ATXI Exhibit 3.0 (Rev.)

ILLINOIS COMMERCE COMMISSION

DOCKET No. 12-0598

REVISED DIRECT TESTIMONY

OF

JEFFREY V. HACKMAN, P.E.

Submitted On Behalf

Of

AMEREN TRANSMISSION COMPANY OF ILLINOIS

DECEMBER 6, 2012

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Ameren Transmission Company of Illinois

I. INTRODUCTION AND WITNESS QUALIFICATIONS

Q. Please state your name, business address and present position.

A. My name is Jeffrey V. Hackman. My present position is Manager of Transmission Operations for Ameren Services Company ("Ameren Services"), located at 1901 Chouteau Avenue, P.O. Box 66149, St. Louis, Missouri 63166.

Q. Please summarize your educational background and professional experience.

A. See my Statement of Qualifications attached as an Appendix to this testimony.

Q. What are your duties and responsibilities in your present position?

A. In my current position as Manager of Transmission Operations for Ameren Services, I lead the department that designs, constructs, maintains and operates Ameren's transmission systems.

Q. Please describe Ameren Services' Transmission Operations function.

A. Transmission Operations is responsible for the real-time implementation of the Ameren Operating Companies', including Ameren Transmission Company of Illinois' ("ATXI"), transmission system functions from the design, procurement, construction and project

management of new facilities, to the operation of those assets to deliver the reliable energy our customers need, and finally to the long-term ownership and maintenance of those facilities. There are seven primary focus areas in Transmission Operations: Design Engineering, Project Management, Project Scheduling and Controls, Construction Services, Vegetation Management, Construction/Maintenance (Asset Management) and System Operations. Design Engineering, as the name implies, takes a conceptual plan and produces a comprehensive construction package that ensures safe, efficient, and reliable transmission facilities. The Project Management group is responsible for delivering new assets on time and on budget, and it "owns" the projects from the identification stage to in-service. Project Scheduling and Controls is the technical resource for the other groups in Transmission Operations in the expert application of project management tools to help those other groups manage new projects, modifications/repairs to existing ones, or ongoing maintenance. Construction Services is responsible for the construction of transmission assets, taking a work package and ensuring that construction resources deliver a quality product, in an efficient, safe and reliable manner. Vegetation Management, as the name implies, ensures that the transmission assets can operate safely and reliably by removing vegetation that might otherwise jeopardize the assets. The Construction/Maintenance group performs the asset management role and constructs some, and maintains all, of the transmission assets with safety at the forefront. System Operations is responsible for the safe and reliable operation of the Bulk Electric System, acting as a NERC-certified Transmission Operator and Balancing Authority.

My testimony here pertains to the Project Management, Project Scheduling and Controls, Construction Services and Systems Operations groups' roles related to the project at issue, which I discuss further below. ATXI witness, Mr. Jerry A. Murbarger (a member of the Design

Engineering group) addresses Transmission Line Design. (ATXI Ex. 7.0.) The other groups comprising the Transmission Operations function are not directly pertinent to my testimony.

II. PURPOSE AND SCOPE

Q. What is the purpose of your direct testimony?

A. My testimony will demonstrate ATXI is capable of efficiently managing and supervising the construction process and has taken sufficient action to ensure adequate and efficient construction and supervision of the construction of the Illinois Rivers Project (the "Project") described in the testimony of ATXI witness, Ms. Maureen A. Borkowski (ATXI Ex. 1.0), as required by Section 8-406.1(f)(2) of the Illinois Public Utilities Act, 220 ILCS 5/8-406.1(f)(2). I also discuss substation site selection along the Transmission Line route, certain operational benefits of the Project, and the total expected cost of the Project.

III. MANAGEMENT AND SUPERVISION OF CONSTRUCTION

Q. How will ATXI manage construction of the Project?

A. As discussed by Ms. Borkowski, Ameren Services will manage the design, construction and operation of the Transmission Line on behalf of ATXI.

