



2021 Request for Proposals Wind & Solar RFPs Short-Term Capacity RFP

Bidders Technical Conference



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June 22, 2021

Disclaimer

THIS PRESENTATION IS A SUMMARY OF THE KEY FEATURES OF THE DRAFT RFPs AND NOT A COMPREHENSIVE REPRESENTATION OF THE DRAFT RFPs ISSUED ON 4/28/2021 OR ITS BIDDING REQUIREMENTS. THE DRAFT RFPs ISSUED ON 4/28/2021 OR SUBSEQUENT REVISIONS CONTROLS IN THE EVENT OF ANY CONFLICT BETWEEN THE RFPs AND THIS PRESENTATION OR ANY OTHER STATEMENTS MADE BY SWEPCO REPRESENTATIVES.

Agenda



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- Purpose
- Introduction to AEP
- Introduction to SWEPCO
- Wind & Solar RFPs
 - Overview
 - Proposal Evaluation Process
- Short-Term Capacity RFP
- Questions and Answers
 - Q&A Deadline: August 6, 2021
- Email Questions to: <u>SWEPCO2021RFP@aep.com</u>



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Purpose



- Southwestern Electric Power Company ("SWEPCO" or the "Company") is pursuing additional generation and short-term capacity resources via three Request for Proposals ("RFPs")
- Resources from these RFPs will support the Company's need for additional generation as a result of the recent announcement of upcoming retirements of owned generating capacity by the Company
- This need will be reflected in the Company's draft Integrated Resource Plan ("IRP") to be shared with stakeholders in an upcoming IRP stakeholder processes

Resource	Solar	Wind	Short-Term Capacity
Volume	up to 300 MW	up to 3,000 MW	 up to 200 MW in 2023/2024 up to 250 MW in 2025/2026/2027
Minimum Size	50 MW	100 MW	50 MW Blocks
Contract Type	Purchase & Sale Agreement	Purchase & Sale Agreement	Capacity Purchase Agreement
RTO /Location	Must interconnect to SPP <u>and</u> be located in the SWEPCO Service Territory	Must interconnect to SPP <u>and</u> be located in AR, LA, TX, OK, KS, MO	SPP
In-Service Date	by 12/15/2024 or 12/15/2025	by 12/15/2024 or 12/15/2025	N/A (Existing Resources)

Introduction to AEP



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American Electric Power



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The Premier Regulated Energy Company



Note: Statistics as of December 31, 2020 except for market capitalization as of June 7, 2021

Introduction to SWEPCO



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Retail Customers

	Residential	Commercial	Industrial	Other	Total
Arkansas	103,700	18,200	700	200	122,800
Louisiana	205,900	24,900	2,100	100	233,000
Texas	152,600	30,400	4,400	200	187,600
TOTAL	462,200	73,500	7,200	500	543,400

Source: https://www.swepco.com/lib/docs/company/about/SWEPCOFactSheet8-10-2020v1.pdf

Southwestern Electric Power Company

- SWEPCO is a unit of AEP
- SWEPCO operates in western AR, northwestern and central LA, East TX and the panhandle of North TX
- Headquarters in Shreveport, LA
- SWEPCO has been providing affordable, reliable electricity to customers since 1912

OPERATING INFORMATION

2019 Retail electric sales in megawatt-hours	17,496,061
2019 Wholesale sales in megawatt-hours	7,664,400
Average cost per kilowatt-hour (residential)	10.19 cents
2019 System peak megawatts (8-12-19)	4,727
Plant in service	\$6.71 billion
Total number of employees	

Source: https://www.swepco.com/lib/docs/company/about/SWEPCOFactSheet8-10-2020v1.pdf

Further Information on SWEPCO can be viewed at: www.SWEPCO.com





North Central Wind (NCW) Facilities



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- SWEPCO's share of NCW Facilities = 54.5% (809 MW)
 - Affiliate Public Service Company of Oklahoma's share = 45.5% (676 MW)
- North Central Wind consists of three wind facilities (1,485 MW)
 - Sundance (199 MW) went into service on 4/14/21
 - Maverick (287 MW) inservice date expected by 12/2021
 - Traverse (999 MW) inservice date expected between 12/2021- 4/2022



