren may reasonably require in order to ascertain that such Performance Guarantees have been met. Such tests shall be completed as expeditiously as possible after completion of the related Work and, if the Performance Guarantees are not met on such tests, shall be retested as necessary to confirm the Performance Guarantees have been met. Unless otherwise provided in the Contract Documents, all tests and retests shall be at the expense of Contractor.

5.02 No Waiver of Breach; Ameren Review

The failure of Ameren to insist upon strict performance by the Contractor or Ameren's failure or delay in exercising any rights or remedies provided in the Contract or by Law shall not be deemed or construed as a waiver of any claims related thereto. No waiver by Ameren of a breach of any provision of the Contract shall constitute or be construed as a waiver of any other breach of such provision. Ameren's review, inspection, or approval of any Work, design documents, applications for payment or other submittals shall be solely for the purpose of determining whether the same are generally consistent with Ameren's construction program and requirements. No review, inspection, or approval by Ameren of such Work or documents shall relieve Contractor of its responsibility for the performance of its obligations under the Contract Documents or the accuracy, adequacy, fitness, suitability, or coordination of its Work. Approval by any governmental or other regulatory agency or other governing body of any Work shall not relieve Contractor of responsibility for the performance of its obligations under the Contract. Payment by Ameren pursuant to the Contract Documents shall not constitute a waiver of any of Ameren's rights under the Contract Documents or at Law, and Contractor expressly accepts the risk that Defects in its performance, if any, may not be discovered until after payment, including Final Payment, is made by Ameren. Notwithstanding the foregoing, prompt written Notice shall be given by Ameren to the Contractor if Ameren becomes aware of any fault or Defect in the Project or nonconformance with the Contract No purported oral modification, waiver or rescission of the Contract by any employee or agent of Ameren operate as a modification, waiver or rescission of any of the provisions of the Contract.

5.03 Compliance with Contract Requirements

All Work shall comply with the Specifications, drawings, design requirements, samples and other descriptive information as specified in the Contract Documents and with all performance requirements, tolerances and representations made therein.

6.00 CHANGES IN THE WORK

6.01 Changes in the Work

- a) The parties acknowledge and agree that the occurrence of the following events may require a change to the schedule and/or fee due Contractor hereunder: (A) a change to Contractor's scope of Work;
 (B) an unanticipated event that materially changes the service needs or requirements of Ameren; or
 (C) a change in Law (each, an "Adjustment Event").
- b) In the event an Adjustment Event occurs or the parties agree on a Change, Contractor shall prepare and provide to Ameren a proposed EWO and, if approved and executed by Ameren, the

Contract Price provisions shall be equitably modified as determined in one or more of the following ways:

- i) By agreed-upon lump sum price and/or;
- ii) By unit prices described in the Contract Documents, or otherwise agreed upon in writing, if applicable.
- c) No claim for additional cost involving a change in the Work shall be allowed unless the change was ordered in writing and signed by the SPOC in advance of the performance of the Work.
- d) The compensation stated in an EWO shall be the total compensation due to Contractor in connection with the Work set forth therein, including, without limitation, changes in the Project Schedule of such Work, Contractor hereby waives any claim to additional compensation in connection with any such extra work, including, without limitation, claims for lost productivity, lost efficiency, or other consequential damages or costs of any kind.
- e) All requests for payments for additions to the Contract Price shall be invoiced separately and not included with amounts applicable to the Contract Price as originally specified in the Contract. All invoices covering additions or credits to the Contract shall refer to the specific EWO or similar written authorization issued by Ameren with respect to the addition or credit.
- **6.02 Emergency Changes in the Work.** Changes in the Work agreed by Ameren to be necessary due to unforeseen site conditions, discovery of errors in Plans or Specifications requiring immediate clarification in order to avoid a serious Work stoppage, changes of a kind where the extent cannot be determined until completed, or under any circumstances whatsoever when deemed necessary by Ameren are kinds of emergency changes which may be authorized by Ameren in writing to the Contractor. The Contractor shall commence performance of the emergency change immediately upon receipt of written direction from Ameren.

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7.00 CLAIMS, DEFAULTS & DAMAGES, INSURANCE

7.01 Claims

Contractor shall make a written claim of all Disputes and matters in question between the Parties as soon as practicable but in no event later than seven (7) Days after its knowledge of the occurrence of the event giving rise to such claim.

7.02 Contractor's Breach

- Ameren may terminate the Contract at any time prior to final acceptance of the Work, without prejudice to any other remedy it has, if any of the following Events of Default occur:
 - i) Contractor fails to pay its debts as they mature, including failure to pay any Subcontractor or materialman for any undisputed amount in connection with the Work,
 - ii) Contractor fails to perform any material obligation under the Contract and: (i) if such default is of a nature that it is or may be harmful to the safety of persons or the Project, such default is not immediately commenced to be cured by Contractor or cured within two (2) working Days of Contractor's receipt of Ameren's written Notice thereof, or (ii) for

other defaults, Contractor has not commenced to cure such default within ten (10) working Days (1 working Day for critical path Work which may affect an outage) or such default is not cured within 30 working Days (five working Days for critical path Work performed which may affect an) after Contractor's receipt of written Notice thereof from Owner. In the event it is impossible or impractical for Contractor to cure an Event of Default within the time periods set forth in this Section, Contractor shall notify Ameren, in writing, of the circumstances prohibiting Contractor from curing such default and Ameren and Contractor shall mutually agree on a reasonable expedited extended cure period. The foregoing cure periods shall not be available for Events of Default which, by their nature, cannot be cured or in the event Contractor has repeated (two or more) Events of Default of the same type during the term of the Contract, notwithstanding any attempts to cure the Event of Default by Contractor.

- iii) Contractor assigns its property for the benefit of its creditors,
- iv) Contractor has made a material misrepresentation, or
- v) Contractor files a voluntary bankruptcy petition, or is made a debtor pursuant to an involuntary bankruptcy petition, and fails to assume the Contract within three working Days after the order of relief.
- b) In addition to or in lieu of terminating the Contract, Ameren may:
 - i) Correct such default and deduct the direct costs thereof actually incurred from any payment then or thereafter due Contractor, or
 - ii) Employ others to finish the Work, including employment of other Contractors or personnel,
 - ii) Protect the Work and tear down or rebuild or re-execute Defective parts of the Work,
 - iii) Supplement the Work of Contractor by engaging other contractors or persons to perform or expedite the Work and charge the cost thereof to the Contract Price.
- c) If Ameren terminates Contractor's right to continue with the Work as provided in this paragraph, Ameren shall be entitled to:
 - i) Take possession of the Work and materials and finish the Work by whatever method Ameren may consider expedient, but without undue delay or expense;
 - ii) withhold any payment to Contractor until a the Work has been completed; and
 - iii) charge Contractor the amount of direct costs actually incurred in completing the Work, including an allowance to cover the cost of corrections to Work performed by Contractor that exceeds the unpaid balance of the Contract Price
- d) In the event Ameren chooses to terminate the Contract upon the occurrence of one or more Events of Default, Ameren shall notify Contractor of its decision to terminate the Contract and, except as otherwise provide in this paragraph, Contractor shall be given a reasonable opportunity to remove its equipment from the Premises at a mutually convenient time for the parties. Contractor shall not be entitled to any further payment unless thereafter the total damages resulting from the breach are less than the amount Contractor claims is due and payable to it.

e) If Ameren chooses not to terminate the Contract, such decision shall not relieve Contractor from liability for all damages arising from such breach, included but not limited to, the cost of corrective Work performed by Ameren or others.

7.03 Termination (Without Cause)

- a) Ameren may terminate the Contract for its own convenience in whole or in part, by written Notice at any time.
- b) If Ameren terminates the Contract in accordance with paragraph (a), above, it will pay Contractor a termination charge equal to all reasonable and actual direct costs incurred by Contractor with respect to the Work terminated but not yet paid and for all demobilization and other termination related costs reasonably incurred by Contractor, together with a 10% mark-up for profit and overhead. Ameren shall be entitled to all material and equipment specifically accumulated for the Work terminated and included in termination charges, shipped at its expense to a place designated by Ameren. In no event shall the aggregate termination charges exceed the Contract Price of the Work.

7.04 Indemnity by Contractor

- a) Contractor shall indemnify and save harmless Ameren, its parent, affiliates and subsidiaries, and their respective directors, officers and employees from and against any and all claims, demands, losses, damages, attorney fees and expenses caused by or resulting from any negligent or willful act or omission of Contractor, its agents, employees, or Subcontractors, including consultants, arising out of or in connection with the Work to the fullest extent permitted by Law. This indemnity obligation shall not apply to the extent liability is caused by the negligence or wrongdoing of Ameren.
- b) The above indemnification obligation shall not be limited by virtue of worker's compensation acts, disability benefit acts, or other employee benefit acts in claims made by an employee of the Contractor or any Subcontractor.
- c) Contractor shall not be relieved from its obligations hereunder by the fact that Contractor or Subcontractor is using equipment owned, leased, or licensed by Ameren and used by Contractor at the time of injury or damage.

7.05 Insurance

- The Contractor shall deliver to Ameren certificates of insurance required by paragraph 7.05 evidencing insurance underwritten by a carrier rated at least A- VII by A.M. Best. If the insurance provided by Contractor is rated below A- VII, Contractor shall obtain approval in writing from Ameren for any exception. All policies of insurance must be reasonably satisfactory to Ameren in form and substance. All such insurance (other than Professional Liability Insurance, if required) shall be written on an occurrence basis. Such insurance shall insure and provide risk protection from all claims which may arise out of or result from Contractor's operations under the Contract, whether such Work be by Contractor or by any Subcontractor, or by anyone directly or indirectly employed by any of them, or by anyone for whose acts any of them may be liable, in the amounts and for the overages required below. Contractor shall obtain insurance of the types and in the amounts described below. The Contractor's policies of insurance shall name Ameren Corporation and its affiliates subsidiaries, as additional insureds for any liability arising out of or resulting, in any way, from the Work or operations of the Contractor on a primary and non-contributory basis and the policies shall include a severability of interest provision. Contractor shall also name as additional insureds any other parties as designated by Ameren in writing. With respect to all insurance coverage, the Contractor shall require its insurance carriers to waive all rights of subrogation against Ameren, its affiliates and subsidiaries and their respective directors, officers, agents and employees as well as against other contractors and Subcontractors. Contractor shall not commence Work under the Contract until it has obtained all insurance required hereunder and acceptable certificates of insurance evidencing such insurance have been submitted and approved by Ameren.
- b The failure to provide or replace certificates of insurance, the providing of a certificate of insurance that fails to meet any requirement of this paragraph 7.05, or the failure of Ameren to enforce any aspect of this paragraph 7.05, shall not be construed as a waiver or limitation on the part of Ameren to insist upon full compliance with paragraph 7.05, nor shall it be construed to limit or relieve the Contractor of any liability arising out of or associated with the Contractor's performance of the Contract, including the obligation of the Contractor to provide the required insurance at the required policy limits.
- c) Upon receipt of any Notice of cancellation or reduction in coverage, Contractor shall, within thirty (30) Days, procure other policies of insurance that are in accordance with terms of the Contract, and deliver evidence of coverage that these are in full force and effect, and if Contractor fails to provide

and deliver acceptable policies, or satisfactory evidence thereof, then at Ameren's option Ameren may obtain such insurance at the cost and expense of Contractor, without the need of any Notice to Contractor.

