



June 7, 2016

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The Honorable Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street, N.E.
Washington, DC 20426

**RE: Docket No. AD16-16-000: Technical Conference on Implementation
Issues Under the Public Utility Regulatory Policies Act of 1978**

Prepared Statement of Jeff Burleson, Southern Company

Dear Secretary Bose:

Southern Company Services, Inc., acting as agent for Alabama Power Company, Georgia Power Company, Gulf Power Company, and Mississippi Power Company, hereby provides the Prepared Statement of Jeff Burleson, Vice President, System Planning, Southern Company, in accordance with the Supplemental Notice of Technical Conference issued in this proceeding on May 9, 2016. Mr. Burleson is a panelist participating in Panel 2: Avoided Cost Calculation during the Commission's technical conference to be held in this proceeding on June 29, 2016.

Thank you for your attention to this matter.

Sincerely,

/s/ Andrew W. Tunnell

Andrew W. Tunnell

Attorney for Southern Company Services, Inc.

OF COUNSEL

BALCH & BINGHAM LLP

Andrew W. Tunnell

1710 Sixth Avenue North

Birmingham, Alabama 35203

(205) 226-3439

atunnell@balch.com

**UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION**

**Technical Conference on Implementation Issues
Under the Public Utility Regulatory Policies Act of 1978**

Docket No. AD16-16-000

**Prepared Statement of Jeff Burleson,
Vice President, System Planning,
Southern Company**

June 29, 2016

I. Introduction

My name is Jeff Burleson and I am Vice President of System Planning for Southern Company. I appreciate the Federal Energy Regulatory Commission's (Commission's) efforts to focus on issues associated with the implementation of PURPA as well as the opportunity to participate on the Avoided Cost Calculations panel in this Technical Conference. My comments will focus on the avoided cost processes at work in the four states in which Southern Company's affiliates provide retail electric service, the array of avoided cost options available within the Southern Company Electric System, the economic risks to retail customers associated with paying long-term energy payments to Qualifying Facilities (QFs) based on projected avoided costs, and a recommended change to the implementation requirements for QF avoided energy cost payments.

Southern Company's retail electric service affiliates (Alabama Power Company, Georgia Power Company, Gulf Power Company, and Mississippi Power Company) reliably and economically serve 4.4 million customers throughout a 120,000-square-mile territory in Alabama, Florida, Georgia and Mississippi. Southern Company affiliates own and operate a diverse generation fleet comprising approximately 45,000 MW of generating capacity and a robust transmission system with over 27,000 miles of transmission lines. Southern Company's retail electric service affiliates are vertically integrated with a closely coordinated system of generation, transmission and distribution assets. Planning processes within Southern Company and its public utility subsidiaries rely on a combination of owned capacity and competitively procured long-term bilateral capacity contracts, firm physical transmission delivery service, firm fuel transportation, firm fuel supply, and natural gas storage. In addition, Qualifying Facilities (QFs),

in some cases, provide firm capacity resources that are incorporated into planning processes and system operations. The overall objective of these planning processes is to assure clean, safe, reliable and affordable electric service to customers. Complementary to existing state and federal regulatory oversight, Southern Company's public utilities utilize processes that place the best interest of customers at the heart of every business decision. These objectives and the careful planning, operation and close coordination of the Southern Electric System has continued to serve customers reliably and economically for many decades.

II. Executive Summary

In my statement, I am addressing details and support regarding four key topics:

1. Avoided cost processes are working in the four states in which Southern Company's affiliates provide retail electric service

Avoided cost processes are working well in the four states in which Southern Company's affiliates provide retail electric service. Processes for determining avoided cost are well-established and forward looking projections of avoided cost are made available to prospective QFs. Consequently, we continue to add QFs to the system.

2. The array of avoided cost options available within the Southern Company Electric System

There are a wide variety of avoided cost options available to QFs across the four state region in which Southern Company's affiliates provide retail electric service. For avoided energy payments, the QF may be paid through any one of a variety of options including the hourly avoided energy cost at the time the QF delivers energy, a year-ahead projection of avoided energy cost for all energy delivered in that year, and a long-term multi-year projection of avoided energy cost based on assumptions and fuel price forecasts that exist at the time a commitment is made to self-build generation or at the time a competitive solicitation for long-term bi-lateral wholesale capacity is concluded. For avoided capacity cost, QFs generally have the ability to be paid capacity payments starting with a year of capacity need at one of our retail utilities. Capacity payments are typically based on the avoided cost of a self-build peaking resource or the market price that results from a competitive solicitation for

capacity under a long-term power purchase agreement. For the latter, QFs may be given the option to receive a capacity payment based on a proxy capacity price that is tied back to the results of a capacity solicitation. QFs are also in some cases given options to be dispatchable or non-dispatchable.

