

SP Transmission Pre-Qualification Package

for PJM Designated Entity Status

December 2023

1. Name and address of the entity including a point of contact

Name of Legal Entity: Southern Power Company
Mailing Address: c/o Corporate Secretary, BIN SC1104
30 Ivan Allen Jr. Blvd NW
City/State/Zip: Atlanta / Georgia / 30308
Business Phone: (404) 506-0269

Primary Point of Contact: David Marshall
Title: Transmission Project Manager
Mailing Address: 3535 Colonnade Parkway
City/State/Zip: Birmingham / Alabama / 35243
Phone: (205) 992-0146
Email Address: dcmarsha@southernco.com

Backup Point of Contact: Josh Hale
Title: Commercial Services Manager
Mailing Address: 3535 Colonnade Parkway
City/State/Zip: Birmingham / Alabama / 35243
Phone: (205) 992-0149
Email Address: joshhale@southernco.com

Attachments:

- Question 1 - SP TRANSMISSION LLC - DE - Formation.pdf

2. Technical and engineering qualifications of the entity or its affiliate, partner, or parent company

SP Transmission, LLC is a wholly owned subsidiary of Southern Power Company. As a recently formed special purpose entity with no currently owned transmission projects, SP Transmission, LLC will be supported by Southern Company and its affiliates who own, operate, and maintain over 18,000 miles of high voltage transmission lines and more than 1,100 high voltage transmission substations (as described in more detail in response to Question 3 below). Southern Company and its affiliates have constructed or managed construction of the vast majority of these facilities. Southern Company's 29,000+ employees will be available to support the successful design, construction, operation and maintenance of SP Transmission's projects. SPC employees will manage SP Transmission's projects and lead all related efforts on behalf of SP Transmission. SPC has extensive experience developing, constructing, owning, operating, and maintaining facilities across the United States. [REDACTED]

SP Transmission will rely on its parent, SPC, who will perform all aspects of development, from initial site selection, assessment and acquisition and permitting through the engineering, procurement, and construction, and eventually leading to commissioning and commercial operation as well as operations and maintenance support for the life of the project. SPC provides in-house expertise and draws on the vast resources of the Southern Company Services organization and existing relationships with many consultants and contractors. Due to Southern Company's size and participation in the marketplace, we maintain favorable relationships with major equipment vendors as well as contractors for all aspects of project engineering, procurement and construction. This translates to lower costs and better commercial terms which are passed on to customers.

SP Transmission will rely on SPC's EPC and Transmission departments to provide primary project management oversight for SP Transmission's projects through commissioning, with support, as required from other SPC and SCS resources as discussed above. SPC's Transmission and O&M departments will lead operations and maintenance efforts for all SP Transmission projects.

SP Transmission will utilize and supplement SPC and Southern Company's existing standards and practices. Project management will be led by SPC's Transmission and EPC departments and will rely on SPC's existing standards and practices for project management. Engineering, material, and construction standards and practices for transmission facilities are managed by the SCS Equipment and Standards Team and will comply with their many established standards and practices by which the Southern Company electric system is governed. A few examples of these standards are attached.

Attachments:

[REDACTED]

3. Demonstrated experience of the entity or its affiliate, partner, or parent company to develop, construct, maintain, and operate transmission facilities. Including a list or other evidence of transmission facilities previously developed regarding construction, maintenance, or operation of transmission facilities both inside and outside of the PJM region

SP Transmission, as a newly formed entity, does not currently own any transmission facilities - it will rely on the experience and capabilities of its parent, Southern Power Company (SPC). SPC owns 50 facilities with over 11,920 MW of generating capacity and associated transmission/interconnection assets across 13 states. See <https://www.southernpowercompany.com/our-projects.html> for more details on each SPC project.

[REDACTED]

SPC's parent, Southern Company, and its affiliates own over 18,000 miles of high voltage transmission lines and more than 1,100 high voltage transmission substations. Southern Company and its affiliates have constructed or managed construction of most of these facilities. Southern Company's subsidiaries include seven state regulated electric or gas utilities, as well as a host of wholesale and competitive, electric, natural gas, communications, and other various subsidiaries. Southern Company Services (SCS) provides support to all of these affiliates in the areas of finance, HR, IT, engineering, supply chain, risk management, safety, compliance, and a host of others.

[REDACTED] SPC will also draw from the knowledge and expertise of SCS in support of any SP Transmission projects.