- d) The required insurance shall include the following coverage and limits in the following categories, amounts and detail:
 - 1. <u>General Liability Insurance</u>. General Liability Insurance shall be provided in the following terms and limits of coverage:
 - A. Bodily Injury and Property Damage Liability \$1,000,000 each occurrence including Premises Operations Liability; Elevator and Escalator Liability (if applicable); Independent Contractors Liability (to cover Contractor's liability arising out of the Work performed by its Subcontractors); Broad Form Property Damage Liability.
 - B. \$1,000,000 Products and Completed Operations Aggregate with the completed operations liability coverage remaining in effect for three years after the date of completion of construction.
 - C. \$1,000,000 Per Project Aggregate.
 - D. \$1,000,000 limits for Personal Injury and Advertising Injury Liability

the General Liability policy must contain the following endorsement, WHICH MUST BE STATED ON THE CERTIFICATE OF INSURANCE: "Contractual Liability Railroads" ISO form CG 24 17 10 01 (or a substitute form providing equivalent coverage).

- 2. Excess Liability Insurance. Excess Liability Insurance shall be purchased on a following form basis providing coverage excess of employer's liability, general liability and automobile liability with the limits not less than \$2,000,000 each occurrence.
- 3. <u>Automobile Liability Insurance</u>. Contractor shall maintain Automobile Liability insurance with a limit of not less than \$1,000,000 each accident. Such insurance shall cover liability arising out of any vehicle (including owned, hired, and non-owned vehicles).
- 4. Workers Compensation Insurance. Contractor shall maintain Workers Compensation and Employer's Liability Insurance for all employees at the site of the Project, as follows:

Coverage A (Workers Compensation) - Statutory

Coverage B (Employer's Liability) -\$1,000,000 each accident Broad Form All States Endorsement Voluntary Compensation Endorsement

e) In the event Contractor contracts any of the Work to Subcontractors, Contractor will require all such Subcontractors to meet the same insurance requirements of Section 7.05, unless alternate requirements are approved by Ameren in writing. Prior to the commencement of any Work or services on Ameren's premises, Contractor shall be responsible to obtain separate Certificates of Insurance from each Subcontractor. All coverages for Subcontractors shall be subject to all of the requirements stated herein.

f) Certificates of Insurance shall be sent to: Ameren, Process & Performance (MC 1105), PO Box 66149, St. Louis, Missouri 63166-6149.

7.06 Patents

- a) Contractor shall pay all royalties and license fees which may be payable on account of or for the use of any of the Work. Contractor shall at its own expense defend any claim brought against Ameren, its successors or assigns, from third parties alleging infringement directly or contributorily, rights in, to, or under patents or inventions; and Contractor will save Ameren harmless from any liability of any nature or kind (including all costs or expenses, including attorney's fees), arising out of any such infringement or alleged infringement. In addition, Contractor shall defend and save Ameren harmless against and shall pay all awards of damages assessed and all costs of suit adjudged against Ameren in such suits or proceedings.
- b) In the event any part of the Work is found to constitute infringement and/or its use is enjoined, Contractor shall, or at any time after a claim of infringement arises Contractor may, promptly either (1) secure for Ameren the perpetual right to continue the use of such part of the Work by procuring for Ameren a royalty-free license or such other permission as will enable Contractor to secure the suspension of any injunction, or (2) replace at Contractor's own expense such part of the Work with an adequate non-infringing part or modify it so that it becomes non-infringing, but only if the replacement or modification does not adversely affect Ameren's acquisition costs, operating or maintenance costs, construction or operating schedules, operation or maintenance procedures, public relations, employee relations, any license or permit affecting Ameren's property or any other matter relating to Ameren's property or its operation.

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7.07 Products of Services.

- a) The Contract grants no license or right to Contractor to use, execute, reproduce, display, perform, distribute externally, sell copies of, or prepare derivative works based upon, any Ameren materials, except that Contractor may exercise the foregoing rights of use, execution, reproduction and adaptation within its own organization solely for the purpose of performing the Work. Upon completion of such performance, all Ameren materials (excluding any adaptations thereof) shall be returned in their entirety to Ameren.
- b) All information, reports, drawings, and other materials resulting from Contractor's performance of the Work, as well as all intellectual property rights therein, shall be the property of Ameren, and Ameren shall have the right to use such materials for any purpose whatsoever, or to dispose of all or any part of such materials by any means whatsoever. Contractor shall provide to Ameren all electronic files associated with the Work prior to Final Acceptance. Ameren prefers electronic documentation. However, if electronic documentation is not available, Contractor shall provide reproducible documents. Contractor shall ensure all documentation converted from one software format to another is complete, accurate and readable.

8.00 PAYMENT AND COMPLETION

8.01 Retainage

- a) If provided in the Contract Documents, Ameren will withhold the specified percentage of the amount of each progress payment made to Contractor. Contractor may provide a bond, in form and substance reasonably satisfactory to Ameren, in lieu of retainage.
- b) Upon Substantial Acceptance of the Work, Contractor may submit a payment request for all remaining retainage withheld.
 - i) If a good faith Dispute exists as to whether one or more items have been completed pursuant to the Contract, Ameren may continue to withhold an amount not to exceed two hundred percent (200%) of the total estimated costs to complete such items, as reasonably determined by Ameren.
 - ii) Payment of any remaining retainage shall be made after Final Acceptance and proper application has been made by Contractor therefore pursuant to the terms of this Section 8.

8.02 Substantial and Final Acceptance

- a) Prior to requesting Ameren inspection for Certification of Substantial Completion, Contractor is to complete the following and list known exceptions in request:
 - i) Application for Payment, showing either one hundred (100%) percent completion for portion of Work claimed as "substantially complete", or listing incomplete items, value of incomplete items of Work, and reasons for being incomplete. Application must include supporting documentation for completion.
 - ii) Obtain and submit releases enabling Ameren's full and unrestricted use of the Work and access to services and utilities, including (where required) occupancy permits, operating certificates, and similar releases.
 - iii) Contractor shall have completed the Work except for items on the Punch List prepared by Contractor and Ameren.
- b) If Contractor fails to complete and finish all punch-list and incomplete items of Work including all documentation required under the Contract Documents within thirty (30) Days or such longer time period as may be agreed to by Ameren after issuance of the Certificate of Substantial Completion, Ameren may at its option complete the Work for Contractor's account and deduct the cost thereof from any monies due Contractor.
- c) Upon receipt of Contractor's request, Ameren shall either proceed with inspection or advise Contractor of prerequisites not fulfilled. Following initial inspection, Ameren shall either prepare Certificate of Substantial Completion, or advise Contractor of Work which must be performed prior to issuance of Certificate of Substantial Completion; and repeat inspection when requested and assured that Work has been substantially completed. Results of completed inspection shall form initial "punch-list" for Certificate of Final Acceptance.
- d) Prerequisites for Certificate of Final Completion.

- i) General. Prior to requesting Ameren's final inspection for Certificate of Final Completion and Final Payment, the Contractor must complete the following and list known exceptions (if any) in its request:
 - 1. Submit final Application for Payment.
 - 2. Submit updated final statement, accounting for Extra Work.
 - 3. Submit copy of the final Punch-List stating that each item has been completed or otherwise resolved for acceptance, endorsed and dated by Contractor.
 - 4. Submit record drawings, parts and replacement lists, diagrams, instructions, maintenance manuals, warranties, final Project photographs and similar final record information as required by the Contract Documents.
 - 5. Submit specific warranties, workmanship/maintenance bonds, final certification and similar documents.
 - 6. Clear Premises of debris, refuse, scrap material or rubbish of any sort resulting from the Work, make all surfaces involved in the Work clean and free from stains, markings or other disfigurement.
 - 7. Complete start-up and performance testing of systems.
 - 8. Complete or discontinue (or change over) and remove from the Project site temporary facilities and services, along with construction tools and facilities, mock-ups, and similar elements.
- j) Re-inspection Procedure. Upon receipt of Contractor's Notice that Work has been completed, including Punch-List items, Contractor and Ameren shall reinspect Work. Upon completion of reinspection, Ameren shall either prepare the Certificate of Final Completion or advise Contractor of any Work not completed or obligations not fulfilled as required for the Certificate of Final Completion. If necessary, this procedure shall be repeated.
- k) When the entirety has been completed in all respects in accordance with the Contract Documents, Ameren will then prepare and provide to Contractor a Notice of Final Completion. Projects bid with a segregation of costs for separate, independent portions may, at Ameren's discretion, have each of the separate portions accepted individually. The date of acceptance of the Work as stated on the Notice of Final Completion shall be the official completion date relating to the assessment of liquidated damages. Ameren may not unreasonably withhold or delay issuance of a Certificate of Final Completion.

8.03 Payments and Lien Claims

- a) No certificate given or payments made shall be considered as conclusive evidence of the performance of the Contract, either in whole or in part, nor shall any certificate or payment be construed as acceptance of any Defective part of the Work.
- b) Each payment request shall be accompanied by an Application for Payment and by such supporting documentation as Ameren may reasonably require. Such supporting documentation shall include, without limitation, the following items:
 - i) On time and material Projects, a detailed invoice listing all payments made by Contractor during the month covered by the applicable payment request which are applicable to the amount claimed. Sales taxes for the applicable items to be charged such taxes shall be itemized as separate line items within the payment application or an affidavit stating the sales taxes have been paid to the state on all items of Work furnished with each payment application.
 - ii) Fully executed and notarized affidavits and waivers of Lien as required by Attachment
- c) Ameren shall notify Contractor if Ameren rejects the payment request as soon as reasonably practical after receiving the Application for Payment from Contractor and shall state, in writing and in reasonable detail, the reasons for such rejection. If Contractor and Ameren are unable to agree on a revised amount, Ameren will approve the payment request for the amount for which Ameren is able to certify as being due Contractor. Any provision hereof to the contrary notwithstanding, Ameren shall be entitled to withhold payment in proportion to the cause for such withholding which shall be reasonably determined by Ameren if any one or more of the following conditions exist:
 - i) Contractor is in material default of any of its obligations hereunder or under any of the Contract Documents, or
 - ii) Any part of such payment is attributable to Work which is Defective or not performed in accordance with the Contract Documents; provided, however, that (1) payment shall be made for specific portions of the Work which is performed in accordance with the Contract Documents and is not Defective unless such Work must be removed or altered in order to replace Defective Work and (2) Ameren shall notify Contractor of Work which is Defective, or not performed in accordance with the Contract Documents and give Contractor a reasonable time to perform such corrective Work, or
 - iii) Incomplete or inadequate supporting documentation with the payment request, or
 - iv) A Mechanics Lien or attachment is filed and such Mechanics Lien has not been discharged.
- d) Ameren shall pay to Contractor, not later than thirty (30) Days after receipt of all information required or such other time period as may be provided in the Contract Documents, the amount shown and approved to be properly due to Contractor less any previous payments made relating to the cost of the Work, and less any amounts of "Retainage" withheld by Ameren pursuant to the Contract Documents.

- e) Contractor agrees to make prompt payment to all Subcontractors, laborers, material men and all other entities entitled to payment on account of the Work.
- f) The title to Work as such Work is constructed upon the Project and title to all materials to be incorporated in the Work by Contractor shall pass to Ameren upon such payment for same.

8.04 Audit, and Taxes

- a) Ameren may, upon reasonable Notice, audit the records of its Contractor and its Subcontractors and suppliers during regular business hours, during of this Contract and for a period of three (3) years after Final Payment is made by Ameren to Contractor under this Contract or longer, if required by Law. Such audits may be performed by an Ameren's representative or an outside representative engaged by Ameren. Compensation paid on a lump-sum basis shall not be auditable by Ameren.
- b) For purposes hereof, Contractor's "records" means any and all information, materials and data of every kind and character, whether hard copy or in electronic form, which may, in Ameren's judgment have any bearing on or pertain to Project, including, without limitation, books, subscriptions, recordings, Contracts, Purchase Orders, leases, contracts, commitments, arrangements, notes, daily diaries, written policies and procedures, time sheets, payroll registers, payroll records, cancelled payroll checks, subcontract files (e.g., including proposals of successful and unsuccessful bidders, bid recap), original estimates, estimating work sheets, correspondence, EWO files (including documentation covering negotiated settlements), back-charge logs and supporting documentation, invoices and related payment documentation, general ledgers, records detailing cash and trade discounts earned, insurance rebates and dividends, superintendent reports, drawings, receipts, vouchers and memoranda.