Further Information on North Central Wind can be viewed at: <u>https://www.swepco.com/clean-energy/renewable/plan</u>



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RFPs Overview (Wind & Solar)

Overview (Wind & Solar)



- SWEPCO is seeking Projects on a turnkey basis in which it will acquire all of the equity interests in the project company
 - Seller to design, develop, procure, build, construct, commission and start up complete project
 - Proposals that do not meet this criteria, including proposals for renewable energy power purchase agreements, will not be considered by SWEPCO

Requirement	Wind	Solar
Volume	Up to 3,000 MW	Up to 300 MW
Size (min.)	100 MW	50 MW
Design Life (min.)	30 Years	30 Years
Battery Storage Option	N/A	Yes
RTO / Location	SPP and located in AR, LA, TX, OK, KS, and MO	SPP and located in SWEPCO's service territory
SPP Requirement	SPP Definitive Interconnection System Impact Study required (§4.7.3)	Each Project must be active in SPP Queue 2018-002 or earlier (§4.7.3)
In-Service Date (by)	12/15/2024 or 12/15/2025	



- SWEPCO's decisions regarding the results of the RFP will be subject to the receipt of regulatory approvals from:
 - Arkansas Public Service Commission
 - Louisiana Public Service Commission
 - Public Utility Commission of Texas
 - Federal Energy Regulatory Commission
- The Company plans to submit a portfolio of Projects to the regulatory commissions described above for approval. In the event the entire portfolio is not approved, the Company may reduce the size of the portfolio accordingly by eliminating Project(s) from the portfolio
- Upon obtaining all regulatory approvals, SWEPCO would issue a notice to proceed (NTP) to move forward with the Project



RFP Timeline (§6.1)

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RFP Timeline		
Draft RFP Posted Online	April 28, 2021	
Bidders Technical Conference	June 22, 2021	
RFP Issued	June 28, 2021	
Notice of Intent	July 16, 2021	
Q&A Deadline	August 6, 2021	
Proposal Due Date	August 12, 2021	
Final Project Selection and Negotiation	October 15, 2021	
Execute Definitive Agreements	March 11, 2022	
File for Regulatory Approvals	March 26, 2022	
Required Regulatory Approvals	No later than March 27, 2023	
Notice to Proceed	No later than April 28, 2023	
Commercial Operation Date	No later than December 15, 2024	
Alternative Commercial Operation Date	No later than December 15, 2025	

RFP Website Structure



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General RFP information posted at Website: www.SWEPCO.com/rfp



ENERGY PROVIDER RFPS

2021 Accredited Deliverable Capacity RFP

Southwestern Electric Power Company (SWEPCO), an American Electric Power company, has made an informational filing with the Louisiana Public Service Commission (LPSC) associated with its plans to issue a Request for Proposals for capacity.

Learn more

2021 Solar Energy Resource RFP

Southwestern Electric Power Company (SWEPCO), an American Electric Power company, has made an informational filing with the Louisiana Public Service Commission (LPSC) associated with its plans to issue a Request for Proposals for solar resources.

Learn more

2021 Wind Energy Resource RFP

Southwestern Electric Power Company (SWEPCO), an American Electric Power company, has made an informational filing with the Louisiana Public Service Commission (LPSC) associated with its plans to issue a Request for Proposals for wind resources.

Learn more

RFP Website Structure



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2021 WIND ENERGY RESOURCE RFP

Southwestern Electric Power Company (SWEPCO), an American Electric Power company, has made an informational filing with the Louisiana Public Service Commission (LPSC) associated with its plans to issue a Request for Proposals for wind resources.

SWEPCO has issued this **Draft 2021 Wind PSA RFP** to obtain up to 3,000 megawatts (MW) of Wind Resources via multiple purchase and sale agreements (PSA) for purchase of 100% equity interest in the project companies selected.

Proposals will be evaluated based on criteria outlined in the final 2021 Wind PSA RFP. Projects must have a minimum name-plate rating of 100 MW and be operational by December 15, 2024 or December 31, 2025.