Q. Please describe Ameren Services' Project Management team for the Project.

A. The management team for the Project starts with Ms. Borkowski as Executive Sponsor. I serve as Project Sponsor, responsible for leading the execution of the Project, coordination between the groups involved and oversight of the Project. As discussed above, I manage the three groups - Project Management, Project Scheduling and Controls and Construction Services - that are responsible for efficiently managing and supervising Ameren Operating Companies'

projects from initiation to in-service, including the Project. Each group is lead by a supervisor who reports directly to me. The Managing Supervisor of the Project Management group oversees the individual project managers assigned to each portion of the Transmission Line. The current Managing Supervisor of this group has broad experience in project management and is a registered Project Management Professional ("PMP"®), a certification I discuss in more detail below. The Project Scheduling and Controls group will support the project managers through the detailed scheduling, resource identification, data gathering and cost control necessary for the Project. The Supervisor of this group is also a registered PMP. The engineers in the Construction Services group will assure that actual construction activities are conducted in a safe and efficient manner, consistent with the design of the Project. The Managing Supervisor of the Construction Services group also is a registered PMP, as well as a registered Professional Engineer. Ameren Services will employ contractors in various capacities for the Project, as it does routinely for transmission projects. It may also engage outside firms, to the extent necessary, to assist it with management of the Project. A current organizational chart is attached to my testimony as ATXI Exhibit 3.1. The Project Management team has the necessary experience to efficiently manage and supervise the Transmission Line construction process.

Q. You indicated the Managing Supervisor of the Project Management group, the Supervisor of the Project Scheduling and Controls group and the Managing Supervisor of the Construction Services group are registered Project Management Professionals, or "PMPs." What is that credential and how is it attained?

A. The Project Management Professional credential is issued by the Project Management Institute, Inc. ("PMI") and is an industry recognized and globally recognized certification for project managers. A PMP demonstrates an individual has the experience, education and

competency necessary to lead and direct projects and project teams. According to the PMP Handbook published by the PMI (available at www.pmi.org), the PMP credential "is accredited by the American National Standards Institute ("ANSI") against the International Organization for Standardization (ISO) 17024. The 17024 standard includes vigorous examination development and maintenance and for the quality management systems for continuing quality assurance. In addition, the PMP credential is also registered against the ISO 9001:2008 standard for quality management systems."

To apply for the PMP, an individual must have either a four-year degree and at least three years of project management experience, with 4,500 hours leading and directing projects and 35 hours of project management education, or a secondary diploma with at least five years of project management experience, with 7,500 hours leading and directing projects and 35 hours of project management education. An applicant also must pass a four-hour examination requiring application of project management concepts and experience to potential on-the-job situations. In addition, as part of PMI's Continuing Certification Requirements, to remain credentialed, a PMP also must earn sixty professional development units ("PDUs") per three-year cycle.

Q. Is Ameren Services capable of efficiently managing and supervising construction of transmission line projects?

A. Yes. As mentioned, Ameren Services and its personnel, on behalf of ATXI and other Ameren Operating Companies, have many years of experience successfully overseeing the construction of transmission lines and related projects. In fact, Ameren Services and its predecessors have been constructing transmission lines for decades, and have managed the construction, re-construction, or rebuilding of hundreds of miles of transmission line. Ameren Services has been responsible, on behalf of Ameren Illinois Transmission Company (predecessor

to ATXI) and Ameren Illinois, for managing and supervising the construction processes of significant transmission line projects approved by the Illinois Commerce Commission ("Commission") in Docket Nos. 06-0179, 06-0706, 07-0532 and 10-0079. In addition, on behalf of Ameren Illinois, Ameren Services will be responsible for managing and supervising the construction processes of the transmission lines recently approved in Docket Nos. 12-0080 and 12-0154.