[REDACTED]

[REDACTED]

SCS and its nearly 5,000 employees will support SPC's team in every aspect of the project and will bring their vast experience supporting Southern Company's retail operating companies' owned transmission systems, which are comprised of over 18,000 miles of transmission lines and more than 1,100 high voltage transmission substations. These systems have been planned, developed, financed, constructed, commissioned, owned, operated, and maintained almost entirely by Southern Company's affiliates over the past ~120 years and have been supported by SCS and various qualified external contractors.

[REDACTED]

[REDACTED]

- Southern Company operations [SCS Bulk Power Operations] has responsibility for more than 27,000 miles of transmission lines, 3,700 substations, and 300,000 acres of ROW: <https://www.southerncompany.com/about-us/our-business/transmission.html>.
- From 2008-2011, Southern Company invested \$2.3 billion in transmission assets (lines and substations) and distribution substations, which is managed in conjunction with transmission at Southern Company [SCS Transmission]: <https://www.southerncompany.com/about-us/our-business/transmission.html>
- Southern Company currently has over \$10.8 Billion of transmission "Gross Plant in Service" that is included in its transmission service rates, per its OASIS site: [https://www.oasis.oati.com/woa/docs/SOCO/SOCODocs/2020 Informational Filing Customer Presentation FINAL.pdf](https://www.oasis.oati.com/woa/docs/SOCO/SOCODocs/2020%20Informational%20Filing%20Customer%20Presentation%20FINAL.pdf)
- Southern Company's Capital Investment plan includes approximately \$13 Billion in "wires" [transmission and distribution] investment from 2020-2024. See slide 13 and 22 from 2019 Q4 Earnings Call at: https://s2.q4cdn.com/471677839/files/doc_financials/2019/q4/SO-2019-Q4-Earnings-Call-Final-Post-at-1PM.pdf. SCS is providing support on every project represented in this plan.
- Southern Company's 10 year expansion plans over the past several years are available on the SERTP website at the following links. This represents many projects that have been completed over the past few years as well as a listing of projects underway and planned over the next 10 years. This is only a selection of projects that SCS determined would be of interest to SERTP stakeholders and does not represent a full list of all projects completed. As was the case for all projects listed above, SCS supports the retail operating companies on each and every one of these projects. To identify Southern Company affiliate projects, for reports dated 2009-2013, all projects not under the Power South or SMEPA headings are Southern Company projects; for years 2014 and later, look for projects listed under the SOUTHERN Balancing Authority header.
 - http://www.southeasternrtp.com/docs/general/2009/dec4/SERTP_10_YR_EXP_PLAN.pdf
 - [http://www.southeasternrtp.com/docs/general/2010/Ten Year Transmission Expansion Plan.pdf](http://www.southeasternrtp.com/docs/general/2010/Ten%20Year%20Transmission%20Expansion%20Plan.pdf)
 - [http://www.southeasternrtp.com/docs/general/2011/2011 Ten Year Transmission Expansion Plan.pdf](http://www.southeasternrtp.com/docs/general/2011/2011%20Ten%20Year%20Transmission%20Expansion%20Plan.pdf)
 - <http://www.southeasternrtp.com/docs/general/2012/SERTP%2010%20Year%20Expansion%20Plan.pdf>
 - <http://www.southeasternrtp.com/docs/general/2013/2013%2010%20Year%20Expansion%20Plan.pdf>

- o <http://www.southeasternrtp.com/docs/general/2014/2014RegionalTransmissionPlanInputAssumptionsOverview.pdf>
- o <http://www.southeasternrtp.com/docs/general/2015/2015%20SERTP%20Regional%20Transmission%20Plan%20-%20Input%20Assumptions.pdf>
- o <http://www.southeasternrtp.com/docs/general/2018/2018-SERTP-Regional-Transmission-Plan-and-Input-Assumptions.pdf>
- o <http://www.southeasternrtp.com/docs/general/2018/2018-SERTP-Regional-Transmission-Plan-and-Input-Assumptions.pdf>
- o <http://www.southeasternrtp.com/docs/general/2018/2018-SERTP-Regional-Transmission-Plan-and-Input-Assumptions.pdf>
- o <http://www.southeasternrtp.com/docs/general/2019/2019-SERTP-Regional-Transmission-Plan-and-Input-Assumptions.pdf>
- o <http://www.southeasternrtp.com/docs/general/2020/2020-SERTP-Preliminary-10-Year-Expansion-Plans.pdf>