8.05 Delay in Completion--Liquidated Damages

If the Work is not completed within the time required, Ameren will sustain damage. It is, and will be, impractical and extremely difficult to determine the actual damage that Ameren will sustain by reason of the delay. It is therefore agreed that, if provided in the Contract Documents, the Contractor will pay to Ameren the sum of money stipulated per Day in the Contract Documents for each Day's delay in completing the Work beyond the time prescribed. If the Contractor fails to pay such liquidated damages, Ameren may deduct the amount thereof from any money due or that may become due the Contractor under the Contract. In the event any cap on Delay Liquidated Damages is reached, Contractor will continue to prosecute the Work in accordance with the Contract. Failure to so prosecute the Work shall entitle Ameren to declare an Event of Default and collect any additional actual damages incurred by it as a result.

9.00 MISCELLANEOUS CONTRACT PROVISIONS

9.01 Regulation of Visitors, Photographs and Press Releases

- a) Contractor shall not permit visitors on the Premises without the prior consent of Ameren.
- b) Contractor may not use Ameren's name or photographs taken by the Contractor on or in the vicinity of the Premises in Contractor's advertising without the prior written consent of Ameren.

c) The Contractor shall not make any verbal or written statement to any press or news media relative to the Work of the Contract, Ameren, or Ameren Engineer without obtaining prior written consent from Ameren.

9.02 Confidentiality.

- a) Contractor shall hold Ameren's Confidential Information confidential and shall not use or disclose to others during or subsequent to the performance of the Work (except as is necessary to perform the Work).
- b) Publication or advertising of information directly derived from the Project or the Work or data obtained in connection with services rendered under the Contract must first be approved in writing by Ameren. Contractor shall not release any information for publication or advertising purposes relative to the material, equipment and or services furnished under the Contract Documents without the prior written consent of Ameren. Ameren reserves the right to release all advertising or publicity concerning the Project or the Work. Except as to signs required by building department regulations or any other governmental requirements, Contractor shall not display or permit any signs or advertisements to be displayed about the Project site nor publicize in any manner its performance of the Work without the express written permission of Ameren.
- c) Contractor shall restrict the knowledge of all confidential information regarding the Work to as few as possible of its employees who are directly connected with performance of the Work and have a definite need for such knowledge. Upon request by Ameren's Representative, Contractor shall cause such persons or groups of persons involved in the Work on Contractor's behalf as Ameren may designate to sign individual secrecy agreements in a form satisfactory to Ameren.

9.03 Notices

Notices hereunder ("Notice") may be given by any means reasonably calculated to timely apprise the other party of the subject matter thereof and no Notice shall be deemed deficient if in writing, or promptly confirmed in writing, and personally delivered, by express courier, or mailed first-class, postage prepaid, or sent by electronic mail or facsimile. Notice shall be deemed given on (i) the date of delivery or refusal in the case of personal delivery, (ii) the delivery or refusal date, as specified on the return receipt, in the case of over-night courier, express courier, or registered or certified mail or (iii) when received by the person to whom it is addressed in the case of an e-mail or facsimile. All Notices to Ameren must be delivered to the SPOC to be effective. Any requirement herein that an acknowledgement, acceptance, amendment or other modification to this Contract be in writing shall be deemed to also include use of Ameren's iSupplier portal system.

9.04 No Third Party Beneficiaries

No provision of the Contract is intended or shall be construed to be for the benefit of any third party.

9.05 Attorney Fees

In the event it shall become necessary for Ameren to retain the services of an attorney for the purposes of enforcing any provisions of the Contract, Contractor shall pay the costs of the court and the reasonably attorneys' fees incurred.

9.06 Corporate Compliance Policy Disclosure Requirements

Ameren has adopted certain rules and principals contained in its Corporate Compliance Policy which, among other things:

- (1) generally prohibits Ameren directors and employees from seeking or accepting, directly or indirectly, personal gain from anyone soliciting or doing business with Ameren (other than for items of nominal or modest value);
- (2) prohibits directors and employees from knowingly accepting any gifts (even of a modest value) from third parties who are involved in negotiations to do business with Ameren or if the employee is part of a sourcing team;
- (3) requires the disclosure of a director's or employee's (or of a family member of a director or employee) investment in, or other business relationship with, third parties who do business with, or are involved in negotiations to do business with, Ameren, except those investments or other business relationships which are immaterial to both the employee and the third party; and
- (4) requires the disclosure of a familial relationship between an Ameren director, executive employee, or an employee who is part of a sourcing team and an employee or director of a third party who does business with, or is involved in negotiations to do business with, Ameren.

Contractor agrees that it will report any known attempted or actual violations of the prohibitions contained in paragraphs (1) or (2) above, at any time during the negotiation, execution or performance of any agreement or other business arrangement between the parties, to Ameren's ethics reporting service which can be reached by calling 1-866-294-5492. Contractor further agrees that it will provide Notice to Ameren of any known business or familial relationships described in paragraphs (3) or (4) above, whether currently existing or which develop during the negotiation, execution or performance of any agreement or other business arrangement between the parties, pursuant to the Notice requirements contained herein.

9.07 APPLICABLE LAW; JURISDICTION; WAIVER OF JURY TRIAL

THE CONTRACT AND ALL ITEMS IN DISPUTE SHALL BE GOVERNED BY THE LAWS OF THE STATE WHERE THE PREMISES IS LOCATED, AND SHALL BE DEEMED TO HAVE BEEN EXECUTED AND PERFORMED IN SUCH STATE. EACH OF THE PARTIES HERETO: (I) HEREBY IRREVOCABLY SUBMITS ITSELF TO THE EXCLUSIVE JURISDICTION OF (A) THE CIRCUIT COURT OF THE COUNTY WHERE THE PREMISES IS LOCATED, AND (B) THE UNITED STATES DISTRICT COURT FOR THE FEDERAL DISTRICT IN WHICH THE PREMISES IS LOCATED, AS WELL AS TO THE JURISDICTION OF ALL COURTS FROM WHICH AN APPEAL MAY BE TAKEN FROM SUCH COURTS, FOR THE PURPOSES OF ANY SUIT, ACTION OR OTHER PROCEEDING BROUGHT BY THE OTHER, OR ITS RESPECTIVE SUCCESSORS OR PERMITTED ASSIGNS, WITH RESPECT TO THE CONTRACT, AND (II) TO THE EXTENT PERMITTED BY APPLICABLE LAW, HEREBY WAIVES, AND AGREES NOT TO ASSERT, BY WAY OF MOTION, AS A DEFENSE OR OTHERWISE IN ANY SUCH SUIT, ACTION OR PROCEEDING, ANY CLAIM THAT IT IS NOT PERSONALLY SUBJECT TO THE JURISDICTION OF THE ABOVE-NAMED COURTS, THAT THE SUIT, ACTION OR PROCEEDING IS BROUGHT IN AN INCONVENIENT FORUM, OR THAT THE VENUE OF THE SUIT, ACTION OR PROCEEDING IS IMPROPER IN SUCH COURTS. EACH PARTY HEREBY EXPRESSLY WAIVES ALL RIGHTS OF ANY OTHER JURISDICTION WHICH THEY MAY NOW OR HEREAFTER HAVE BY REASON OF ITS PRESENT OR SUBSEQUENT RESIDENCE OR DOMICILE.

EACH PARTY HEREBY EXPRESSLY AND IRREVOCABLY WAIVES ANY RIGHT TO TRIAL BY JURY, TO THE EXTENT PERMITTED BY LAW, OF ANY CLAIM, DEMAND, ACTION OR CAUSE OF ACTION ARISING UNDER THE CONTRACT, WHETHER NOW EXISTING OR HEREAFTER ARISING AND WHETHER SOUNDING IN CONTRACT OR TORT OR OTHERWISE; AND EACH PARTY HEREBY AGREES AND CONSENTS THAT ANY SUCH

CLAIM, DEMAND, ACTION OR CAUSE OF ACTION SHALL BE DECIDED BY THE COURT WITHOUT A JURY AND THAT ANY PARTY MAY FILE AN ORIGINAL COUNTERPART OR COPY OF THE CONTRACT WITH ANY COURT AS WRITTEN EVIDENCE OF THE CONSENT OF THE PARTIES TO THE CONTRACT TO THE WAIVER OF THEIR RIGHT TO TRIAL BY JURY.

9.08 DISPUTE RESOLUTION

- (a) Notice of Dispute. Either Party asserting the existence of a Dispute under, arising out of, in connection with or related to the Contract shall deliver a written Notice (a "Dispute Notice") to the other Party describing the nature and substance of the Dispute. The Dispute Notice shall be delivered to the attention of the other Party's designated recipient for notices under the Contract or, in his/her unavailability, to such individual's direct supervisor.
- (b) Initial Negotiation. The Parties shall then attempt in good faith to resolve the Dispute through negotiations by their respective authorized representatives during the fifteen (15) days following delivery of the Dispute Notice; provided, that upon the written agreement of the Parties, such fifteen-day period may be extended up to an additional fifteen (15) days. If such negotiations result in an agreement in principle among such negotiators to settle the Dispute, they shall cause a written settlement agreement to be prepared and signed by the Parties, whereupon the Dispute shall be deemed settled, and not subject to further dispute resolution hereunder.
- (c) Executive Negotiation. If the Parties do not resolve and/or settle the Dispute within the negotiation period set forth in subection 9.08(b), the Parties shall then attempt in good faith to resolve the Dispute through negotiations by their respective authorized executive officers during the ten (10) days following the end of the negotiation period under subsection 9.08 (b) before pursuing any of the further means of dispute resolution hereunder. Upon the written agreement of the Parties, the negotiation period may be extended up to an additional ten (10) days. If such negotiations result in an agreement in principle among such negotiators to settle the Dispute, they shall cause a written settlement agreement to be prepared and signed by the Parties, whereupon the Dispute shall be deemed settled, and not subject to further dispute resolution.
- (d) Mediation. Subject to subsection 9.08(e), if the Parties do not resolve and/or settle the Dispute through the negotiations described in subsections 9.08 (b) and 9.08 (c), if the parties mutually agree, all remaining Disputes shall then be submitted to mediation within ten (10) days from written notice of concluded negotiations following the Commercial Mediation Rules published by the American Arbitration Association. Mediation shall be held in St. Louis, Missouri. This agreement to mediate and any other agreement or consent to mediate entered into in accordance with this agreement shall be specifically enforceable under the prevailing law of any court having jurisdiction. Notice of the demand for mediation shall be filed in writing with the other Party to this Agreement. The demand for mediation shall be made within a reasonable time.
- (e) Other Dispute Resolution Procedures. Notwithstanding the provisions set forth above in this subsection 9.08, the Parties may, by mutual agreement, submit any Dispute for resolution in any other manner that they may agree to in writing at the time such Dispute arises; provided, however, that a Party's agreement to any such other dispute resolution procedure with respect to any particular Dispute shall not act as a waiver of the right of any Party to have any other Dispute resolved in accordance with the Dispute resolution procedures set forth above in this Section 9.08.
- (f) In the event the dispute resolution procedures set forth in this Section 9.08 are unsuccessful, the provisions of Section 9.07 shall apply.