Q. How does ATXI intend to construct the Project?

A. The Project will be constructed in portions, each managed by a project manager, as stated above. Each portion will be constructed using the design, bid, build process or a modified Engineer-Procure-Construct delivery structure, dependent upon the timing of the in-service date and resource allocation. The main difference between these two project delivery models is the role Ameren Services takes in directing the flow of contracts and work product. In the design, bid, build process, Ameren Services directs each phase of the work activities. This is the traditional approach to project delivery wherein the owner (here, ATXI, through Ameren Services) arranges for the completion of the design (either by self-design or using consulting engineers). 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 material. Finally, the build phase requires the owner to coordinate the receipt of the material and manage the overall construction phase, including the activities of the construction contractor. In the Engineer-Procure-Construct ("EPC") project delivery model, by contrast, Ameren Services directs one EPC contractor who coordinates the design, bid, build activities and is responsible for seamless integration of those activities through project completion. The two primary benefits often attributed to this Project delivery model are cost

certainty and quality/efficiency (the EPC contractor knows the material and labor resources it will use and incorporates that information into the design). When the EPC model is used for an energy delivery project, Ameren Services utilizes a modified EPC contract which requires the EPC contractor to use and procure the exact materials that Ameren Services has established as "standard." This promotes long-term success, efficient asset management, and takes advantage of the favorable contracts secured by Ameren Services via its rigorous sourcing process, which I discuss in more detail below. Regardless of the method of construction utilized, as discussed above, Ameren Services personnel will efficiently manage and supervise construction of each portion of the Project.

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

A. Given the widely varying level of transmission construction activity, the use of contractors is the most efficient and cost-effective manner to construct these types of projects. In addition, Ameren Services does not employ dedicated transmission linemen in Illinois. 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. These construction contractors will all be union contractors.

Q. How will ATXI select contractors for the Project?

A. Ameren Services, on behalf of ATXI, will use a formal sourcing process for each portion of the Transmission Line to secure the labor necessary to construct that portion as determined by the method of construction used (design, bid, build process or modified Engineer-Procure-Construct delivery process). Generally, the sourcing process is comprised of: (1) formation of a

contract development team to identify the scope of work to be completed and the contractor criteria necessary; (2) acceptance and evaluation of the bids and qualifications received from those interested in the work as scoped; and (3) negotiation of the most favorable terms and conditions. Sample traditional model and EPC contracts are attached as ATXI Exhibits 3.2 and 3.3, respectively. This rigorous sourcing process assures Ameren Services secures the "best-bid" for efficient and effective construction.

Q. Explain how ATXI has taken sufficient action to 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. It has documented corporate project oversight policies and procedures that govern all phases of Ameren Operating Companies' transmission line projects, including the Project. These policies and procedures are consistent with the Project Management Institute's *Project Management Book of Knowledge* ("PMBOK"), which is an American National Standards Institute standard. They describe key steps in ensuring adequate and efficient construction such as engineering design calculation checking, constructability reviews and fully integrated logic-driven schedules.

Q. Explain how ATXI will supervise construction of the Project.

A. Ameren Services' Transmission Operations Construction Services group will have primary responsibility of job site supervision of the Transmission Line. In addition to this full-time supervision, employees engaged in design engineering, construction controls, and safety will oversee construction. Finally, contractors selected for use in construction of the Project will

be continuously managed through field inspections, testing (as required), and construction review.

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

A. Yes. Ameren Services personnel involved in the construction of the Project are regularly involved in the construction of transmission lines in Illinois across the Ameren system. As such, they are aware of the applicable laws and regulations involved in such construction. When changes are made to these laws and regulations, Ameren Services employees involved in regulatory issues advise those affected by said changes to implement any modifications in process or procedure necessary to stay compliant. Through its experience and the process to address changes, Ameren Services, on behalf of ATXI, will ensure that it complies with all applicable federal and state regulations and orders of the Commission, including 83 Ill. Admin. Code Part 305, "Construction of Electric Power and Communications Lines," and the National Electrical Safety Code ("NESC").

Q. How will ATXI manage costs associated with constructing the Project?

A. The Project Scheduling and Controls group will implement a comprehensive Earned Value Management ("EVM") process for this construction. EVM is a project management technique for measuring project performance and progress in an objective manner. EVM has the ability to combine measurements of scope, schedule, and cost in a single integrated system, for the purposes of providing accurate forecasts of project performance. As such, issues can be addressed early to assure project success. Essentially, EVM establishes a "value" (either cost,

labor or material) for each activity in the detailed work schedule. When actual progress is reported, it can be compared to the pre-determined "value."