Construction oversight and project management for SP Transmission's projects will be provided by SPC, with support from SCS and other Southern Company resources. To reiterate, Southern Company and its affiliates who own, operate, and maintain an extensive high voltage system, as described above, and have constructed or managed construction of the vast majority of these facilities. SPC also has constructed or managed construction of many of their generating facilities and associated transmission facilities. Contractors will likely be utilized for most physical construction activities and will be managed through the Supply Chain, Safety and Risk Management, and other standard SPC and Southern Company processes that are described throughout this application and attachments. Detailed construction plans will be project specific based on the unique aspects and challenges of each project.

Attachments:



4. Previous record of the entity or its affiliate, partner, or parent company to adhere to standardized construction, maintenance and operating practices

As discussed in response to Questions 2 and 3, SPC and SCS have an extensive record of successfully developing, constructing, commissioning, operating, and maintaining transmission facilities. Also, the response to Question 8 shows some statistics around SPC's excellent operational capabilities. These successes are in large part due to Southern Company's and its affiliates' rigorous standards, guidelines, policies, best practices, and other similar programs, as described in more detail in response to Question 5, below.

Southern Company, and SPC in particular, have an excellent record of completing quality projects on time and within budget, safely. As discussed in response to Question 8, Southern Company, and SPC in particular, also have excellent records of high reliability and operational excellence.

One measure of SCS/SPC's record of adhering to standardized practices is through its record of complying with NERC standards. Affiliate-owned transmission facilities are generally maintained according to Southern Company corporate maintenance and testing programs that follow common industry practices and includes both time-based and condition-based maintenance activities. Programs are reviewed periodically to address lessons learned, technology improvements, and industry best practices. Equipment outages are reviewed to determine root cause and corrective action plans are developed and implemented to prevent recurrence, as appropriate. Maintenance activities (including repair and

replacement) are scheduled and tracked via an in-house maintenance management tool ensuring that maintenance intervals adhere to NERC requirements. Southern Company has successfully demonstrated compliance with NERC requirements for inspection and maintenance of transmission facilities in multiple audits. Public versions of previous reports are available on the NERC website via the following link: [Regional Audit Reports](#).

SPC utilizes the Southern Company corporate internal compliance program (ICP) which is documented in an Ethics & Compliance Framework document. The ICP is designed to meet or exceed the seven due-diligence elements of an effective compliance program defined in the Federal Sentencing Guidelines for Corporations enacted in 1991 and subsequent amendments. Southern's ICP is reviewed periodically and approved by the Southern Company Ethics and Compliance Council. The ICP is also widely disseminated to employees via the intra-company web.

Regulatory responsibilities are identified and communicated to personnel responsible for executing the activities associated with the requirements. Annual NERC training specific to the business units is developed and delivered via live or web-based sessions. Compliance oversight is conducted at both the business unit and corporate levels, and all NERC Requirements are subject to monitoring and testing according to the corporate NERC Internal Controls program.

Southern Company is collectively registered for eleven NERC functions in nine separate registrations. Functions performed include the reliability functions of Balancing Authority, Reliability Coordinator and Transmission Operator. Since 2007, Southern Company has participated in 26 audits involving six Regions encompassing both CIP and O&P Standards. O&P audit results generally resulted in no findings or minor findings resulting in Recommendations and Concerns.

Southern has self-reported several possible NERC violations of O&P Standards that resulted in enforcement action in the SERC and FRCC Regions. Examples include violations of FAC-003, FAC-008, PRC-005 and VAR-002. All of the issues were determined to pose minimal to moderate risk and were effectively mitigated. None of the violations revealed systemic issues with Southern's internal compliance program.

