

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition to determine need for Seminole combined cycle facility, by Seminole Electric Cooperative, Inc.

DOCKET NO. 20170266-EC

In re: Joint petition for determination of need for Shady Hills combined cycle facility in Pasco County, by Seminole Electric Cooperative, Inc. and Shady Hills Energy Center, LLC.

DOCKET NO. 20170267-EC
ORDER NO. PSC-2018-0151-PHO-EC
ISSUED: March 19, 2018

PREHEARING ORDER

Pursuant to Notice and in accordance with Rule 28-106.209, Florida Administrative Code (F.A.C.), a Prehearing Conference was held on March 12, 2018, in Tallahassee, Florida, before Commissioner Gary F. Clark, as Prehearing Officer.

APPEARANCES:

GARY PERKO, BROOKE E. LEWIS, AND MALCOLM MEANS, ESQUIRES
Hopping Green & Sams, 119 South Monroe Street, Suite 300, Tallahassee, FL 32301
On behalf of SEMINOLE ELECTRIC COOPERATIVE, INC. AND SHADY HILLS ENERGY CENTER, LLC.

ROBERT SCHEFFEL WRIGHT AND JOHN T. LAVIA, III, ESQUIRES,
Gardner, Bist, Bowden, Bush, Dee, LaVia & Wright, P.A. 1300 Thomaswood Drive, Tallahassee, FL 32308
On behalf of QUANTUM PASCO POWER, L.P., MICHAEL TULK, AND PATRICK DALY.

RACHAEL DZIECHCIARZ AND CHARLES MURPHY, ESQUIRES, Florida Public Service Commission, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850
On behalf of the Florida Public Service Commission (Staff).

MARY ANNE HELTON, ESQUIRE, Deputy General Counsel, Florida Public Service Commission, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850
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Florida Public Service Commission General Counsel

I. CASE BACKGROUND

On December 21, 2017, the above referenced dockets were opened for the Public Service Commission's (Commission) review of the Petition for Determination of Need for Seminole Combined Cycle Facility, filed by Seminole Electric Cooperative, Inc. (Seminole) and the Joint Petition for Determination of Need for Shady Hills Combined Cycle Facility in Pasco County, filed by Seminole and Shady Hills Energy Center, LLC (SHEC) (collectively, Petitioners). Docket Nos. 20170266-EC and 20170267-EC were consolidated for hearing purposes by Order No. PSC-2018-0018-PCO-EC (Order Establishing Procedure), filed on January 5, 2018. The consolidated dockets were set for hearing on March 21 and 22, 2018.

On January 17, 2018, Michael Tulk and Patrick Daly filed a Motion to Intervene in both dockets. Quantum Pasco Power, L.P. (Quantum) also filed a Motion to Intervene in both dockets on January 17, 2018. On January 24, 2018, Order No. PSC-2018-0062-PCO-EC was issued granting Michael Tulk and Patrick Daly intervention. Order No. PSC-2018-0063-PCO-EC, also issued on January 24, 2018, granted intervention to Quantum. (Michael Tulk, Patrick Daly, and Quantum Pasco Power, L.P. are collectively referred to as Intervenors.)

II. CONDUCT OF PROCEEDINGS

Pursuant to Rule 28-106.211, F.A.C., this Prehearing Order is issued to prevent delay and to promote the just, speedy, and inexpensive determination of all aspects of this case.

III. JURISDICTION

This Commission is vested with jurisdiction over the subject matter by the provisions of Chapter 366 and Section 403.519, Florida Statutes (F.S.). This hearing will be governed by said statutes and Chapters 25-6, 25-22, and 28-106, F.A.C., as well as any other applicable provisions of law.

IV. PROCEDURE FOR HANDLING CONFIDENTIAL INFORMATION

Information for which proprietary confidential business information status is requested pursuant to Section 366.093, F.S., and Rule 25-22.006, F.A.C., shall be treated by the Commission as confidential. The information shall be exempt from Section 119.07(1), F.S., pending a formal ruling on such request by the Commission, or pending return of the information to the person providing the information. If no determination of confidentiality has been made and the information has not been made a part of the evidentiary record in this proceeding, it shall be returned to the person providing the information. If a determination of confidentiality has been made and the information was not entered into the record of this proceeding, it shall be returned to the person providing the information within the time period set forth in Section

366.093, F.S. The Commission may determine that continued possession of the information is necessary for the Commission to conduct its business.

It is the policy of this Commission that all Commission hearings be open to the public at all times. The Commission also recognizes its obligation pursuant to Section 366.093, F.S., to protect proprietary confidential business information from disclosure outside the proceeding. Therefore, any party wishing to use any proprietary confidential business information, as that term is defined in Section 366.093, F.S., at the hearing shall adhere to the following:

- (1) When confidential information is used in the hearing that has not been filed as prefiled testimony or prefiled exhibits, parties must have copies for the Commissioners, necessary staff, and the court reporter, in red envelopes clearly marked with the nature of the contents and with the confidential information highlighted. Any party wishing to examine the confidential material that is not subject to an order granting confidentiality shall be provided a copy in the same fashion as provided to the Commissioners, subject to execution of any appropriate protective agreement with the owner of the material.
- (2) Counsel and witnesses are cautioned to avoid verbalizing confidential information in such a way that would compromise confidentiality. Therefore, confidential information should be presented by written exhibit when reasonably possible.