EVM is widely used across public and private enterprises engaged in projects. This tool is a foundation of effective project management and is addressed in the PMBOK. Ameren Services and the Transmission Operations Project Scheduling and Controls group regularly utilize this process to manage construction costs and have found it effective in controlling construction costs, schedules and scope.

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

A. The Ameren Services Transmission Operations Systems Operations group, which reports to me, as discussed above, will be responsible for the operation of the Transmission Line and associated facilities once they are placed in-service. This team is comprised of NERC-certified System Operators with substantial experience performing the Transmission Operator and Balancing Authority tasks pertinent to such facilities. Ameren Services will provide these services in accordance with the Commission approved General Services Agreement ("GSA") between Ameren Services and ATXI. 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 ATXI is capable of efficiently managing and supervising construction of the Project. As explained, Ameren Services, on behalf of ATXI, will manage and supervise construction of the Project. Ameren Services and its personnel have many years of experience successfully overseeing the construction of myriad transmission lines and related projects. As

such, as the Commission has found in the past, Ameren Services, on behalf of ATXI and the other Ameren Operating Companies, is capable of efficiently managing and supervising such projects. This Project is no exception.

IV. SUBSTATION SITE SELECTION

Q. Please describe, from an engineering perspective, ATXI's substation site selection methodology for the Project.

A. The facilities that are to be constructed as part of the Project must connect to the existing transmission system. For this reason, the selection of the locations to add additional substation equipment must take into account the existing system topology. The process to identify the substation sites necessary to provide access to the numerous 138 kV lines which distribute the energy throughout Illinois is an iterative one.

As discussed by ATXI witness, Mr. Dennis D. Kramer (ATXI Ex. 2.0), ATXI determined the general locale, or "drop-off points" where additional transformation or switching equipment should be installed. These "drop-off" points can be analogized to interstate highway exits. The Project is very much like an interstate highway. One purpose of an interstate highway is to allow interstate traffic to pass through Illinois uninterrupted. An additional purpose is to allow local users to get deliveries from the interstate highway. This later benefit is achieved with the addition of exit (and entrance) ramps. Likewise, the Illinois Rivers Project substation site selection planning process first determined the general locations where "exit ramps" - substations - should exist. Once ATXI determined the general area where the substations should be, potential routes for the Transmission Line, as well as routes for future circuit(s), were considered in the site scoping process. If enough viable routes were identified in a specific area, it was then

up to the Design team to locate exactly which property was best. And like the design criteria for interstate highways, there are many considerations that go into the site selection for transmission substations. The geology and topography of the land must be taken into account. The location of the nearest railroad is an important consideration in sites where very large transformers are to be installed. Coupled with the railroad consideration is the size and capability of highways and local roads, as well as any bridges on those thoroughfares. Environmental concerns, as well as the potential for flooding, also need to be considered. And in addition to these more physical factors, it is important to consider some societal factors as well. It is desirable to keep substations as close as possible to existing infrastructure to minimize system integration (e.g., relocations, extensions) costs. But this must be balanced with the general preference to keep these large facilities out of populated areas. This last point is also important since any future circuit routes would have to traverse through those populated areas to get to the substations; there must be sufficient space and good routes for those future circuits. When possible, it is advantageous that substations not be in the way of future economic corridors as well, to ensure the highest and best use of land. Moreover, the cost of the land to be acquired is a factor. I would note that this list is not exhaustive.

The substation site selection process for the Project involved balancing all of the above factors in an iterative process. First, the Ameren Services design and real estate professionals and I looked at the general location of the substations as specified by the planners, along with routing and real estate data, and selected two site locations for each substation along the Transmission Line, a preferred and an alternate, which had the best combination of the factors. Then, Real Estate professionals conducted a more detailed investigation of the availability of the parcels identified. This investigation lead to new inputs, such as price points, status of title,

unrecorded flooding, presence of mining and future development plans by the owner, to name several. Based on the new inputs, the selection team re-convened, as needed, and adjusted the preferred and alternate substation sites or added new sites to the list for consideration where an originally identified site had to be eliminated.