- (g) Confidential Settlement Context. All negotiations, discussions, offers, counter offers, data exchanges, proposed agreements and other communications between the Parties in connection with any of the pre-litigation negotiations or other Dispute resolution procedures contemplated by subsections 9.08 (a), (b), (c) and (d) are to be deemed as having been made, exchanged and taken in confidence subject to the confidentiality provisions hereof. Without limiting the preceding sentence, all such communications shall be deemed to be in the context of attempting to settle a disputed claim, shall not be construed, or be admitted in evidence in any related or unrelated arbitration, litigation or other adversary proceeding, as an admission or agreement as to the liability of any Party to such proceeding.
- (h) In case of any Dispute which is or may be the subject of litigation, and unless the Contract has been terminated by either Party pursuant to its terms, Contractor shall continue to diligently prosecute the Work and maintain its progress, and Ameren shall continue to make payments to Contractor for those portions of the Work completed that are not the subject of Dispute in accordance with the Contract.

9.10 SUPPLIER CERTIFICATION AND VERIFICATION

(1)In order to provide a safe and healthy working environment and to ensure that suppliers comply with the minimum mandatory requirements of its contract terms and conditions, Ameren has instituted a Supplier Certification Program.

In order to obtain certification, Contractor must meet Ameren's minimum mandatory compliance requirements by completing and submitting proof of relevant compliance information, including insurance certificates, licenses, business classifications, safety experience rates, training initiatives, quality information, environmental compliance and other business data required by Ameren, as appropriate. Ameren will use this consolidated and verified information to determine Supplier's compliance with Contract terms and conditions and Ameren's corporate Supplier Certification Program, thereby qualifying Supplier to work at any Ameren site.

(2) Ameren has contracted with a third-party verification company (Browz Group, LC) to collect, verify and manage relevant documentation.

Contractor shall register directly with Browz for the Supplier Certification Program and shall submit all compliance information, supporting documentation and fees for verification and processing no later than 10 days from the Effective Date of this Contract.. For further instructions contact Browz Buyer Services at (888) 276-9952.



Ameren Supplier Billing Instructions

Purchase Order Requirement

Effective January 1, 2009, Ameren policy requires that all invoices reference a valid Ameren Purchase Order (PO) number. The only permitted exemptions to the PO requirement policy are:

- Payments to civic organizations, government entities, and financial institutions.
- Payments for most utility services, transportation/freight, insurance, legal fees, fuel, and real estate transactions.
- Ameren Visa Card transactions do not require a PO.

Questions regarding PO requirements must be directed to the Ameren employee who requested the materials or services.

Freight Charges (Non-Parcel)

All prepaid shippers must ship <u>freight collect</u>. Ameren utilizes Logistics Planning Services (LPS) as its agent for transportation and freight payment services for all domestic and international shipments to or from all Ameren locations. Refer to your Ameren issued PO for specific instructions and/or contact your Ameren buyer. Freight invoices must 3rd party bill to:

Ameren c/o LPS PO Box 38 Amherst, NY 14226

- You must reference the Ameren Purchase Order # on the Bill of Lading
- Direct all questions regarding shipment routing to http://www.keyship.net/ameren or call 1-877-KEY-SHIP (539-7447).

Lien Waivers and Retention (Retainage) Requirement

<u>If applicable</u>, the Ameren PO issued for services and/or materials will include the lien waiver requirements in the Terms and Conditions. Failure to include the required documentation with the invoices submitted will result in a delay in payment.

If your Ameren PO requires retention to be withheld from invoice payments, this will be handled automatically by our financial system. To avoid potential short-payment of your invoices, for example duplicate retention withheld, you must clearly identify:

- 1. The Gross Amount of the invoice for work completed during the current billing period.
- 2. The Retention Amount.
- 3. The Net Amount Due.

Retainage Release Request: Do not send invoices for the payment, or release, of the retention amount previously withheld to Ameren's Accounts Payable. Companies can either submit a request for the release using iSupplier Portal (see below) or submit an invoice to their Ameren contact to initiate the retention payment request.

Ameren provides the following invoice submission methods; listed in order of preference.

Invoice Method 1: iSupplier Portal

Ameren provides a web-based tool, iSupplier Portal, for PO delivery and invoice submission. iSupplier Portal allows your company to electronically acknowledge and print POs; to create and submit electronic invoices to Ameren; and to view the status of invoices submitted and processed by Ameren Accounts Payable. To request registration for iSupplier Portal, please contact processperformance@ameren.com with "iSupplier Portal Registration Inquiry" in the subject line.

iSupplier Portal Invoicing Requirements

- You may use iSupplier Portal to submit invoices for Ameren POs which are electronically delivered via iSupplier Portal.
 - If a PO is sent to your company outside iSupplier Portal (via fax, e-mail, or US Postal Service), your firm must submit invoices via e-mail or US Postal Service (refer to other invoicing options below).
 - Invoices for items that do not require a PO may not be submitted via iSupplier Portal. Your company should not accept an Ameren order without a PO number.
 - Do not submit an invoice for charges that were paid using an Ameren VISA credit card. If your company receives a PO for materials or services paid by credit card, you must acknowledge the PO, but do not submit any documents to Ameren Accounts Payable (i.e., credit card acknowledgement, invoice, etc.).
- The supplier name on the invoice must match the supplier name on the PO.

For example, a subcontractor cannot submit an invoice directly to Ameren against a PO issued to you. If it is necessary for your company to have another company fill an Ameren PO, the electronic invoice must be submitted by your company, not the company who filled the order.

- Invoiced quantities may not exceed two decimal places.
- Unit of measurement (UOM) on the electronic invoice must match that which is shown on Ameren's PO.
- Line items, taxes, freight and miscellaneous charges may not exceed two decimal places (no fractional cents).
- Do not bill miscellaneous charges separately. Tax, freight and other miscellaneous charges must be billed on the same invoice as the applicable materials or services, unless agreed to with Ameren in writing in advance. Miscellaneous charges must include a detailed description and supporting receipts must be scanned and attached.
- Do not mail, fax or e-mail Ameren any invoice that has been or will be sent electronically.

Invoice Method 2: Contractor Cost Tracking Module (CCTM)

The CCTM application provides select service suppliers with the capability to:

- Maintain electronic rate cards detailing their negotiated labor and equipment rates. Rate cards may be created manually or compiled into a worksheet by the supplier and uploaded into CCTM. Upon approval, the rate card becomes the basis for all labor and equipment charges submitted to Ameren.
- Submit time cards electronically detailing charges for labor, equipment, material and expenses.

Time cards detail the actual hours and expenses incurred by the supplier for the work that was done. Time cards. Can be entered online or uploaded via worksheet into CCTM.

In order to enter a time card in CCTM, the supplier must have a valid CCTM PO and an approved rate card. After an Ameren employee approves the hours and expenses entered on the time card, the Accounts Payable system automatically creates an invoice and the supplier is paid on terms. CCTM suppliers can view their invoices using the iSupplier Portal application.

CCTM suppliers should not send invoices directly to Ameren Accounts Payable department, nor should they submit invoices via iSupplier Portal. The Ameren Accounts Payable department will reject any invoices for CCTM POs that are submitted using non-CCTM invoicing methods such as paper, email or iSupplier Portal.

CCTM usage is reserved for Contractors doing significant, on-going business with Ameren. For further information on CCTM, contact the Process Performance group at

process_performance@ameren.com with 'CCTM Registration Inquiry' in the subject line.
Invoice Method 3: Email the Invoice as a PDF File Attachment

Ameren accepts e-mail invoice submissions to help minimize paper handling and to process your company's invoices faster. Refer to the content and format instructions for the Paper Invoice Method on page 3, as they also apply to PDF invoices sent by e-mail. Invoices submitted via e-mail will be systematically processed and must adhere to the following guidelines:

• One invoice or credit memo per each Adobe PDF file.

PDF files containing more than one invoice will be deleted. Emails which include non-PDF file attachments will be rejected.

- Multiple PDF files can be attached to a single email.
- Supporting invoice documentation, for example, timesheets or other details, should be included as part of the PDF invoice file.

Separate attachments for the supporting documentation cannot be matched to the invoice in our system and will be deleted.

- Comments or special instructions, for example the Ameren contact, should be included in the body of the invoice and not in the email.
- Emailed invoice submission must be the first submission of the invoice. For example, the invoice has not previously been mailed, faxed, or submitted in another electronic format. Repeated instances of multiple invoice submissions will result in your emails being blocked.
- Invoices must only be e-mailed once.
- Use the appropriate e-mail address, based on whether a Purchase Order (PO) is required.
 - O Invoices Requiring a PO: Suppliers submitting invoices for goods or services that do not fall into one of the exempted categories listed on page one are required to submit invoices to Ameren with a valid PO number. PO invoices may be emailed to AccountsPayablePOInvoices@Ameren.com.
 - O Invoices Not Requiring a PO: Suppliers submitting invoices for goods or services that fall into one of the exempted categories listed on page one may invoice Ameren without a valid Ameren PO number. Non-PO invoices may be emailed to AccountsPayableNPOInvoices@Ameren.com.

Note: These are automated email boxes used by Ameren's electronic invoice management system. General email correspondence, such as past due inquiries, should not be sent to these addresses as it will not be read. General email correspondence and inquires should be sent to Accounts Payable Ameren.com.

Non-compliance

Ameren Accounts Payable will return any invoices that do not comply with the Billing Instructions. All invoices that do not follow these instructions will be returned to your company via US Postal Service regardless of the original invoice submission method.

Invoice Method 4: Paper Invoice

Follow the instructions below to ensure proper and timely payment of your invoices.

- Before any invoices are processed, Ameren requires that you submit a completed Supplier Set-Up Information form, including your valid taxpayer identification number (TIN). For businesses, this will be your company's employer identification number (EIN). For individuals, this will be your social security number (SSN). If Ameren does not have this information on file, payment will not be processed.
- To expedite invoice processing please submit all invoices on 8 1/2 x 11 white paper.

Each invoice must include the following information:

- Appropriate and complete Ameren legal entity or business name and remittance address
- Invoice number and invoice date
- Payment terms and due date (must agree to Ameren PO)
- Unless otherwise exempted (see page 1), a valid PO number, PO line item number(s), and PO release number
- Description, price, and quantity of materials and/or services provided. Quantities billed cannot exceed the amount ordered per the Ameren PO. Inclusion of the Ameren stock number, if applicable, will help Ameren process your invoice faster. Itemized charges may include:
 - i. labor
 - ii. materials
 - iii. taxes
 - iv. freight
- The UOM per your invoice should be consistent with Ameren's PO, or provide a mathematical conversion formula on the invoice (i.e., gallons per pound).
- Total amount due
- Ameren contact name
- Freight/Transportation carrier tracking information, as applicable

Other Rules

- Supplies or services must be delivered to the "Ship To" address and acknowledged by the receivers of the goods or services before the invoice will be paid.
- Each invoice must include charges for no more than one PO or PO Release.
- Credits or credit memos applied against a PO must be invoiced separately from PO charges.
- <u>Do not</u> mail paper copies of any invoice that was submitted electronically (i.e. iSupplier Portal, CCTM, or PDF).
- Invoices already paid via credit card should not be mailed to Accounts Payable.
- Accounts Payable Policy is to process invoices only.
 Documents such as supplier statements, price quotes, or pro forma invoices will not be accepted as a basis for processing payments.
- Do not use a marker to highlight items on an invoice. This causes the highlighted area to be illegible when viewed through Ameren's imaging system.
- Accounts Payable is not responsible for invoices not submitted in the manner prescribed herein.