The amount of transmission facilities subject to NERC compliance include:

- 18,350 miles of transmission line
- 1,150 transmission substations

Attachments:



5. Capability of the entity or its affiliate, partner, or parent company to adhere to standardized construction, maintenance and operating practices

SP Transmission will utilize and supplement SPC and Southern Company's existing standards and practices. Project management will be led by SPC's Transmission and EPC departments and will rely on SPC's existing standards and practices for project management. Engineering, material, and construction standards and practices for transmission facilities are managed by the SCS Equipment and Standards Team and will comply with their many established standards and practices by which the Southern Company electric system is

governed [REDACTED]

During project development and construction, detailed schedule, budget, site safety plan, and standards or practices addressing any unique engineering, material, or construction considerations will be developed and documented specifically for each project. Project schedule, budget, and performance will be tracked consistently, and weekly and monthly status reports will be produced (see attached example project schedule and weekly/monthly status reports). Specific procedures will also be developed for managing contractors [REDACTED] and detailed commissioning plans will be developed for each [REDACTED]

Regarding operations, the operation of SP Transmission's facilities will be handled by either SPC's Remote Operation Center, Southern Company Transmission's Power Control Center, or by a third-party operator. In either case, the facilities will be operated by qualified personnel who adhere to standard operating practices and have experience preparing and responding to emergency operating conditions. In addition, oversight and management of any of the above options including any associated potential 3rd party contracts will be managed by the Generation Support Manager. Southern Company has experience operating and maintaining over 18,000 miles of high voltage transmission lines and over 1,100 high voltage transmission substations. SCS - Transmission performs the functions of Transmission Operator, Balancing Authority and Reliability Coordinator for a large portion of the southeastern United States.

As required in NERC Reliability Standard PER-003-2, SCS-Trans's system operators performing the reliability-related tasks of the Reliability Coordinator, Balancing Authority and Transmission Operator are certified through the NERC System Operator Certification Program. Certifications are maintained through continuing education utilizing both internal training administered by SCS Bulk Power Operations Training staff and external training and workshops. System operator competency is evaluated per PER-003-2, Requirement R1, subparts 1.1.1 to 1.1.8 by qualified training staff prior to release to shift. SCS Transmission's operator training program meets or exceeds the requirements of NERC Reliability Standard PER-003-2 and has been characterized by SERC auditors as best-in-class. [REDACTED]

The control center will have the capability for monitoring, controlling, and communicating operational information to ensure full visibility of the TOP area and neighboring TOP areas. Existing policies will be utilized for the control center to ensure the identification, security, and management of electronic and physical assets in a controlled manner and to comply with applicable company policies, industry practices, and federal regulations, including NERC CIP requirements. The established plan for continued operations, as a result of a loss of its primary control center, includes backup functionality, not dependent on primary functionality, to perform the required TOP functions including monitoring, control, logging, and alarming of the transmission system facilities within the TOP area consistent with NERC regulatory requirements. The appropriate data to assess Availability Measures performance based upon Forced Outage records will be retained and reported as required (all forced outages will be documented, including the date, start time, end time, affected Transmission Facility, and the probable cause(s) if known, and saved for annual reporting purposes).

Southern Company's operations and maintenance practices have resulted in Southern being an industry leader in SAIDI, SAIFI, and EFOR, as described in response to Question 8, below.

Maintenance of SP Transmission's facilities will be done according to Southern Power Company Transmission Facilities Inspection and Maintenance Guidelines [REDACTED] as well as other relevant Southern Company maintenance procedures. These procedures will be enhanced or modified as needed to accommodate any specific equipment that may be a part of any SP Transmission project. [REDACTED]

[REDACTED] SP Transmission will retain local personnel to provide timely response to any

facility failures or emergencies and will also have the resources of SPC and Southern Company available for support, as needed.

Regarding safety, SP Transmission will adhere to Southern Power Company (SPC)'s Safety and Health Management System (SHMS), which details SPC's safety philosophy and lays out guidelines and procedures of how SPC and its subsidiaries operate. [REDACTED]. This document discusses roles and responsibilities of SPC personnel, risk identification and management processes, maintenance of a safety focused culture, design, procurement, contractor selection and management, as well as many other related topics.

[REDACTED]

[REDACTED]

[REDACTED]

Attachments:

[REDACTED]

[REDACTED]

6. Financial statements of the entity or its affiliate, partner, or parent company. Please provide the most recent fiscal quarter, as well as the most recent three fiscal years, or the period of existence of the entity, if shorter, or such other evidence demonstrating an entity's current and expected financial capability acceptable to the Office of the Interconnection

[REDACTED]

[REDACTED]

As a recently formed entity with no assets currently on its balance sheet, SP Transmission, LLC does not yet have audited financial statements. Financial statements for SP Transmission's parent, Southern Power Company (SPC) - who is providing financial backing for SP Transmission, are available at the following link: <https://investor.southerncompany.com/information-for-investors/investor-information/sec-filings/default.aspx>.