ATXI Exhibit 4.2 (sponsored by ATXI witness Ms. Donnell Murphy) indicates the preferred substation site location for each substation along the Primary Route. ATXI witness, Mr. Ronald Dyslin (ATXI Ex. 8.0) generally addresses the status of ATXI's acquisition of the real estate intended for each of those nine substation sites. It is my understanding ATXI has acquired or is close to acquiring all parcels necessary to construct or expand the nine substations. Therefore, the likelihood that one or more of the nine substation sites may change is slim. Below, I discuss the factors considered specific to the determination of each of the sites associated with the Project.

Q. How did ATXI determine the site of the Quincy substation?

A. A new substation site will be developed for the substation in the Quincy area. The Quincy site that was acquired was the preferred site. It was chosen primarily to minimize integration costs since the other factors, as addressed above, were essentially equal for the other sites considered.

Q. How did ATXI determine the site of the Meredosia substation?

A. The Meredosia substation development will be adjacent to the existing transmission switchyard facilities. This location was the preferred site because it minimized system integration costs and is well suited to future transmission routes. Additionally, this location is

well suited to accommodate any generation from the Future-Gen near-zero emissions coal power plant project.

Q. How did ATXI determine the site of the Ipava substation?

A. A new substation site will be developed in the Ipava area. The area around the existing transmission substation was judged by the Design professionals on the selection team to be unsuitable for the ultimate development of the Project substation because of the topology and proximity of the road, residence and watercourse. As such, a preferred site and alternate site were selected, one east and one west of the existing substation. Both the preferred and alternate sites had the benefit of minimizing integration costs and had good "build-ability." During the Real Estate activities though, the preferred site was found to pose concerns that would make line routing more difficult, so an additional site to the east was pursued. This site had the benefit of minimizing integration costs with the added benefit of slightly better routes for future circuits. This second alternate site was the site ultimately chosen for the new Ipava substation.

Q. How did ATXI determine the site of the Pawnee substation?

A. A new substation site will be developed in the Pawnee area. The preferred site was immediately adjacent to the existing substation. The alternate site was south of the preferred site. These two sites were selected primarily on the basis of integration cost, line routing and geographical considerations. However, during the Real Estate review, it was discovered that both the preferred and alternate sites were located above an early Twentieth Century roof-and-pillar mine. The civil engineers contacted mining experts to assist in the evaluation of the suitability of this site for an electrical substation that, once completed, would have significant reliability implications. The selection team evaluated aerial photography conducted over several

years to get a time-lapse photographic assessment. Verifiable evidence existed that mine subsidence was occurring. Options to stabilize the area were evaluated by the engineering team. Ultimately, based on the cost and uncertainty of success associated with these stabilization options, both the preferred and alternate sites were rejected. New preferred and alternate sites were identified outside of the mining area.

Q. How did ATXI determine the site of the Pana substation?

A. A new substation site will be developed in the Pana area. The preferred site was immediately adjacent to the existing substation. The alternate site was west of the preferred site. These two sites were selected primarily on the basis of integration cost, line routing and geographical considerations. However, similar to the initially identified Pawnee substation sites, during the Real Estate effort, it was discovered that both the preferred and alternate sites were located above an early Twentieth Century roof-and-pillar mine. The same evaluation was undertaken with the same results and, as with the Pawnee sites, both the initial preferred and alternate sites were rejected. New preferred and alternate sites were identified outside of the mining area.

Q. How did ATXI determine the site of the Mount Zion substation?

A. A new substation site will be developed in the Mount Zion area. The preferred site was initially identified to be proximate to an existing industrial customer substation that is served at transmission voltage. The alternate site was south of that industrial plant. After consultation with the planning engineers about future routes, as well as the likelihood of economic development in the immediate area, the preferred site became the alternate and the alternate (south of the plant) became the preferred. During the public participation process for the

Transmission Line routing, a landowner who owned property south of the plant offered his property for sale. After reviewing the site, it became evident that site offered very good access, as well as the opportunity to keep the Project lines, as well as future Extra-High Voltage ("EHV") circuits, away from more populated areas. Given its availability and these benefits, this site became the revised preferred site. It is my understanding the site has been acquired.