To qualify for consideration Wind Projects must interconnect to the Southwest Power Pool (SPP) RTO and be located in Arkansas, Louisiana, Texas, Oklahoma, Kansas or Missouri. Refer to the RFP for additional requirements (See Sections 4 and 9.1).

Proposals are due August 12, 2021. All proposal responses should be directed to the RFP Manager outlined in the RFP documents.

SCHEDULE

Draft RFP Posted Online: April 28, 2021 Bidders Technical Conference: June 22, 2021 RFP Issue Date: June 28, 2021* Notice of Intent: July 16, 2021 Q&A Deadline: August 6, 2021 Proposal Due Date: August 12, 2021 Final Selection and Negotiation: October 15, 2021 Execute Definitive Agreements: March 11, 2022 File for Regulatory Approvals: March 26, 2022 Required Regulatory Approvals: No later than March 27, 2023 Notice to Proceed: No later than April 28, 2023 Commercial Operation Date: No later than December 15, 2024 or December 15, 2025 *The above schedule is subject to review and approval by the LPSC Staff.

DOCUMENTS

📕 News Release

Draft 2021 Wind PSA RFP

Joint Notice of LPSC Staff and the Southwestern Electric Power Company's Technical Conference

Bidders Technical Conference – The Bidders Technical Conference presentation will be posted in this location at a later date

BIDDERS TECHNICAL CONFERENCE

Bidders Technical Conference has been delayed to June 22, 2021. Place: Webex Event. Please email swepco2021rfp@aep.com for details.

Q&A

Questions should be directed via email to: SWEPC02021RFP@aep.com.



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RFP Details



Wind Resources (§4.6.3)

- Bidders shall include a robust wind resource analysis/study prepared by an independent consultant, which shows the expected energy output from the Project utilizing the turbines that will be used for the Project (Appendix G)
- During the Company's evaluation process, Bidders will be required to provide additional site information including raw meteorological data and met tower maintenance records to the Company for use by the Company's independent wind resource consultant

Solar (§4.6.3)

- Bidders are required to submit all required Solar Resource Information (Appendix G)
 - Proposal must provide the source and basis of the solar irradiance data used in the development of energy projections for the Project.
 - <u>NEW:</u> Bidder must supply the Project Layout along with the contour and elevation data in CAD format



- The Proposal must identify the Project's proposed transmission interconnection point(s) within SPP, including any studies, applications, line extensions and system upgrades identified as part of the interconnection approval process
- The Bidder is responsible during the Project start-up period for following the established SPP, NERC, and transmission operator policies and procedures that are in effect regarding facility interconnection and operation associated with a utility's transmission system
- Interconnection Status:
 - Wind: Each Project must have a completed SPP Definitive Interconnection System Impact Study (DISIS) with the demonstrated ability to achieve commercial operation of any interconnection for the full output of the Project by the Commercial Operation Deadline
 - Solar: Each Project must be active in SPP Queue 2018-002 or earlier. Projects in later queues will not be able to participate in this RFP

Bid Price and Structure (§5.1-5.2)



- Proposal pricing must be for the Company's acquisition of a turnkey Project that is a complete and commercially operable integrated wind or solar powered electric generating plant designed for a minimum of a 30-year life.
- The Proposal Bid Price shall include, but is not limited to:
 - Wind Projects: wind turbine generators, balance of plant equipment, operations and maintenance ("O&M") facilities, SCADA, and all facilities required to deliver energy into SPP. The turbines for the Project must be manufactured by GE, Vestas or Siemens-Gamesa
 - Solar Projects: solar modules, tracking system, balance of plant equipment, operations and maintenance facilities (if applicable), SCADA and all facilities required to deliver energy into SPP. The Project's solar modules and inverters must be included on the approve list contained in the AEP Solar Generation Facility Standard
 - Warranty: a minimum of two-year comprehensive warranty from a creditworthy entity for all balance of plant equipment including design, labor and materials, and fitness for purpose
 - Post-commercial operation testing activities and associated costs, including the installation / removal of any temporary test met towers (as applicable)
 - All transmission and interconnection facilities required for the Project, including system or network upgrades, as required by SPP for the Project to interconnect to SPP at the point of interconnect