SP Transmission itself does not yet have credit ratings from the major agencies, but its parent, Southern Power Company (SPC) - who is providing financial backing for SP Transmission, is a leading U.S. wholesale energy provider with over 11,800 MW of generating capacity and associated transmission infrastructure across 13 states and maintains investment grade credit ratings at all three major rating agencies (S&P - BBB+, Moody's - Baa1, and Fitch - BBB+) - the latest credit reports are attached.

There have been no bankruptcy declarations or material defaults of Southern Company or any of its subsidiaries (including Southern Power Company and SP Transmission) in the past five years. SP Transmission has had no dissolutions, mergers, or acquisitions in its history. All information about recent dissolutions, mergers, and acquisitions for the parent are referenced in its annual and quarterly SEC filing information which can be viewed at the following link:

<https://investor.southerncompany.com/information-for-investors/investor-information/sec-filings/default.aspx>.

Attachments:

[REDACTED]

7. Commitment by the entity to execute the Consolidated Transmission Owners Agreement, if the entity becomes a Designated Entity

SP Transmission commits to execute the Consolidated Transmission Owners Agreement if SP Transmission becomes a Designated Entity.

Attachments:

[REDACTED]

8. Evidence demonstrating the ability of the entity to address and timely remedy failure of facilities

SP Transmission will address and remedy any equipment failures in a timely and efficient manner. [REDACTED]

[REDACTED] *SP Transmission projects will have key spares on site where practical. Specific emergency response plans will be developed for each project or group of projects based on the specific project needs and requirements of the ISO and neighboring Transmission Owners.*

[REDACTED] *any SP Transmission plan would [REDACTED] describe the operations, monitoring, and local emergency response resources that will be utilized and will describe the responsibilities and expectations for each resource. In event of a failure, a thorough investigation will be completed and appropriate corrective actions will be [REDACTED]*

SP Transmission will retain local personnel to provide timely response to any facility failures or emergencies and will also have the resources of SPC and Southern Company available for support, as needed.

Southern Company is an industry leader in storm restoration and in swiftly handling unexpected repairs such as power transformer and major generation equipment failures. With decades of experience Southern Company has developed exceptional engineering, construction, maintenance, and logistical resources along with a large supply chain and spare equipment network to quickly and efficiently meet our customers' needs.

SPC has owned, operated, and maintained a large generating fleet, including associated transmission lines and substations for over a decade and has quickly responded to any equipment failures to restore service as quickly as possible. These failures include two large generator step-up transformer failures that SPC was able to replace with shared Southern Company spares that were in stock and quickly replace the spares due to Southern Company's strong relationships, reserved production slots, etc... with multiple suppliers.

Southern Company's operations and maintenance practices have resulted in Southern and its affiliates being industry leaders in SAIDI, SAIFI, and EFOR. [REDACTED]

[REDACTED]

Attachments:



9. Description of the experience of the entity in acquiring rights of way

Engineering and design will be supported and reviewed by SP Transmission, leveraging various SCS Transmission groups, including Substation Physical Design, Substation Electrical Design, Transmission Line Design, Protection & Control, and Civil Design, as well as any other relevant support groups – see section “SCS Transmission Team” in attachment “Question 2 - Bios of Key Southern Company Individuals.pdf” for more specific experience of key team members in these areas. Surveying will be completed by local contractors and reviewed by SPC Site Development with appropriate SCS support.

Routing and siting of all SP Transmission Projects will be managed by SPC personnel [REDACTED]. Over the previous two plus decades, the SPC organizations have successfully developed and constructed dozens of \$100 Million+ wholesale generation projects and associated transmission infrastructure. Local consulting resources will be retained by SP Transmission to support real-estate acquisition, permitting, environmental evaluation, and similar activities, where appropriate.

SP Transmission’s Transmission Planning analysis and project scoping will be led by SPC’s Transmission team [REDACTED]. The Transmission team will also utilize support from the broader Southern Company team as needed.

Public outreach is handled by SPC’s Communications department. The public outreach plan for each project varies significantly based on the nature of the project and the communities that will be impacted.

As described in response to Questions 2 and 3 above, SPC and SCS have extensive experience developing, constructing, operating, and maintaining transmission lines and substations, including acquiring, managing, and maintaining real estate and rights-of-way.

Attachments:

