1. Purpose:

- **1.1.** Pedernales Electric Cooperative ("PEC" or "Cooperative"), in its mission, is committed to provide low-cost, reliable and safe energy solutions for the benefit of our members. The purchase of electricity is required to satisfy PEC's obligations to its members and to manage PEC's Electric Energy Requirements.
- 1.2. The purpose of the Power Supply and Energy Management Policy ("Policy") is to establish a Power Supply and Energy Management ("PSEM") Program ("Program") to manage PEC's Electric Energy Requirements with acknowledgment of the significant cost expenditures and cost fluctuations inherent with power suppliers or directly with fuel and power markets.

2. Scope:

- **2.1.** This Policy governs the activities used to manage PEC's Electric Energy Requirements.
- **2.2.** This Policy governs the planning, management, reporting, and oversight of PEC's Program.
- **2.3.** This Policy governs the management of PEC power supply resources and existing and future power supply contracts.
- 2.4. This Policy governs the actions required by PEC as a Load Serving Entity ("LSE") in the Electric Reliability Council of Texas ("ERCOT") including but not limited to establishing and maintaining registered Qualified Scheduling Entity ("QSE") services and assuring compliance with ERCOT protocols and operating guides.
- **2.5.** This Policy governs the actions required by PEC as a Resource Entity ("RE") in ERCOT including but not limited to establishing and maintaining registered QSE services and assuring compliance with ERCOT protocols and operating guides.

3. Definitions:

The definitions below are commonly utilized by power industry professionals in describing the ERCOT energy market and energy transactions. The definitions are to clarify this Policy and may not align with other uses of the terms.

- **3.1.** Ancillary Service is a service necessary to support the transmission of energy to LSEs while maintaining reliable operation of the transmission system.
- **3.2.** Congestion Revenue Rights <u>("CRRs")</u> is a financial instrument that results in a charge or a payment to the owner of the instrument, when the ERCOT transmission grid is congested.
- **3.3.** Cost of Power is the cost to PEC to meet the Electric Energy Requirements.
- **3.4.** Electric Energy Requirements means all electric energy consumed by the Cooperative and Ancillary Services that are required to meet PEC members' energy requirements.
- **3.5.** Electric Reliability Council of Texas ("ERCOT") is a membership-based 501(c)(4) nonprofit corporation, governed by a board of directors and subject to oversight by the Public Utility Commission of Texas and the Texas Legislature. ERCOT performs the financial settlements for the competitive wholesale bulk-power market.

- 3.6. Load Serving Entity ("LSE") is an entity that sells energy to customers, members, or wholesale customers and that has registered as an LSE with ERCOT.
- <u>3.6.</u>
- 3.7. Market Participants is an entity that engages in any activity that is subject to the ERCOT Protocols. Examples of such entities include but are not limited to QSE, LSE, RE, transmission/distribution service provider ("TDSP"), and Renewable Energy Credit ("REC") Account Holder.
- <u>3.7.</u>
- **3.8.** Power Supply is a collective term used to refer to wholesale power purchases and sales.
- **3.9.** Power Supply and Energy Management Program ("Program") represents the execution strategy to manage PEC's Electric Energy Requirements and implement the Power Supply Plan.
- **3.10.**Power Supply Plan ("Plan") is a <u>PEC</u> Board <u>of Directors</u> approved plan that is updated annually and describes how PEC plans to meet its Electric Energy Requirements for the upcoming year.
- **3.11.**Power Supply Portfolio a grouping of contracts, resources and any other assets included in a Power Supply Plan to meet the Electric Energy Requirements.
- **3.12.**Power Supply and Energy Management Transactions ("PSEM Transactions") represents transactions, including purchases and sales to meet the Cooperative's Electric Energy Requirements and within the Plan.
- **3.13.**Qualified Scheduling Entity ("QSE") is a Market Participant that is qualified by ERCOT for communication with ERCOT on behalf of Resource Entities and LSEs for settling payments and charges with ERCOT.
- **3.14.**Renewable Energy Credit ("REC") is a tradeable instrument that represents all of the renewable attributes associated with one MWh of production from a certified renewable generator.
- 3.15.Resource Entity ("RĒ") is a Market Participant that owns or controls a resource that sells energy or ancillary services into the ERCOT market and is registered as an RE with ERCOT.
- **3.16.**Risk Tolerance is the degree of variability in the Power Supply Portfolio value that the Cooperative is willing to withstand.
- **3.17.**Transmission Cost of Service ("TCOS") is the cost incurred to utilize the transmission system to deliver power to PEC members within the ERCOT region.

4. Defined Objectives:

The implementation and maintenance of the Program enables PEC to create, protect, and enhance value for PEC members by undertaking activities to meet the following three objectives:

- **4.1.** Low Cost The Program will implement a Power Supply Plan that will strive to meet the Electric Energy Requirements at a low cost.
- **4.2.** Balance Risk The Program will implement a Power Supply Plan that will strive to meet the Electric Energy Requirements while balancing inherent risks associated with managing a Power Supply Portfolio.

4.3. Portfolio Diversity – The Program will implement a Power Supply Plan that will strive to meet the Electric Energy Requirements while assigning value to a diversified portfolio consisting of electrical energy from multiple suppliers, multiple fuel types, multiple sources, and with various contract lengths.

5. Power Supply and Energy Management Program:

The Program organizes and defines the design, oversight, and control of any transactions needed to implement the Power Supply Plan. The Program will consist of the following elements:

- 5.1. Policy Establishes the Program and provides for management and ongoing adjustments to the Program, and directs the execution of the annual <u>PEC</u> Board <u>of Directors</u> approved Power Supply Plan within the approved authority and thresholds.
- **5.2.** People Designated roles and individuals responsible for performing the processes and executing the strategy.
- 5.3. Processes Processes collectively refers to the defined plans and procedures that describe how the Cooperative will execute implementation of the Program. Processes and procedures will operate under a continual improvement approach to formally address lessons learned, reduce errors, and strive for operational efficiency while reducing risk.
- **5.4.** Tools The Program will utilize various tools such as software, hardware, third party contracts, vendors, and consultants as required.
- 5.5. Regulatory The Program will require registrations and other compliance items associated with ERCOT for the Cooperative as a Market Participant. These items will be actively managed and updated as required to implement the Power Supply Plan and meet the Policy's defined objectives. These registrations for the Cooperative may include, without limitation, registrations as a LSE and a RE.
- 5.6. Standard of Care All People involved in the Program will act responsibly as stewards of PEC resources. PSEM Transactions will be made using the exercise of judgment and care under the circumstances then prevailing, that persons of prudence, discretion and the intelligent exercise in the management of their own affairs, not in regard to speculation but in regard to the permanent disposition of their funds, considering the probable income as well as the probable safety of their capital.

6. Power Supply Plan:

The Power Supply Plan will define how the Cooperative anticipates fulfilling the members' Electric Energy Requirements for the upcoming year. The Plan will be presented to the <u>PEC</u> Board <u>of Directors</u> annually and will be consistent and in alignment with the annual budget cycle. The Plan will have the following major components:

- **6.1.** Forecast of the Cost of Power for at least a 12-month period.
- **6.2.** Dates that the Power Supply Portfolio will have an open position within a 12-month period.

- **6.3.** Strategy to fill any open positions in the Cooperative's Power Supply Portfolio within a 12-month period.
- **6.4.** Any expected delegation of authority needed to complete any PSEM Transactions approved by the <u>PEC</u> Board of <u>Directors</u> in the Power Supply Plan within a 12-month period.
- **6.5.** Recommendations of least-cost, risk adjusted Plan considering the trade-offs of the defined objectives in this Policy.

7. Procedure Responsibility:

- 7.1. General Roles and Responsibilities
 - 7.1.1. The <u>PEC</u> Board of <u>Directors</u> shall review, at least annually, the Program activities of PEC to ensure they are in accordance with this Policy; approve annually the Power Supply Plan; and review the effectiveness of the Program and make any changes to this Policy necessary to meet the Cooperative's defined objectives.
 - 7.1.2. The <u>PEC</u> Board <u>of Directors</u> will determine the Risk Tolerance of the Cooperative as to its Program.
- 7.2. PSEM Committee
 - 7.2.1. The <u>PEC</u> Board <u>of Directors</u> establishes a PSEM Committee in connection with the Program comprised of the following roles:
 - 7.2.1.1. Chief Operating Executive Officer ("CEO");
 - 7.2.1.2. Chief Operating Officer ("COO");
 - 7.2.1.3. Chief Financial Officer ("CFO");
 - 7.2.1.4. Controller;
 - 7.2.1.5. Vice President of Engineering;
 - 7.2.1.6. Vice President of Markets;
 - 7.2.1.7. Director<u>of</u>, Power & Energy Risk Management, Power Supply; and
 - 7.2.1.8. A <u>in-house</u> Legal designee to serve as a legal advisor to the PSEM Committee.
 - 7.2.2. The PSEM Committee is charged with administration of this Policy and is granted authority and responsibilities to:
 - 7.2.2.1. Ensure all Program activities of PEC are in accordance with this Policy, including implementation of a Plan within any approved limits of authority;
 - 7.2.2.2. Approve procedures for the administration of the Program;
 - 7.2.2.3. Oversee responsibilities and activities assigned to the Program;
 - 7.2.2.4. Recommend controls and periodically review the effectiveness of all aspects of the Program, in addition to the <u>PEC</u>Board<u>of</u><u>Directors</u>; and
 - 7.2.2.5. Retain outside advisors and organizations, if needed, to assist PEC in entering into PSEM Transactions.
 - 7.2.3. The Vice President of Markets shall be responsible for management of the Program including the continual evaluation of the ongoing ability of the

Program to meet the objectives established in this Policy and effectively deliver the Plan.