Q. How did ATXI determine the site of the Kansas substation?

A. The Kansas substation development will be adjacent to the existing transmission substation. This location was the preferred site because it had excellent constructability and minimized integration costs and is well suited to future transmission routes.

Q. How did ATXI determine the site of the Sidney Substation?

A. The Sidney substation development will be adjacent to the existing transmission substation. This location was the preferred site because it had excellent constructability and minimized integration costs, is close to the load center and did not impede development.

Q. How did ATXI determine the site of the Rising substation?

A. The Rising substation development will be adjacent to the existing transmission substation. This location was the preferred site because it had excellent constructability and minimized integration costs, and offered excellent routing for future circuits.

Q. You have indicated that, in some instances, line extensions to existing circuits and/or relocations will be needed. How will this be accomplished?

A. ATXI recognizes interconnections to the grid will be necessary. To accomplish these connections, it will be necessary in some locations for Ameren Illinois to build short extensions

to existing Ameren Illinois transmission lines, or for Ameren Illinois to relocate its existing facilities. Other utilities will also need to make similar connections. However, the specific connections are dependent in part upon the Transmission Line route approved by the Commission, including the location of the associated substations. Once the Commission approves the Transmission Line route, including the related substations, in this proceeding, it will be Ameren Illinois and the other utilities that will obtain the requisite approvals, if any, and make the necessary connections and/or relocations involving their lines.

Q. Does ATXI have an understanding of the potential locations for such connections or relocations?

A. Yes. ATXI Exhibit 4.10 depicts ***potential*** corridors of integration between the Transmission Line and Ameren Illinois' existing facilities. I would emphasize, however, that these corridors show only possible locations for such integration. The actual connections necessary will depend on the final route for the Transmission Line approved by the Commission in this proceeding, and then subsequent detailed engineering design. Accordingly, the integration corridors illustrated on ATXI Exhibit 4.10 may not be utilized as depicted.

V. OPERATIONAL BENEFITS

Q. Will the Project provide operational benefits?

A. Yes. Construction of the Project will provide several operational benefits. This high capacity, EHV transmission circuit will enhance the import capability of the AMIL Balancing Authority area which will allow Illinois customers increased access to wholesale markets in normal operations and more robust sources in emergencies. The addition of the Project line segments and substations will result in more redundancy in the transmission system to

accommodate needed maintenance and repairs of the bulk electric system infrastructure. The Project will materially increase voltage support to several communities, especially during contingencies. Assuming other factors are unchanged (i.e., load, generation, interchange), the addition of a transmission line reduces flows on other lines and results in a reduction in transmission system losses. In the case of the Project, this is especially true since the additional line is an EHV line (higher voltage means less current for the same power, and losses are a function of the value of current squared). And finally, the Project will increase reliability because of the independent paths for power flows. As an example, a new independent Mississippi River crossing is being developed, as opposed to use of an existing crossing. In the event of a failure of a river crossing, especially one on the Mississippi River, service on that circuit may be out for a significant period of time because it is not possible to erect any form of temporary line. During periods when the existing river crossing is out of service for maintenance, the transmission system in western Illinois is stressed. Thus, an independent crossing assures that a long-duration failure of a river crossing will only involve one of the two (one existing, one new) circuits, thus providing needed redundancy. Providing individual river crossings for these lines also would provide better voltage support to the western Illinois area in the event that one of the river crossings fails. This aligns with Ameren Services' customary preference in constructing transmission lines on separate rights-of-way, especially those which entail a river crossing.

VI. PROJECT COST

Q. What is the total cost of the Project?

A. The total expected Project cost, for the Primary Route, is $1,091,600,000. The total expected Project cost for the Alternate Route is $1,167,500,000.

Q. How was the total Project cost determined?

A. As discussed by Mr. Murbarger, the Ameren Services Transmission Design group determined a per-mile baseline cost, including adjustments for the increased costs associated with angles on each portion, known field conditions, rights-of-way and environmental factors. (See ATXI Exhibit 7.0 and supporting exhibits.) That base cost was then utilized as an input to a Monte Carlo simulation, risk-based contingency analysis model called @Risk, which was utilized to derive an expected cost and a cost range for each portion of the Transmission Line. This analysis is designed to account for various contingencies and risks, such as changes in soil characteristics from that anticipated, changes in material pricing and even inclement weather which may hinder construction progress.

Q. What is the cost range?

A. The cost range represents the likely costs that could occur on the Project from a value very near the base (with only minimal contingency) to a high-end value with significant contingency. Within the range is the expected cost of the Project. The low end of the cost range is self-explanatory. The high end of the cost range estimate represents a worst case cost scenario (95% confidence) and accounts for the statistical probability that the occurrence of project risks may exceed the "normal distribution" of risk occurrences. As an example, flipping a coin to "heads" is expected to occur 1 out of 2 times on average. But it is not unrealistic to flip a coin

three times and get three "heads," although not many have seen 100 "heads" in a row. The high-end range in the analysis tries to capture an outlying, but practical, cost that could occur. The "expected value" or mean amount represents the statistically expected cost of the Project. In the coin toss example, this would be "heads" occurring 1 of 2 times.

Q. How, then, is the total cost of the Project determined?

A. To arrive at the total cost, the projected costs of the associated substations, with appropriate contingencies, were added to the Transmission Line expected cost and cost range to arrive at the total expected Project cost and cost range for both the Primary Route and the Alternate Route. This produces the expected total cost as indicated above. The high-end value for the total cost of the Primary Route is $1,220,700,000 and the high-end value for the total cost of the Alternate Route is $1,307,100,000. See ATXI Exhibit 3.4 which is a table that breaks down the expected cost for each portion of the Project.

VII. CONCLUSION

Q. Does this conclude your revised direct testimony?

A. Yes, it does

APPENDIX

STATEMENT OF QUALIFICATIONS
JEFFREY V. HACKMAN, P.E.

In 1980, I earned a Bachelor of Science in Electrical Engineering degree from the University of Missouri-Rolla, graduating *magna cum laude*. In 1987, I earned a Masters degree in Business Administration from Webster University, graduating *summa cum laude*. I am a registered professional engineer in the state of Missouri. I am a Senior Member of the Institute of Electrical and Electronic Engineers ("IEEE").

In 1980, I started working for Union Electric Company (now d/b/a Ameren Missouri) as an engineer in the System Planning Department, and later moved to engineering positions with Transmission Substation Design and the Operating Divisions of Geraldine and Dorsett. I was then promoted and worked as the Supervising Engineer in the Geraldine, Heavy Underground and Wentzville Operating Divisions. Following the distribution assignments, I was transferred to Transmission Operations as a Consulting Engineer, where I worked as an Operational Planner in the Electric Planning Department for Ameren Services, a subsidiary of Ameren Corporation. On November 1, 2005, I was promoted to Principal Engineer.

As an Operational Planner, I was responsible for the analysis and engineering approval of all long-term transmission service requests received under the Open Access Transmission Service Tariff ("OATT") of the Ameren Operating Companies until the Ameren Operating Companies—then AmerenUE and Central Illinois Public Service Company d/b/a AmerenCIPS (collectively, "Ameren")—turned over functional control of their transmission systems to the Midwest Independent Transmission System Operator, Inc. ("MISO") on May 1, 2004. The Ameren Operating Companies later included Central Illinois Light Company and Illinois Power

Company, who along with AmerenCIPS merged as one entity, now Ameren Illinois Company ("Ameren Illinois").

After May 2004, I worked extensively with MISO on various issues, including the Coordinated Summer Assessment, FTR Entitlements, and Day 2 (Energy Market operations) load and generation modeling. During the latter half of 2004, I worked extensively on the development of a long-term transmission pricing mechanism to become effective December 1, 2004, when the Federal Energy Regulatory Commission ("FERC") eliminated "Through and Out Rates" for all transactions within the combined region of the MISO and PJM Interconnection, L.L.C. (the "MISO/PJM Region"). In addition to this planning work, I performed real-time, next-day, and seasonal studies for the system operators, and analyzed outages and developed plans for use by the North American Electric Reliability Corporation ("NERC") certified system operators