3. The economic risks to retail customers associated with paying long-term energy payments to Qualifying Facilities (QFs) based on projected avoided costs

Dramatic and significant changes in the volatility of natural gas fuel prices and the make-up of the generation mix have occurred over the past ten to fifteen years. The changes in the natural gas markets have made it much more difficult to forecast future long-term natural gas prices over the past 15 years than had been the case previously. Additionally, the dramatic changes in combined cycle natural gas generation technology over the past two decades have changed the nature of the units that predominately set, or will set, avoided energy costs in the future. Taken together, the increased uncertainty around natural gas prices and the growing share of natural gas combined cycle generation have increased the risk of economic harm to retail customers associated with locking in long-term avoided energy cost payments based on projections of natural gas prices.

4. A recommended improvement to the requirements for QF avoided energy cost payments

The combination of increased uncertainty around natural gas prices and the growing share of natural gas combined cycle generation have increased the risk of economic harm to retail customers associated with locking in long-term avoided energy cost payments based on projections of natural gas prices and associated avoided electric energy costs. As a result, the Commission should consider removal of the requirement to give future QFs the option to select an avoided energy cost payment based on long-term projections of avoided energy costs.

III. Avoided cost processes are generally working in the four states in which Southern Company's affiliates provide retail electric service

Avoided cost processes established at the state level are based on the Commission's implementation of the Public Utilities Regulatory Policy Act of 1978 (PURPA) and the

associated responsibilities the Commission has placed upon the states. The state implementation of PURPA has, in some cases, evolved over time to address changes in markets or in response to identified needs. The state processes for determination of avoided costs are well defined within the four states in which Southern Company's retail electric service affiliates operate. These avoided cost processes are consistent with PURPA and are working well in the four states in which Southern Company's affiliates provide retail electric service. Consequently, Southern Company's retail affiliates have QFs ranging from very small to large and continue to add QFs today. The wide variety of the types of existing QFs, the size range of existing QFs and the continuing addition of QFs from which Southern Company's retail electric service affiliates purchase energy is evidence of how well the existing avoided cost processes are working. Nevertheless, avoided cost processes could be improved in our four states by eliminating the FERC requirement to make avoided energy cost payments to QFs based on long-term projections of avoided energy cost, as will be further discussed in section VI.

IV. The array of avoided cost options available within the Southern Company Electric System

While each state has implemented their PURPA responsibilities as they deem most appropriate, there are a wide variety of avoided energy cost options available to QFs across the four state region in which Southern Company's affiliates provide retail electric service. The assumptions and analyses used to develop avoided energy costs reflect the coordinated operation of the Southern Company Electric System power pool. The pool operation relies on the principle of economic dispatch based on actual variable cost of pool resources, regardless of ownership or fixed costs of the pool resources. This cost-based economic dispatch ensures that retail customers receive the lowest cost energy available in each hour. The hourly marginal costs associated with the pooled economic dispatch provide the foundation for calculation of avoided energy cost for QFs that sell to any Southern Company retail electric service affiliate, regardless of the state in which the QF is located. In some cases QFs are paid at the hourly avoided energy cost as determined for the hour in which the QF delivered energy or at the hour-ahead projection of avoided energy cost. In other cases, QFs may be paid based on a projected year-ahead, published avoided energy cost. In yet other cases, QFs may be paid based on projections of multi-year-ahead avoided energy cost for all energy delivered during the term of their QF

contract. For the multi-year-ahead avoided cost prices, the projected avoided energy cost is determined based on assumptions and fuel price forecasts that exist at the time a commitment is made to self-build generation or at the time a competitive solicitation for long-term bi-lateral wholesale capacity is concluded.

For avoided capacity cost, QFs generally have the ability to be paid capacity payments starting with a year of incremental capacity need at one of our retail utilities. The capacity payment would typically be based on the avoided cost of a self-build peaking resource or the market price that results from a competitive solicitation for capacity under a long-term power purchase agreement. For the latter, QFs may be given the option to receive a capacity payment based on a proxy capacity price that is tied back to the results of the capacity solicitation. QFs are also in some cases given options to be dispatchable or non-dispatchable although it is extremely rare for a QF to select the dispatchable option.