- 7.2.4. The Director of Power and Energy Risk Management shall be responsible for the day-to-day operations and execution of the Power Supply Plan.
- 7.2.5. The Vice President of Markets or the Director<u>of</u>, Power and Energy Risk Management will report at least quarterly to the other members of the PSEM Committee as to the following:
 - 7.2.5.1. Status of the Cooperative's Power Supply Portfolio as well as any proposed PSEM Transactions necessary to implement the Power Supply Plan;
 - 7.2.5.2. Status of the approved Power Supply Plan; and
 - 7.2.5.3. Status of the Power Supply and Energy Management Program.
- 7.2.6. The Vice President of Markets, or the Director of Power and Energy Risk Management will also report at least quarterly to any committee that oversees enterprise risk management ("ERM") of the Cooperative.

8. Monitor and Control:

- **8.1.** A member of the PSEM Committee will report at least quarterly to the PEC Board of Directors on the implementation of the approved Power Supply Plan. The report to the <u>PEC</u> Board of <u>Directors</u> will consist of the following:
 - 8.1.1. Program performance metrics;
 - 8.1.2. Updates on current and open Power Supply Portfolio positions;
 - 8.1.3. Market and pricing updates;
 - 8.1.4. Status updates on Plan activities;
 - 8.1.5. Updates on potential risks and uncertainties associated with the Plan; and
 - 8.1.6. Report on the implementation of the Plan within the authorization established in this Policy, the Plan itself, and the established Risk Tolerance.

8.1.6.8.1.7. Status on the Cost of Power and Cost of Power forecast

- **8.2.** A member of the PSEM Committee will also report at least quarterly to the PEC Board of Directors on the Cost of Power unless otherwise required, and the following additional controls apply to the Cost of Power:
 - 8.2.1. The Program will endeavor to continually quantify the forecasted impacts of changes in market conditions, and any other factors that may affect the Cost of Power, against the objectives established in this Policy and the approved Plan.
 - 8.2.2. The Program will maintain a 3-year rolling forecast of the Cost of Power.
 - 8.2.3.8.1.8. If an event or condition arises that may adversely affect the Cost of Power, a member of the PSEM Committee will report to the <u>PEC</u> Board <u>of</u> <u>Directors</u> on the issue or risk along with any recommended action.

9. Delegation of Authority and Approved Transaction Types:

9.1. The <u>PEC</u> Board of <u>Directors</u> approves the delegation of authority to the <u>CEO</u> or <u>CEO designee</u> to execute PSEM Transactions within the Power Supply Plan on an annual basis.

- **9.2.** Any PSEM Transaction that is not initially included within a Power Supply Plan will require <u>PEC</u> Board of <u>Directors</u> approval.
- **9.3.** The PSEM Transaction types and detail that will be included in the <u>PEC</u> Board <u>of Directors</u> approved delegation of authority that is part of each annual Power Supply Plan are as follows:
 - 9.3.1. Negotiating and execution of Master Power Purchase and Sale Agreements ("EEIs");
 - 9.3.2. Negotiating and executing confirmations as to EEIs within the <u>PEC</u> Board <u>of Directors</u> approved parameters on term length, credit requirements, volume and pricing;
 - 9.3.3. Negotiating and execution of Power Purchase Agreements ("PPAs") within the <u>PEC</u> Board of <u>Directors</u> approved parameters on term length, credit requirements, volume and pricing;
 - 9.3.4. Purchase of Ancillary Services;
 - 9.3.5. Sale of Ancillary Services;
 - 9.3.6. Sale of RECs; and
 - 9.3.7. Purchase of CRRs in connection with PPAs.
- **9.4.** Approval authority levels for invoices pertaining to Power Supply transactions is as follows. All invoices pertaining to Power Supply transactions must be signed by at a minimum of two of the positions listed.

Position	Limit
CFO	\$ 10,000,000 and
	above
VP of Markets	10,000,000
Director of Power Supply and Energy Risk Management	1,000,000

10. References and Related Documents:

- **10.1.** Authority and Responsibilities Policy
- **10.2.** Budget Policy
- **10.3.** Designation of Competitive Matters Policy
- **10.4.** Investment Policy
- 10.5. Rate Policy
- **10.6.** Power Supply Plan

11. Enforcement:

11.1. Violations of this Policy may result in disciplinary action, up to and including, termination.

12. Superseding Effect:

This Policy supersedes all previous policies and memoranda concerning the subject matter. Only the Approver may authorize exceptions to this Policy.

Policy Title:	Power Supply and Energy Management Policy
Review Frequency:	Every Three Years
Last Reviewed:	NA
Date Adopted:	XXXX, 2019
Effective Date:	XXXX, 2019
Amendment Dates:	
Approver:	Board of Directors
Applies to:	PEC Employees
Administrator:	Vice President of Markets
Superseding Effect	This Policy supersedes all previous policies and memoranda concerning the subject matter. Only the Approver may authorize exceptions to this Policy.