Form Purchase & Sale Agreement



- Notice To Proceed (NTP) subject to receipt of all Regulatory Approvals
- Buyer to purchase 100% of project company exclusively holding all Project assets
- Closing
 - Wind: 100% payment at closing/substantial completion
 - Solar: 80% payment at mechanical completion; 18% at substantial completion (COD); and 2% at final completion
- Major equipment (e.g. wind turbine, modules and inverters) warranties will be direct assignment through to SWEPCO
- Seller to provide full 2-year warranty for all balance of plant equipment
- Seller to provide credit support for all obligations under PSA
- Customary Seller Covenants, Representations and Warranties

Proposal Content Requirement



- All Proposals must provide concise and complete information as provided in the RFP
- The Bidder is encouraged to provide as much information as possible to aid in the evaluation of the offer
- Appendix J Proposal Content Check List Sheet
 - Appendix A (Project Summary)
 - Appendix B (Bidder's Credit-Related Information)
 - Appendix C (Bidder Profile)
 - Appendix D (Form Purchase and Sale Agreement)
 - Appendix E (AEP Wind (Solar) Generation Facility Standards)
 - Appendix F (AEP Requirements for Connection of Facilities)
 - Appendix G (Wind (Solar) Resource Analysis / Study)
 - Appendix H (Project Land Lease / Decommissioning Costs)
 - Appendix I (O&M Services Proposal optional)



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RFP Proposal Evaluation (Section 9)

Evaluation Process



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Economic Analysis (§9.2.1)

Eligibility & Threshold – WIND (§ 9.1)



WIND RESOURCES

 Project must have demonstrated a clear path toward constructability (land rights, permits, etc.) and be capable of achieving commercial operation by the Commercial Operation Deadline (December 15, 2024 or alternatively December 15, 2025) (§4.2); 	 Project's wind turbine generators must be manufactured by GE, Siemens-Gamesa, or Vestas; and include a Cold Weather Package (§4.6.2);
 Project's minimum name-plate rating is 100 MW (§4.3); 	 Project must have a minimum design life of at least 30 years (§4.6.2)
3. Project must be interconnected to SPP (§4.4), have a completed SPP Definitive Interconnection System Impact Study (§4.7.3), and remain active in the queue process with the demonstrated ability to achieve commercial operation of any interconnection for the full output of the Project by the Commercial Operation Deadline;	8. Bidder must have completed the development, construction, financing, and commissioning of a similar-sized wind project in the United States or Canada and/or otherwise have demonstrated appropriate experience;
 Project must be physically located in Arkansas, Louisiana, Texas, Oklahoma, Kansas or Missouri (§4.5); 	9. Bidder's exceptions to the Form PSA, considered individually or in the aggregate, are minimally acceptable to the Company as a basis for further discussions.
5. Bidder has substantial Project site control (§4.6.1);	

<u>ONLY</u> projects that meet the Eligibility & Threshold Requirements will move to the "Detailed Analysis" phase of the RFP

Eligibility & Threshold – SOLAR (§ 9.1)



SOLAR RESOURCES

1. Project must have demonstrated a clear path toward constructability (land rights, permits, etc.) and be capable of achieving commercial operation by the Commercial Operation Deadline (December 15, 2024 or alternatively December 15, 2025) (§4.2);	 Project must have a minimum design life of at least 30 years (§4.6.2);
2. Project's minimum name-plate rating is 50 MW (§4.3);	 Project's module and inverter manufacturers must be included in the AEP Solar Generation Facility Standard (§4.6.2);
3. Project must be interconnected to SPP (§4.4), be active in SPP Queue 2018-002 or earlier (§4.7.3), and remain active in the queue process with the demonstrated ability to achieve commercial operation of any interconnection for the full output of the Project by the Commercial Operation Deadline;	8. Bidder must have completed the development, construction, financing, and commissioning of a similar-sized solar project in the United States or Canada and/or otherwise have demonstrated appropriate experience;
 Project must be physically located in SWEPCO's service territory (§4.5); 	9. Bidder's exceptions to the Form PSA, considered individually or in the aggregate, are minimally acceptable to the Company as a basis for further discussions.
5. Bidder has substantial Project site control (§4.6.1);	