V. The economic risks to retail customers associated with paying long-term energy payments to Qualifying Facilities (QFs) based on projected avoided costs

Contracting to purchase energy from QFs at a fixed energy price that is based on long-term projections of avoided energy cost creates economic risks for retail customers and in some cases creates risks for the QF when the QF is also receiving capacity payments or has minimum energy delivery obligations. When energy payments to non-dispatchable QFs are based on long-term projections of avoided energy costs, it can create economic harm for retail customers. When actual avoided energy costs are lower than the long-term projected avoided costs embodied in a non-dispatchable QF contract, then retail customers are economically harmed as a result of payments the utility must make to the QF for each unit of energy delivered by the QF.

The potential for economic harm to retail customers associated with the requirement to lock in long-term projections of avoided energy cost are exacerbated by the dramatic and significant changes in the volatility of natural gas fuel prices and the make-up of the generation mix that have occurred over the past ten to fifteen years. The changes in the natural gas markets have made it much more difficult to forecast future long-term natural gas prices than had been the case previously. Additionally, the dramatic changes in combined cycle natural gas generation technology over the past two decades have changed the nature of the units that predominately set, or will set, avoided energy costs in the future. When coal, with its more stable commodity

price, was the dominant fuel for electricity generation, predicting long-term fuel costs was less challenging than it is today. Taken together, the increased uncertainty around natural gas prices and the growing share of natural gas combined cycle generation have increased the risk of economic harm to retail customers associated with locking in long-term avoided energy cost payments based on projections of natural gas prices.

There is also risk to the non-dispatchable QF of entering into a QF contract that provides energy payments based on fixed, long-term projections of avoided energy cost. It is not uncommon for a QF that has committed to providing capacity to have fuel or other production costs that unexpectedly increase. Under these circumstances, when the avoided energy cost payments from the utility are fixed based on a long-term forecast of fuel prices, the QF may lose money on every unit of energy they sell. Yet, because they are earning capacity payments they are obligated to continue delivering energy to the utility even at a loss.

VI. A recommended improvement to the requirements for calculation of QF avoided energy cost

The combination of increased uncertainty around natural gas prices and the growing share of natural gas combined cycle generation have increased the risk of economic harm to retail customers associated with locking in long-term avoided energy cost payments based on projections of natural gas prices and associated avoided electricity energy costs. There is a change that should be made to the PURPA avoided energy cost requirements that would mitigate or at least partially mitigate the economic risks to retail customers, while simultaneously ensuring QFs are not disadvantaged relative to other generation resources. This change is consistent with the Edison Electric Institute proposed change to §292.304(d) represented at this Technical Conference by Mr. Al Brogan. The change would generally acknowledge that QFs have the ability under current PURPA avoided cost requirements to earn capacity payments. Therefore, QFs can secure long-term fixed capacity revenue streams similar to a PPA seller. These long-term fixed capacity revenue streams provide the QF with certainty of a portion of their revenues so long as they perform under the terms and conditions of the contract and also enable the QF to be similarly situated to an Independent Power Producer in terms of the predictability of their revenues. In these cases, the avoided energy cost payment to the QF should be based on actual avoided energy cost at the time the QF delivers energy. These avoided

energy cost calculation changes would ensure that retail customers of the utility are not taking undue risks associated with long-term avoided energy cost projections while ensuring the QF is at least similarly situated to an Independent Power Producer in terms of their ability to secure financing for their project. The change can be made without the necessity of the QF having access to the wholesale market or competing in a wholesale market capacity solicitation or capacity auction.

VII. Summary

The avoided cost processes established at the state level in the four states in which Southern Company's retail affiliates operate are consistent with PURPA. The processes are working as intended, as evidenced by the fact Southern Company's retail affiliates have QFs ranging from very small to large and continue to add QFs today. The Commission's current requirement that utilities offer QFs the option to accept an avoided energy cost payment that is based on long-term projections of avoided energy costs places undue economic risks on retail customers due to the dramatic changes that have occurred in fuel markets and in generation technologies that either now, or will in the future, set marginal costs. The recommended change to pay QFs an avoided energy cost based on actual avoided energy costs at the time the QF delivers energy would substantially reduce the risk of economic harm to retail customers while maintaining a level of comparability between QFs and Independent Power Producers without the necessity for the QF having to have access to the wholesale market or compete in a competitive capacity solicitation or auction.