Submitting Your Invoice to Ameren

To expedite invoice processing, Ameren utilizes a centralized location for processing invoices. Sending invoices to locations other than Accounts Payable will delay payment. Unless you have prior approval from Ameren, invoices should be sent directly to Accounts Payable. The Accounts Payable mailing address is:

Ameren Accounts Payable (Mail

Code 230) P. O. Box 66892 St. Louis, MO 63166-6892 What Happens If You Do Not Comply With These Requirements? Ameren wants to pay your firm in accordance with agreed upon terms. We greatly appreciate your cooperation in adhering to these requirements as it will help us to process your invoice faster. Any

Ameren wants to pay your firm in accordance with agreed upon terms. We greatly appreciate your cooperation in adhering to these requirements as it will help us to process your invoice faster. Any exception to these rules may delay payment of your invoice and will require additional communication and coordination between our companies, causing unnecessary delays in the payment process. If we are unable to process your invoice for any reason, we will return it to you via US Postal Service regardless of the method you used to submit the invoice, along with a note explaining the reason. You should make all necessary corrections to the invoice and return it to Ameren for processing.

Preferred Method Of Payment

Ameren prefers to pay suppliers electronically via the ACH (Automated Clearing House) payment system. Please complete the Direct Deposit Registration Form and e-mail it to <u>AccountsPayable@Ameren.com</u> or fax it to 314.554.3443. Otherwise, your company's invoice will be paid by check and mailed via US Postal Service. For security reasons, Ameren does not allow a check to be picked up by an individual.

We're Here To Help You

For general Accounts Payable questions, contact the Ameren Accounts Payable Information Center at <u>accountspayable@ameren.com</u> or call the Supplier Hotline at 314.554.4468. For specific purchase order questions, contact your Ameren buyer or Ameren field representative directly.

SUPPLEMENTAL GENERAL CONDITIONS OF CONTRACT

TRANSMISSION CONSTRUCTION

1.0 General

- 1.1 These Supplemental General Conditions of Contract ("SGCCs") clarify and supplement the Ameren General Conditions of Contract ("GCCs") and other Contract Documents. Specific duties set forth herein do not constitute an exclusive list of requirements, but complement the GCCs Unless otherwise defined herein, capitalized terms have the meaning assigned in the GCCs.
- 2.0 Definitions. As used in these SGCCs, the following terms shall have the meanings described below:
- 2.1 Accident/Incident An incident is defined as a near miss, vehicle accident, or property damage to Company-owned/leased equipment or facilities. Refer to OHSA 29CFR1904 for definitions of reportable incidents and injuries.
- 2.2 **Asbestos Containing Material (ACM)** Material that contains asbestos that may become airborne and must be handled according to Ameren procedures and Federal and State regulations.
- 2.3 Competent Person An individual, who is trained and certified in applicable standards, is capable of identifying Workplace hazards relating to specific operations, performs inspections of industrial and construction jobsite equipment, and has authority to take corrective actions when needed.
- 2.4 Computer Based Training (CBT) Computer Based Training is used for safety and job work rules orientation of new employees before they are permitted unescorted access to Company property.
- 2.5 Confined Space An enclosed area that may require a permit, specialized training, and/or special equipment to enter because of atmospheric or physical entrapment hazards. See OSHA 29CFR1910.146 and Ameren Management Instruction ES-REG-209.
- 2.6 **Hot Work** Work that will generate sparks, such as; cutting, grinding, welding, and brazing. A permit may be required for hot work that is hazardous due to location or other factors.
- 2.7 **Environmental, Safety and Health (ES&H)** Ameren's ES&H Department sets standards for environmental, safety and health issues and monitors compliance with Ameren policies, as well as with Federal, State and Local regulations.
- 2.8 **Job Working Rules** Rules of conduct for Contractors working at Ameren facilities that include various types of prohibited behavior: off –limit areas, driving and parking instructions, and safety information that may be specific for the plant, such as fire alarms and evacuation procedures.

3.0 Labor Conditions

- 3.1 Contractor's Work is to be performed under the National Maintenance Agreement (NMA), or similar labor agreements unless Ameren consents otherwise. Contractor must furnish a copy of the Site extension approval(s) granted by the International Union(s). Site extension requests for the NMA may be filed online at www.nmapc.org.
- 3.2 There shall be no limit on the work output of any employee, and no restrictions on what tools or equipment may safely be used to increase productivity. There shall be no minimum, other than what may be required by safety regulations, on the number of employees assigned to any crew or to any service.
- 3.3 Featherbedding practices of any kind will not be tolerated.

- 3.4 Actual work hours will be agreed upon during pre-job conferences; lunch breaks will be an unpaid one-half hour. No additional organized breaks are allowed. There shall be no non-working stewards. If a steward is included in the labor force, the steward must be a qualified worker and shall exercise no supervisory functions.
- 3.5 Contractors must conform to Construction Users Round Table (CURT) Tripartite Initiative report, dated June 2004, with respect to absenteeism, excessive overtime and Work disruptions.
- 3.6 Contractor employees must be rested and fit for duty when they report to the Company's Premises. Contractor employees must not work in excess of 16 consecutive hours without prior approval of Contractor's Superintendent and the Company and then only when additional steps have been taken to ensure worker safety
- 3.7 Contractor shall provide break/lunch facilities at a location in close proximity to the majority of the.
- 3.8 There shall be no slowdowns, illegal strikes, or unauthorized work stoppages of any kind. Contractor understands that its work must be completed in a timely fashion not withstanding the presence of a labor strike or any pickets at or around the job site.
- 3.9 Contractor may obtain workers from any source so long as such workers meet Contractor's qualifications.
- 3.10 In the event that the Company's employees, another contractor's or subcontractor's employees or Contractor's employees engage in a strike or established pickets, contractor is expected to continue to meet its obligations under the terms of the contract and/or obligations with the Company. Any such picketing activity is not an excuse for non-performance or delay in completing the Project.
- 4.0 Contractor Management Requirements
- 4.1 Prior to mobilization, Contractor shall submit an organizational chart and resumes for the entire management team that will utilize, on or off-Premises, for the Project.
- 4.2 Contractor will be responsible to comply with the training and implementation requirements of the FERC Code of Conduct procedure, GEN-ADM-5476/
- 5.0 Environmental, Safety and Health
- 5.1 Contractor shall ensure worker and public safety during the course of this Project.
 - 5.1.1 Contractors must comply with all applicable Company, Federal, State, and Local health, safety and environmental regulations including, but not limited to, those concerning:
 - Public and worker health and safety
 - Public's "Right to Know"
 - Fire safety
 - Air and water quality
 - Flammable materials storage
 - Spill control, response and cleanup
 - Hazardous and non-hazardous waste handling, identification and disposal

NOTE: Ameren policies and procedures are on available Ameren.com.

- 5.1.2 Contractor shall implement a substance abuse testing policy no less stringent than the policy set forth on Attachment G..
- 5.2 With is bid, Contractors shall submit:
 - Attachment A, <u>Contractor Environmental</u>, <u>Safety & Health Data Form</u>, (unless specifically exempted from this provision by the Company)
 - Their company's ES&H program
 - A Project-specific ES&H Action Plan, including an Emergency Response Action Plan that is in accordance with Ameren, Federal, State & Local requirements

- 5.3 At mobilization, Contractor shall:
 - Appoint a competent onsite ES&H representative who will coordinate Contractor ES&H activities, hazardous material and waste handling. The ES&H representative will work with Ameren personnel on ES&H related issues, and implement ES&H rules necessary for the safe execution of the Project.
 - Supply the frequencies of all walkie-talkie 2-way radios they intend to use to the SPOC. Frequencies must be listed to four (4) decimal places. (Attachment F, <u>Authorization for Two-way Radios</u>, must be submitted to the designated SPOC).
- 5.4 Contractor shall be responsible for tool inspection/maintenance in accordance with the requirements of the OSHA standard and the manufacturer's recommendations/instructions.

5.5 Handling of Materials and Waste

- 5.5.1 If the Project involves Contractor's use of chemicals or products that are regulated under Section 112 (r) of the Clean Air Act, Sections 302 & 304 of the Emergency Planning & Community Right to Know Act, OSHA 29CFR1926.65 or 29CFR1910.120, then Contractor has the choice of adopting the plant's Health and Safety Plan (HSP) or developing a similar plan that is at least as protective and compliant.
 - 5.5.1.1 Contractor Site personnel shall read and acknowledge by signature they will comply with the applicable HSP.
 - 5.5.1.2 Certification of individual training is required prior to hazardous waste operations as defined by OSHA 29CFR1910.120 or equivalent applicable state regulations.
- 5.5.2 Contractor shall minimize the amount of waste generated and shall discuss waste handling, manifest preparation, record keeping, and disposal with the SPOC in advance of these activities. Contractor should coordinate waste handling Vendors/Subcontractors with Company personnel.

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- 5.5.3 If Contractor is considered the sole generator of a waste, then, such a waste is the sole responsibility of Contractor and Ameren assumes no responsibility for Contractor's compliance with applicable regulations.
- 5.5.4 Contractor shall notify the SPOC before using a chemical/material that could create noxious or toxic fumes
- 5.5.5 Contractor shall make available upon request, copies of the Material Safety Data Sheets (MSDS) for materials brought onto the jobsite to appropriate personnel employed on or visiting the worksite.
 - 5.5.5.1 Contractor shall provide written notification to the SPOC of any material requiring an MSDS that is brought onsite by the Contractor in quantities in excess of that material's Superfund Amendment's and Reauthorization Act (SARA) Threshold Planning Quantity. Such notification is required for SARA Tier II reporting purposes.
- 5.5.6 Contractor shall ensure that hazardous chemicals or materials are properly contained and labeled, and that employees are adequately trained to recognize, handle, and use hazardous chemicals safely.
 - 5.5.6.1 Small quantities (i.e. <10 gal.) of hazardous liquids, such as gasoline, diesel fuels or solvents, brought onto the site shall be stored in properly labeled safety containers with flame arrestors and self-closing lids. All container labels must include contents information and display hazard symbols clearly on the exterior of each container in accordance with NFPA 704M, OSHA 29CFR1910.1200 or other applicable standard.</p>

5.6 ES&H Training Requirements

5.6.1 Documentation of OSHA training for Contractor craft workers and supervisors must be maintained on-Site and made available to Ameren. Effective September 1, 2006 the minimum training standard is OSHA 10 for Contractor craft workers and OSHA 30 for Contractor supervisors.

- 5.6.2 Contractor will maintain documentation of ES&H training on the Project and must provide requested documentation of training to the Company. Contractor shall retain verification of satisfactory training for as long as required by law or six months after completion of the contract, whichever is greater.
- 5.6.3 Job safety awareness meetings will be held with Company and applicable contractors on a frequency determined by the Company. The meetings will address industrial safety issues from Contractor job safety reviews.

5.7 Environmental, Safety & Health Surveys

- 5.7.1 The SPOC and Ameren ES&H personnel will conduct periodic ES&H surveys of the Project. Any discrepancies will be reported to Contractor management for immediate correction.
- 5.7.2 These ES&H surveys do not relieve contractors of their responsibility to self-inspect their Work and equipment and to conduct their Work in a safe and environmentally compliant manner.

5.8 Reporting and Investigating Incidents/Accidents

- 5.8.1 Contractor shall make an immediate report by telephone to the SPOC of any accident involving injury, death, fire, spill, mishandling of oil, regulated/hazardous waste spill, or any other emergency.
- 5.8.2 In the event of an emergency, Company has authorized the SPOC to act as emergency coordinator. Contractor shall proceed with appropriate emergency response measures as directed by the SPOC, and take full responsibility for the clean-up and disposal of any wastes or materials.
- 5.8.3 Contractor shall submit a <u>Monthly Contractor Accident Statistics Report</u> (see Attachment B) by the second day of each month for the preceding month's activities.
- 5.8.4 Contractor shall investigate all types of events listed herein, whether they result in an injury or not, and provide the results of said investigation to Company. An accident investigation does not assign blame; it does determine how to eliminate similar accidents in the future. Company reserves the right to monitor Contractor's investigation and Contractor shall provide the SPOC with all necessary information to all required Company personnel to perform this monitoring function.
- 5.8.5 Ameren reserves the right to investigate any accidents that occur on its property or in completing the Work being performed by a Contractor's employees whether they result in an injury or not. An accident investigation does not assign blame; it does determine how to eliminate similar accidents in the future. Ameren further will conduct investigations for accidental environmental releases or spills, etc.
- 5.8.6 A signed <u>Witness Statement</u> must be completed by each witness providing factual observations. (see Attachment A, Contract Work Limitations Attachment B, <u>Witness Statement</u>)
- 5.8.7 An Incident/Accident Investigation Report, (see Attachment A, Contract Work Limitations Attachment A, Incident/Accident Investigation Report) must be submitted to the SPOC within 24 hours to document the investigation. The accident facts, causes, and corrective action should be documented and communicated to employees through ES&H meetings.

5.9 <u>Inspections, and Permits</u>

- 5.9.1 A third-party-certified Competent Person shall make a thorough annual inspection of cranes and powered hoisting equipment. Cranes shall be inspected and have deficiencies corrected prior to being put into service. Documentation of crane inspections must be maintained on-Site by Contractor.
 - 5.9.1.1 Crane hooks should be inspected by a Competent Person prior to use. Rigging should be inspected by a Competent Person before each shift. Defective components shall be removed from service immediately. Anti-Two-Block devices, that automatically disengage crane hoist/boom functions when the hook or block approaches the jib or boom tip, shall be used on all cranes.
 - 5.9.1.2 All outriggers on mobile cranes must be fully extended and fully deployed when the crane is used to lift or support a load.

- 5.9.2 Operators of forklifts, boom lifts, buses, and other mobile equipment must be trained and certified on the operation of the specific equipment.
- 5.9.3 Operators of cranes must be trained and certified by the National Commission for the Certification of Crane Operators (CCO). Crane operators must be qualified on each crane type and rating they operate.

5.10 ES&H Adherence Policy

- 5.10.1 Action Level One The SPOC will issue a written Notice of ES&H Non-Compliance (see Attachment C) and a Warning Letter for ES&H Non-Compliance (see Attachment D) to the Contractor's management and Site ES&H representative if a Contractor fails to comply with an applicable ES&H standard.
- 5.10.2 Action Level Two The SPOC will issue a Written Notice of Temporary Job Suspension (see Attachment E) to Contractor if ES&H non-compliance is not corrected by Action Level One, or if Contractor repeatedly fails to comply with applicable ES&H regulations. The appropriate Ameren Manager and Contractor's Division Manager, or equivalent, must meet and agree on corrective actions acceptable to the Company before Work may resume. Actions may include, but are not limited to:
 - Removal of certain Contractor personnel from the Project
 - Alteration of Contractor's job procedures
 - Having Ameren implement corrective action and back charge Contractor
 - 5.10.2.1 Contractor shall not resume Work until Ameren accepts the proposed corrective actions. Ameren will retain meeting minutes documenting the <u>agreement.</u>
- 5.10.3 Action Level Three Ameren Management may terminate the contract for cause, if Action Level One and Action Level Two do not result in Contractor's ES&H compliance.

ATTACHMENT A

CONTRACTOR ENVIRONMENTAL, SAFETY & HEALTH (ES&H) DATA FORM

ES&H PERFORMANCE HISTORY

1.

	Year EMR *WI	H/CL			
					
	*If self-insured, provide employee Work House	rs per Claim. (WH/CL)			
THE	E FOLLOWING DATA FOR LAST THREE (3) YEARS FROM CON	TRACTOR'S C	SHA LOG	
	· ·	Year			
					-
B-1.	No. of employee hours worked				
B-2.	No. of fatalities (Column G of OSHA 300 log Attach explanation for any fatalities.	;).			
B-3.	No. of cases involving days away from work (Column H of the OSHA 300 Log)				
B-4.	No. of job transfer or restricted duty cases_(Co OSHA 300 log)	olumn J of			
B-5.	No. of cases defined as other recordable cases of OSHA 300 Log)	(Column J			
B-6.	Total no. of cases for B-2, 3, 4, and 5 above.				
B-7.	"OSHA Incidence Rate" –Formula: <u>Total Recordable Cases x 200,000</u> Total no. of work hours.				
B-8.	No. of citations by OSHA and/or other ES& agencies in the past three years (provide detail				_

2.	Do you have a written hazard communication program?	Yes	No
	Do you have a written ES&H program?		
	Do you have a written company substance abuse program?		
_	Do you have a written respiratory protection program?	Ш	Ш
3.	Do you have one or more full time:		_
	A. Physicians		ᆜ
	B. ES&H Professionals		
	C. Industrial Hygienists		Ш
4.	Do you have a new employee orientation program?		
	Does it include the following?		
	A. Company ES&H Policy		
	B. Company ES&H Rules		
	C. ES&H Meeting Attendance		
	D. Company ES&H Record		
	E. Hazard Recognition		
	F. Hazard Reporting		
	G. Injury Reporting		
	H. Personnel Protective Equipment		
	I. Respiratory Protection		
	J. Fire Protection		
	K. Housekeeping		
	L. Toxic Substances		
	M. Electrical Safety		
	N. Safety Harnesses and Lifelines		
	O. First Aid		
	P. Driving Safety		
	Q. Lockout/Tagout		
	R. Ladder/Stairway Safety		
	S. Hearing Conservation		
	T. Trenching and Excavation		
5.	Do you have a training program for newly hired or promoted first line supervisors?		
	Does it include the following?		
	A. Hazard Recognition		
	B. Safe Work Practices		
	C. ES&H Supervision		
	D. New Employee Orientation		
	E. Tailgate/Toolbox ES&H Meetings		
	F. First Aid Procedures		
	G. Emergency Procedures		
	H. Incident Reporting		
	I Accident Investigation		

6.	How often do you hold periodic	ES&H meetings for	your foremen/	supervisors?		
	A. Weekly	C. Bi-Weekly				
	B. Monthly	D. Less Often, A	s Needed			
7.	Do you conduct field ES&H insp	pection of work in pr	rogress?	3	Yes	No 🗌
	A. If yes, who conducts the inspe	ection?				
	B. How often?					
					Yes	No
8.	Are accident reports circulated to	o your management?)			
9.	Is ES&H a (documented) weigh	ted factor in evaluat	ing the perform	ance of:		
	A. Foreman					
	B. Supervisor					
	C. Management					
10.	Does your firm hold "Toolbox F	ES&H Meetings?				П
	How often?	O			_	_
	A. Weekly	П				
	•					
	B. Bi-Weekly					
	C. Monthly					
	D. Less Often, As Needed					
11.	List the most senior staff ES&H	professional at your	company.			
	Name:		Title:			Phone:
12.	List the person to contact to disc	cuss the details of the	e information c	ontained in th	is document.	
	Name:		Title:			Phone:

ATTACHMENT B

26 1	D : N	
Month:	Project Name:	
Contractor Name:		
Work hours for the mont	: Work	nours year-to-date:
Number of First Aid only	cases:	
Number of injuries & illne	sses that received treatment by a 1	ohysician:
Total number of OSHA F	ecordable injuries & illnesses for t	he month:
Number of restricted duty	cases: Numb	er of lost time (days away) cases:
Number of motor vehicle	Numb	er of miles driven:
accidents:		er of fines driven
Please list injuries and illn	sses, which have occurred to emp	loyees of your company on the above Project this month. Include n of injured/ill employee (i.e., returned to work, still off work, awaiting
Please list injuries and illn accident cause, injury/illn	sses, which have occurred to emp	loyees of your company on the above Project this month. Include
Please list injuries and illn accident cause, injury/illn	sses, which have occurred to emp	loyees of your company on the above Project this month. Include
Please list injuries and illn accident cause, injury/illn	sses, which have occurred to emp	loyees of your company on the above Project this month. Include
Please list injuries and illn accident cause, injury/illn	sses, which have occurred to emp	loyees of your company on the above Project this month. Include
Please list injuries and illn accident cause, injury/illn	sses, which have occurred to emp	loyees of your company on the above Project this month. Include
Please list injuries and illn accident cause, injury/illn	sses, which have occurred to emp	loyees of your company on the above Project this month. Include
Please list injuries and illn accident cause, injury/illn	sses, which have occurred to emp	loyees of your company on the above Project this month. Include n of injured/ill employee (i.e., returned to work, still off work, awaiting

(09/10 Version)

work activities.

ATTACHMENT C

NOTICE OF ENVIRONMENTAL, SAFETY & HEALTH (ES&H) NON-COMPLIANCE To: Site Representative for: Your company has been found to be in non-compliance with one or more Federal, State, or Ameren ES&H requirements as specified below. This ES&H con-compliance must be corrected immediately for your company to meet the requirements of your contract. Item of non-compliance Item # Applicable ES&H Requirement Applicable ES&H Requirement Applicable ES&H Requirement Issued By: Signature of SPOC Received By: Signature of Representative Receiving Notice Date Superintendent-Construction Management Services cc: Safety Supervisor Plant Outage Manager

ATTACHMENT D

WARNING LETTER OF ENVIRONMENTAL, SAFETY & HEALTH (ES&H) NON-COMPLIANCE

Project Name and Number	
Your firm,, has been for	und to be in violation of your contract by
non-compliance with applicable Federal, State, or Ameren ES	&H requirements.
On, in accordance with the Ameren	ES&H Adherence Policy, your
representative,, , wa	s given a Notice of ES&H Non-Compliance (copy attached).
This notice specifies areas where your company does not com-	ply with Federal, State, or Ameren ES&H
requirements, and requests that these items be corrected imme	ediately. If they are not corrected, more
stringent measures will be taken in accordance with Ameren E	S&H Adherence Policy.
Thank you for your prompt attention to this matter.	
Signature of SPOC	Date
cc: Superintendent-Construction Management Services Safety Supervisor Plant Outage Manager	

ATTACHMENT E

cc: Superintendent-Construction Management Services Safety Supervisor Plant Outage Manager

ATTACHMENT F

AUTHORIZATION FOR CONTRACTOR TWO-WAY RADIOS (SAMPLE)

All frequencies must **NOT** fall between the two ranges of frequencies:

463.5500 to 463.5700 MHz (Plant-Specific)

464.5500 to 464.5700 (Plant-Specific)

• When reporting the frequency, you must include digits four places past the decimal point. (e.g.: 123.4567)

If a repeater is being used, you must report both transmit and receive frequencies.

- If no repeater is being used, receive and transmit frequencies will be the same.
- Must submit all frequencies to be used.

CONTRACTOR

CONTRACTOR REPRESENTATIVE		Print Name	
RADIO MANUFACTURER OR MAKE			
HOW MANY CHANNELS BEING U	USED?		
FCC License "Call Sign" e.g. WPUP269	9		
CHANNEL	RECEIVE FR	EQ (MHz)	TRANSMIT FREQ (MHz)
1			
2			
3			
4			
5			
6			
7			
8			
SPOC:	Con	tractor Rep:	
Date:			

ATTACHMENT G

CONTRACTOR SUBSTANCE ABUSE POLICY

1.0 Introduction

1.1 In an effort to provide a drug-and-alcohol-free workplace, Ameren and its operating subsidiaries establishes the following policy for Contractors.

2.0 Scope

- 2.1 Working on an Ameren work site and being under the influence of drugs or alcohol creates safety risks for all personnel who work on our work sites.
- 2.2 The term "Contractors" refers to all non-Ameren personnel hired to perform a service for Ameren who will be on Ameren property and includes all Contractors, their subcontractors and all other non-Ameren persons who are employed by them with active badges for site access. Visitors and delivery drivers are excluded from these requirements.