<u>ONLY</u> projects that meet the Eligibility & Threshold Requirements will move to the "Detailed Analysis" phase of the RFP



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Detailed Analysis (§9.2)

Economic Analysis (90%)

- LCOE (levelized cost of energy)
- Transmission Congestion (the cost of Transmission Congestion as determined by the Company's Transmission Congestion Screening Analysis)
- Levelized Adjusted Cost of Energy (LACOE) = LCOE + cost of transmission congestion and losses to the AEP West load zone
- Levelized Net Revenue Requirement = Net SPP Revenues LACOE

Non-Price Factors (10%)

- Project's (including associated transmission and interconnection facilities) impact on wildlife, the environment and identified cultural resources
- Project's (including associated transmission and interconnection facilities) location on or proximity to tribal or government lands
- Bidder's exceptions to the AEP Solar/Wind Generation Facility Standards
- Bidder's exceptions to the Form PSA
- Development status of the Project including, but not limited to, permitting, transmission and interconnection facilities and constructability



Final Selection (Wind and Solar)

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Final Project Selection

- Based upon the results of the Economic Analysis (90%) and the Non-Price Factor Analysis (10%) described previously, the Company will determine which Projects will be included in the final selection
- The Company will notify Bidders whether or not their Proposal has been selected and negotiation of definitive agreements will commence with Bidders whose Proposals have been selected







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Short-Term Capacity RFP

Overview



- SWEPCO is seeking purchases of electric capacity from generating resources within the Southwest Power Pool ("SPP") that will allow SWEPCO to satisfy its load and planning reserve obligations.
- The Short-Term Capacity RFP seeks SPP Accredited Deliverable Capacity (50 MW minimum) for:
 - up to 200 MW for planning years 2023 and 2024, and
 - up to 250 MW for planning years 2025, 2026 and 2027
 - Proposals that provide the ability to align with the increasing need over the timeframe above could be advantageous
- A Base Proposal meeting the criteria above is required; however, alternate proposals will be considered
- Delivery of capacity will begin June 1, 2023, subject to regulatory approval

Overview (continued)



- The generating resource must have accredited capacity that satisfies the qualifications for Deliverable Capacity in Attachment AA of the SPP Open Access Transmission Tariff.
- AEPSC will consider resources connected to the SPP transmission system and prefers locations electrically near the load zone for SWEPCO
- Resources located in SPP portions of Arkansas, Louisiana, and Texas are desirable
- Capacity from resources outside of SPP must have firm transmission to SPP
- Resources must be registered in the SPP Integrated Marketplace
- Credit & Collateral Requirements See §8.4 of the RFP
- Timeline: Same as the Wind & Solar RFPs (see slide 12)

Proposal Content (Section 8)



- All Proposals must provide concise and complete information as provided in the RFP
- The Bidder is encouraged to provide as much information as possible to aid in the evaluation of the offer
- Bidder's proposal shall include an executive summary of the Proposal characteristics and timeline (as applicable), including any unique aspects
- RFP Appendices
 - Appendix A Proposal Summary
 - Appendix B Bidder's Credit & Collateral Requirements
 - Appendix C Bidder Profile
 - Appendix D Confirmation Letter



Evaluation Process (Section 9)

- Initial review of proposals Bidder may be required to provide additional information to ensure Bid is complete
- Eligibility & Threshold
 - Generating resource must have accredited capacity that satisfies the qualifications for Deliverable Capacity (See RFP §3.3);
 - The minimum capacity bid must be 50 MW (See RFP §3.4);
 - Each Bidder must submit at least one Proposal from each generating resource (see RFP §3.4);
 - Resources located outside of the SPP region must include firm transmission service to the SPP transmission system (See RFP §4.1).
- Economic Analysis (90%)
- Non-Price Analysis (10%)
 - The Non-Price evaluation will include an assessment of areas such as contract risks and benefits, locational benefits, likelihood of transmission availability, resource diversity and project development risks.



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Questions and Answers

All questions regarding the RFPs should be submitted to: <u>SWEPCO2021RFP@aep.com</u>



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The End