3.0 Implementation

- 3.1 Contractors shall establish and maintain a confidential drug and alcohol testing program for each of their employees assigned to work on Ameren property, which shall meet the following minimum requirements.
 - 3.1.1 All employees of a Contractor who are assigned to an Ameren site shall be subject to Contractor's drug and alcohol testing program. Contractor's program shall prohibit employees from buying, selling, consuming, or distributing alcohol or drugs while working for Ameren or while on Ameren property. The program shall also prohibit Contractor employees from reporting to an Ameren site or being on Ameren property while under the influence of alcohol or drugs.
 - 3.1.1.1 Contractor's program shall provide for drug testing for the substances listed in Section 3.1.4 of this Policy under the following circumstances: pre-assignment testing; random testing; testing for reasonable cause based on observations by an Ameren or Contractor supervisor; and testing after any accident or incident that involves injury to personnel or damage to property.
 - 3.1.2 Contractor shall require pre-assignment drug testing, or will assure that each person who will be assigned to an Ameren location has been tested for drug use within the 120-day period immediately prior to the start of work on Ameren premises. Contractor shall provide written documentation from the testing authority to the Ameren Construction Supervisor or the Plant Station Point of Contact that its employees are either compliant or non-compliant with this Policy. Contractor employees, who are not in compliance with this Policy, will be subject to Section 3.1.6 of this Policy. To maintain confidentiality, Ameren will not accept actual test results. A previous random drug test or a drug test conducted for another reason is sufficient to satisfy the pre-assignment testing requirement if the test was conducted during the 120-day period prior to working on Ameren premises and otherwise satisfies the drug testing requirement in Section 3.1.4 of this Policy. Contractor employees who have taken a pre-assignment drug test will be allowed to work pending the test results for no more than 5 working days. Testing may be waived pending Ameren management approval for contractor employees who are working less than 40 hours annually providing site labor.
 - 3.1.2.1 In lieu of pre-assignment testing, Contractor may accept a certificate signed by a Department of Health and Human Services (DHHS), Substance Abuse Mental Health Service Administration (SAMHSA) DHHS/SAMHSA-certified drug testing laboratory indicating the results of drug test performed within the 120-day period immediately prior to working on Ameren premises. Identification cards, which indicate the employee's name and date of his/her most recent drug test, may also be accepted if they are traceable to the certification from the DHHS/SAMHSA -certified drug-testing laboratory, which performed the test, and are attested to by Contractor management.
 - 3.1.3 Contractor shall provide site specific random substance abuse testing for each of its employees and its subcontractors' employees assigned to be on Ameren premises. The random testing shall be conducted at a frequency such that a minimum of one test is performed for hours up to the first 2,000 man-hours

worked and one additional test for every 2,000 man-hours worked by Contractor, or any of its subcontractors, on Ameren premises. Contractor shall establish a random selection process to ensure that each individual will have an equal chance of being selected and tested each time a random test is scheduled. The random testing pool will include all crafts under the direction of the prime Contractor, including subcontractors. Employees selected for the random testing shall not be informed of the test until immediately prior to the test and shall be accompanied to the testing site by a responsible Contractor supervisor as soon as practical on the same day selected. Contractor shall notify the Construction Supervisor or the Plant Station Point of Contact of the random selection results and an Ameren representative may exercise the option of being present during the selection process.

3.1.4 Samples used to comply with this policy shall be analyzed by a NIDA-certified laboratory or quick cup and/or instant cup method. The tests must screen at a minimum for the following substances and levels, however some labor consortium testing programs will be accepted for initial site access only pending Ameren approval. A confirmed positive drug testing will be considered a violation of this policy

Substance	Initial Level	Confirmed Level
Amphetamines	1000 ng/ml	500 ng/ml
Barbiturates	200 ng/ml	200 ng/ml
Benzodiazepines	300 ng/ml	200 ng/ml
Cocaine	300 ng/ml	150 ng/ml
Marijuana	50 ng/ml	15 ng/ml
Methadone	300 ng/ml	200 ng/ml
Opiates	2000 ng/ml	2000 ng/ml
Oxycodone	100 ng/ml	100 ng/ml
Propoxyphene	300 ng/ml	200 ng/ml
Methamphetamine	1000mg/dl	500mg/dl

- 3.1.5 Contractor's program shall provide for alcohol testing under the following circumstances: random testing; testing for reasonable cause based on observations by an Ameren or Contractor supervisor; and testing after any accident or incident that involves injury to personnel or damage to property. Preassignment alcohol testing shall not be required. A test result of .04% blood alcohol concentration or greater as indicated by a breathalyzer or similar test will be considered a violation of this Policy.
- 3.1.6 Individuals who fail a test, refuse to test or otherwise violate this Policy will be denied site access from all Ameren premises. In addition, Contractor shall notify the applicable consortium to remove the employee from the active pool. A Contractor employee who is determined to have violated this policy will be denied site access for a period of one year. After a period of one year, if the individual can demonstrate successful completion of a required treatment program based on Contractor's consortium policy, the individual will be given a last chance opportunity. However, site access will not be permitted unless the individual has a satisfactory return-to-duty drug test. If at any time an individual is found to have a second violation of this Policy, the individual will be permanently denied site access to all Ameren premises. Contractor shall document all non-compliance on a reduction force report and forward the report to the Construction Supervisor or the Plant Station Point of Contact. The reduction force report shall include the person's name, craft and reason stated "Non-Compliance with Ameren Substance Abuse Policy".
- 3.1.7 Contractors shall require all of their subcontractors to comply with all provisions of this Substance Abuse Policy. Failure of Contractor or any of its subcontractors to comply with the requirements of this Policy shall be grounds for removal from consideration for any future work and/or termination of the current contract at the discretion of Ameren. Ameren reserves the right to audit Contractor's drug and alcohol testing program at any time to verify compliance with this policy.
- 3.1.8 Ameren will not be responsible for any expenses or loss of wages due to non-compliance with this Policy.

- 3.1.9 Ameren retains the right to change or modify this Policy at any time. Ameren also retains the right to waive this Policy for any Contractor that is badged as a visitor.
- 3.1.10 Any documents relating to this Policy will be maintained in confidence and will not be released without written authorization unless otherwise required by law.

Attachment H Department of Homeland Security Disclosure Form

Please list all chemicals to be brought on Ameren property that have a listed DHS component and the maximum quantity expected to be brought on-site at one time.

Product Name	DHS Appendix A Identified Chemical	Maximum Quantity



AMEREN CORPORATION AND SUBSIDIARIES COLLECTION OF LIEN WAIVERS

It is Ameren's policy to collect waivers of lien from all Contractors (and certain First- and Second-Tier Subcontractors*) before payment of any Contractor invoice on projects where: (1) the Contractor provides equipment, materials or labor, and (2) the equipment, materials or labor improve the value of an Ameren power generating station or substation or other real property^{†**}; and (3) the purchase order (P.O.) issued by Ameren for the work to be performed by the Contractor is for an amount greater than or equal to \$50,000.

If waivers of lien are required pursuant to the above requirements, each Contractor <u>must</u> submit the documentation outlined in this document with each Contractor invoice equal to or greater than \$25,000 in order for the invoice to be considered for payment.

1. <u>Initial Invoice Requiring Waivers of Lien</u>

Together with the first invoice submitted by a Contractor which meets the three requirements above, the Contractor shall submit the following for all work performed by Contractor through the last date of the invoice billing period:

- A. Contractor's Affidavit for Progress Payment Exhibit A; and
- B. Contractor's Partial Waiver of Lien Exhibit B.

2. Subsequent Invoices

For each subsequent Contractor invoice greater than or equal to \$25,000, the Contractor shall submit the following for work performed through the last date of the invoice billing period:

- A. Contractor's Affidavit for Progress Payment Exhibit A;
- B. Contractor's Partial Waiver of Lien Exhibit B;
- C. Subcontractor's Partial Waiver of Lien Exhibit C, which Contractor shall submit for each of its direct subcontractors ("First-Tier Subcontractors") identified in the Contractor's Affidavit for Progress Payment that Contractor included with its immediately <u>prior</u> invoice, for whom the "Contract Price" is equal to or greater than \$250,000 and the "Amount Due Through Last Date" is equal to or greater than \$100,000; and
- D. Subcontractor's Partial Waiver of Lien Exhibit C, from each First-Tier Subcontractor's direct subcontractor ("Second-Tier Subcontractor") identified on the most recent previous First-Tier Subcontractor's Partial Waiver of Lien for whom the "Contract Price" is equal to or greater than \$250,000 and "Amount Due Through Last Date" is equal to or greater than \$100,000.

3. Final Invoice

Together with the Contractor's final invoice, the Contractor shall submit the following for all work performed on the construction project covered by the P.O.:

- A. Contractor's Affidavit for Final Payment Exhibit D;
- B. Contractor's Unconditional Final Waiver of Lien Exhibit E;
- C. Subcontractor's Unconditional Final Waiver of Lien (Exhibit F), from each First-Tier Subcontractor identified in the Contractor's Affidavit for Final Payment, where the "Contract Price" with respect to such First-Tier Subcontractor is equal to or greater than \$250,000, and
- D. Subcontractor's Unconditional Final Waiver of Lien (Exhibit F), from each Second-Tier Subcontractor identified in the First-Tier Subcontractor's Unconditional Final Waiver of Lien, where the "Contract Price" with respect to such subsubcontractor is equal to or greater than \$250,000.

^{*} A "Contractor" is an entity that has a direct contract with an Ameren company. A "First-Tier Subcontractor" is an entity that has a direct contract with the Contractor. A "Second-Tier Subcontractor" is an entity that has a direct contract with a First-Tier Subcontractor.

^{** †} Examples of covered projects include: labor, equipment and materials incorporated into construction projects, or used in connection with repairs or maintenance performed at, Ameren-owned buildings, facilities or transmission poles, towers or lines; drawings produced by a design professional for improvements, modifications or additions to an Ameren building or facility; and equipment, appliances, or materials which become permanently affixed to Ameren-owned real property.

Exhibit A

STATE OF)			
COUNTY OF		e Affinavit l	For Progress P	AVMENIT
				hat he/she is
	(title) of		("Contractor"), en	ngaged by
	[name of Ameren er	ntity] ("Owner") to pro	ovide labor, equipment an	d/or materials at the following
location:			("Property").	
The undersigned	represents that the total am	ount of its contract v	with Owner, pursuant to 0	Owner's Purchase Order No.
, i	s \$	_, of which Contrac	tor has received payment	of \$, prior to
				the amount of \$
, for labor, equip	ment and/or materials provi	ided through	, 20 ("Last	Date")** (insert date of last labor,
				which Contractor now requests
payment has been complet	ed according to the relevant	t contract provisions	, and payment is now due	to Contractor pursuant to the
terms of the contract.				
The following are	e the names of all parties wh	o have furnished lab	or, equipment and/or ma	iterials for improvement of the
Property at the request of	Contractor ("First-Tier Subo	contractors") with a	Contract Price equal to o	greater than \$250,000 and for
which Contractor has not	yet provided to Ameren a Si	ubcontractor Final W	Vaiver of Lien.	
FIRST-TIER SUBCONTRACTOR NAME (1)	DESCRIPTION OF LABOR/MATERIAL/ EQUIPMENT SUPPLIED	SUBCONTRACT PRICE (OVER \$250,000)(2)	AMOUNT PAID PRIOR <u>TO DATE OF</u> THIS AFFIDAVIT	AMOUNT DUE THROUGH LAST DATE (OVER \$100,000 REQUIRES SUBCONTRACTOR LIEN WAIVER)(2)(3)

The undersigned represents that this statement is a full, true and complete statement of all work performed through the Last Date by
Contractor and its subcontractors other than claims for extra work which have been submitted to Owner in a written Change Order or
Notice of Change Order prior to the date hereof.

Dated:	
	(Contractor)
	Ву:
	Title:
Subscribed and sworn to before me, this day	y of, 20
	Notary Dublic
My Commission expires:	Notary Public
My Commission expires.	

- (1) If Contractor has no Subcontractors meeting the criteria set forth above, please indicate "None" in the table.
- (2) For Lump Sum or Fixed Priced contracts, Contractor may just indicate that the Contract Price is greater than \$250,000 and whether the "Amount Due Through Last Date" is less than or greater than \$100,000.
- (3) The "Last Date" referred to in this document means the last date of the billing period for which Contractor is submitting this Affidavit. Contractor shall submit a Subcontractor's Partial Waiver of Lien for each listed Subcontractor, for the amount shown in this column through the Last Date, with its next invoice submitted to Ameren, unless the Subcontractor has finished its work, in which case Contractor shall provide a Subcontractor Final Waiver of Lien executed by such Subcontractor.

Exhibit B

STATE OF)
) SS COUNTY OF)
CONTRACTOR'S PARTIAL WAIVER OF LIEN
("Contractor") represents that it has
provided labor, equipment and/or materials (including but not limited to what is shown on Invoice No)
pursuant to Owner's Purchase Order No for the improvement of property of
[name of Ameren entity]("Owner") at the following location:
(the "Property") through the following date:, 20 ("Last Date")(insert date of last labor,
equipment and/or materials included in this waiver). Contractor has received payment of \$, prior to receipt of this progress
payment now requested in the gross amount of \$, less contract retainage funds, if any, to be withheld by
Owner of \$, for a net payment due of \$ ("Current Payment").
mechanic's lien against the Property described above, and any improvements thereon, for all labor, equipment and/or materials supplied through the Last Date pursuant to the above-referenced Purchase Order, except that this document does not waive Contractor's lien rights for: (1) the retainage funds set forth in the first paragraph; (2) retainage funds previously withheld by Owner for the work; or (3) claims for extra work which have been submitted to Owner in a written Change Order or Notice of Change Order prior to the date hereof and in accordance with the contract between Owner and Contractor. Provided Owner is not in breach of the payment provisions of the contract between Owner and Contractor, Contractor shall defend and indemnify the Owner, Owner's employees, and the Property against all liens, claims and lawsuits of subcontractors or suppliers of Contractor of every tier related in any way, subject to the exclusions set forth in the second paragraph hereof, to payment for labor, equipment and/or materials provided to or for the benefit of the Property through the Last Date pursuant to the above-referenced Purchase Order,
(Contractor)
Ву:
Title:
Subscribed and sworn to before me, this day of, 20
Notary Public
My Commission expires:

Exhibit C

STATE OF)
) SS
COUNTY OF)

SUBCONTRACTOR'S PARTIAL WAIVER OF LIEN

1.	("Subcontractor") has provided to or through
	("Contractor") certain labor, equipment and/or materials (including but not limited to
what is	own on Subcontractor's Invoice No) for the improvement of property of
	[name of Ameren entity]("Owner") at the following location:
	(the "Property").
2	
2.	ubcontractor has been paid for such labor, equipment and/or materials through the following date:,
20	Last Date")(insert date of last labor, equipment and/or materials supplied by Subcontractor included in this waiver).

- 3. Subcontractor hereby waives, without reservation, all rights to a mechanic's lien against the Property described above, and any improvements thereon, for all labor, equipment and/or materials supplied through the Last Date, except that this document does not waive Subcontractor's lien rights to contract retainage funds currently withheld by Owner or Contractor, and does not waive Subcontractor's lien rights or rights to payment for any other claims Subcontractor has previously made in writing in accordance with the terms of the contract between Contractor and Subcontractor. The undersigned acknowledges that all other claims and/or entitlement to payment, without reservation, for labor, equipment and/or materials provided through the Last Date are permanently waived, along with any mechanic's lien rights thereon.
- 4. Subcontractor shall defend and indemnify the Owner, Owner's employees, Contractor, and the Property against all liens, claims and lawsuits of subcontractors or suppliers of Subcontractor of every tier related in any way to payment for labor, equipment and/or materials provided to or for the benefit of the Property through the Last Date.
- 5. To be completed by "first-tier" subcontractors only: Subcontractor has paid in full, except for any retainage, all of its subsubcontractors and suppliers for labor, equipment and/or materials they supplied to or for the benefit of the Property through the Last Date. The following are the names of all parties who have furnished, or will furnish, labor, equipment and/or material for improvement of the Property at the request of Subcontractor with a Contract Price equal to or greater than \$250,000.00. The undersigned represents that Subcontractor has paid each of the following entities the "Amount Paid to Date" applicable to

such entity, and has provided to Contractor fully-executed lien waivers from all sub-subcontractors for whom the "Amount Due Through Last Date" is equal to or greater than \$100,000:

By:Title:	ocontractor)	
before me, this	·	Title:

My Commission expires:

Notary Public

- (1) If Subcontractor has no Second-Tier Subcontractors meeting the criteria set forth above, please indicate "None" in the table.
- (2) For Lump Sum or Fixed Priced contracts, Subcontractor may just indicate that the Contract Price is greater than \$250,000 and whether the "Amount Due Through Last Date" is less than or greater than \$100,000.
- (3) The "Last Date" referred to in this document means the last date of the billing period for which Subcontractor is submitting this Affidavit. Subcontractor shall submit to Contractor a Subcontractor's Partial Waiver of Lien for each listed Second-Tier Subcontractor, for the amount shown in this column through the Last Date, unless the Subcontractor has finished its work, in which case the Subcontractor shall provide a Subcontractor Final Waiver of Lien executed by such Second-Tier Subcontractor.

C C	Exhibit D			
State of)) SS			
County of)			
	CONTRACTOR'S AFFIDAVIT FO	OR FINAL PAYMENT		
	, first be	ing duly sworn, depos	es and states that:	
I am	[title] of			
("Contractor"), engaş	ged to provide labor, equipment and/or mate	erials at the following le	ocation:	
	("Property"), owned by			
[name of Ameren entity] ("C	,			
_	nts that the total amount of Contractor's con	_		
	, of which Contra			
	ayment, and Contractor now requests Final F	Payment in the amount	t of \$, including
withheld retainage, if any, of				
	he names of all parties who have furnished m		*	
1 , 1	ontractor in an amount equal to or greater that	•	,	. The
	Contractor has paid each of the following en	tities the amounts state	ed:	
FIRST-TIER UBCONTRACTOR NAME(1)	DESCRIPTION OF LABOR/EQUIPMENT/MATERIAL	SUBCONTRACT PRICE	AMOUNT PAID PRIOR TO FINAL	FINAL PAYMENT
	SUPPLIED	(OVER \$250,000)(2)	PAYMENT	
	epresents that Contractor has provided to Ow	•		
	where the Subcontract Price is equal to or gr		<u> </u>	
•	d any other equipment, labor or material, and	_		
* *	or or other work provided to or through Con	tractor for the benefit	of the Property, other	tnan as stated
above, or which are less than	1 \$250,000.00 iii price.			
Dated:				
Dated.		(Contractor)		<u> </u>
	Title:			
Subscribed and sworn to bef	Fore me, this day of 20			

My Commission expires:	
, 1	Notary Public

- (1) If Contractor has no Subcontractors meeting the criteria set forth above, please indicate "None" in the table.
- (2) For Lump Sum or Fixed Priced contracts, Contractor may just indicate that the Contract Price is greater than \$250,000.

Exhibit E

STATE OF) 22	
COUNTY OF)	
	CONTRACTOR'S FINAL WAIVER OF LIEN	
	("Contractor"), first being duly sworn,	, deposes and states that it has
provided labor, equipment and	or materials pursuant to Owner's Purchase Order Number	•
	("Owner"	
	(the "Property") and is entitle	ed to final payment in the
following amount: \$, including withheld retainage, if any, of \$	
Effective immediately	upon receipt of the above payment, Contractor does hereby permanen	tly, and without reservation, fully
waive and release all rights it m	nay have to assert a mechanic's lien or any other lien, claim or right again	ast the Property identified above,
or any improvement thereon, or	or against the Owner or its employees, alleging non-payment for labor as	nd/or material supplied to or for
the benefit of such Property pu	ursuant to the above-referenced Purchase Order.	
Contractor shall defer	nd and indemnify the Owner, Owner's employees, and the Property aga	inst all liens, claims and lawsuits
	ontractors or suppliers of Contractor of every tier for labor or materials	
0 0 1	pove-referenced Purchase Order.	ı
1 71		
Dated:		
Dated:	(Contractor)	
	Ву:	
	Title:	
Subscribed and sworn	n to before me, this day of, 20	
	Notary Public	
My Commission expires:		

		LAMBOU
STATE OF)	
) SS	
COUNTY OF)	

SUBCONTRACTOR'S UNCONDITIONAL FINAL WAIVER OF LIEN

		of
		("Subcontractor"), being first duly sworn, deposes and states as follows:
	1)	I am the (title and/or position) of Subcontractor, and am familiar w
the facts	stated l	herein.
	2)	Subcontractor has provided to or through
		("Contractor"), certain labor, supplies, materials, equipment and/or other items for use in the construction
of impro	ovement	nts at the following location:(t
"Property	") owne	ed by("Owner").
	3)	Subcontractor hereby acknowledges its receipt of full and final payment, including retainage, for all labor, supplies
materials	s and eq	quipment provided by or through Subcontractor for the Property.
	4)	To be completed only by "first-tier" subcontractors: The following are the names of all parties who have furnished materia
equipme	ent and/	/or labor for improvement of the Property at the request of Subcontractor in an amount equal to or greater than
\$250,000). Subc	contractor represents that it has provided a fully-executed Subcontractor's Unconditional Final Waiver of Lien for each

SECOND-TIER SUBCONTRACTOR'S NAME	LABOR/EQUIPMENT/MATERIAL SUPPLIED	CONTRACT PRICE	AMOUNT PAID PRIOR TO FINAL PAYMENT	FINAL PAYMENT

such party. Subcontractor has paid in full all of its sub-subcontractors and suppliers for all labor, supplies, materials, equipment and

other items they provided to or through Subcontractor for the Property, regardless of the contract price:

- 5) Subcontractor hereby unconditionally and without reservation waives all rights to assert a mechanic's lien or any other right or claim it may have against the Property, the Owner, and the Contractor, arising out of or related to the Property.
 - 6) Subcontractor shall defend, indemnify and hold harmless the Owner, Owner's employees, Contractor, and

associated therewith, arising out of any labor, supplies, material	als, equipment or other facilities furnished by or through Subcor	ntractor,
or by its sub-subcontractors and suppliers of any tier, in connect	ection with the Property.	
	Subcontractor	
	By:	
	Title:	
SWORN TO before me and subscribed in my presence this	day of	
Notary Public		
My Commission expires:		

the Property and the Owner against any liens, suits on liens, claims, or lawsuits, including all expenses, costs and attorney fees

PROPOSED PROJECT SCHEDULE FOR THE MARK TWAIN TRANSMISSION PROJECT

<u>Activity</u>	<u>Start</u>	<u>Finish</u>
PSC Filing	09/2017	02/2018
Engineering	08/2017	03/2019
Environmental Permitting and Monitoring	08/2017	12/2020
Right-of-Way Acquisition	02/2018	06/2019
Substation Material Procurement	04/2018	04/2019
Line Material Procurement	05/2018	09/2019
Line Access Construction	06/2018	06/2019
Substation Construction	06/2018	06/2019
Transmission Line Foundation Installation	09/2018	08/2019
Right-of-Way Clearing	11/2018	12/2019
Line Construction	10/2018	12/2019
Final Inspections	10/2019	12/2019
Project In-Service		12/2019