At the conclusion of that portion of the hearing that involves confidential information, all copies of confidential exhibits shall be returned to the proffering party. If a confidential exhibit has been admitted into evidence, the copy provided to the court reporter shall be retained in the Office of Commission Clerk's confidential files. If such material is admitted into the evidentiary record at hearing, and is not otherwise subject to a request for confidential classification filed with the Commission, the source of the information must file a request for confidential classification of the information within 21 days of the conclusion of the hearing, as set forth in Rule 25-22.006(8)(b), F.A.C., if continued confidentiality of the information is to be maintained.

V. PREFILED TESTIMONY AND EXHIBITS; WITNESSES

Testimony of all witnesses to be sponsored by the parties and Commission Staff (Staff) has been prefiled and will be inserted into the record as though read after the witness has taken the stand and affirmed the correctness of the testimony and associated exhibits. All testimony remains subject to timely and appropriate objections. Upon insertion of a witness' testimony, exhibits appended thereto may be marked for identification. Each witness will have the opportunity to orally summarize his or her testimony at the time he or she takes the stand. Summaries of testimony shall be limited to five minutes.

Witnesses are reminded that, on cross-examination, responses to questions calling for a simple yes or no answer shall be so answered first, after which the witness may explain his or her answer. After all parties and Staff have had the opportunity to cross-examine the witness, the

exhibit may be moved into the record. All other exhibits may be similarly identified and entered into the record at the appropriate time during the hearing.

The Commission frequently administers the testimonial oath to more than one witness at a time. Therefore, when a witness takes the stand to testify, the attorney calling the witness is directed to ask the witness to affirm whether he or she has been sworn.

The parties shall avoid duplicative or repetitious cross-examination. Further, friendly cross-examination will not be allowed. Cross-examination shall be limited to witnesses whose testimony is adverse to the party desiring to cross-examine. Any party conducting what appears to be a friendly cross-examination of a witness should be prepared to indicate why that witness's direct testimony is adverse to its interests.

VI. ORDER OF WITNESSES

Witnesses who are listed twice below are providing unique testimony for each docket. Issue Nos. with "A" or "C" listed after them pertain to the SCCF (Docket No. 20170266-EC), and Issue Nos. with "B" or "D" listed after them pertain to the SHCCF (Docket No. 20170267-EC). Testimony and cross-examination will be presented concurrently for both the SCCF and the SHCCF.

<u>Witness</u>	<u>Proffered By</u>	<u>Issue No(s).</u>
<u>Direct</u>		
Michael P. Ward, II	Petitioners	1A, 2A, 3A, 4A 5A, 5C, 6A, 7A
Michael P. Ward, II	Petitioners	1B, 2B, 3B, 4B 5B, 5D, 6B, 7B
David Kezell	Petitioners	3A, 4A, 5A, 5C, 6A
Ankur Mathur	Petitioners	3B, 4B, 5B, 5D, 6B
David Wagner	Petitioners	4A, 5A, 5C, 6A
David Wagner	Petitioners	4B, 5B, 5D, 6B
Robert DeMelo	Petitioners	5A, 5C, 6A
Robert DeMelo	Petitioners	5B, 5D, 6B
Kyle D. Wood	Petitioners	1A, 1B, 2A, 2B, 3A, 3B, 4A, 4B 6A, 6B

<u>Witness</u>	<u>Proffered By</u>	<u>Issue No(s).</u>
Thomas Hines	Petitioners	2A, 2B
Jason Peters	Petitioners	2A, 2B, 3A, 3B, 4A, 4B, 5A, 5B, 5C, 5D, 6A, 6B
Julia Diazgranados (As amended)	Petitioners	1A, 1B, 2A, 2B, 3A, 3B, 4A, 4B 5A, 5B, 5C, 5D, 6A, 6B
Alan S. Taylor	Petitioners	2A, 2B, 3A, 3B, 5A, 5B, 5C, 5D 6A, 6B
Paul M. Sotkiewicz, Ph.D. (Direct and Supplemental)	Intervenors	1A, 1B, 3A, 3B, 4A, 4B, 5A, 5B, 5C, 5D, 6A, 6B

Rebuttal

<u>Witness</u>	<u>Proffered By</u>	<u>Issue No(s).</u>
Kyle D. Wood	Petitioners	1A, 1B, 2A, 2B, 3A, 3B, 6A, 6B
Tao Hong, Ph.D.	Petitioners	1A, 1B, 2A, 2B, 3A, 3B, 6A, 6B
David Kezell	Petitioners	3A, 3B, 5A, 5B, 5C, 5D, 6A, 6B
Alan S. Taylor	Petitioners	2A, 2B, 3A, 3B, 5A, 5B, 5C, 5D, 6A, 6B

VII. BASIC POSITIONS

Petitioners: The Commission should grant the petitions for determination of need for the Seminole Combined Cycle Facility (SCCF) and the Shady Hills Combined Cycle Facility (SHCCF) because the analyses presented in the pre-filed testimony and exhibits of the Seminole and SHEC witnesses demonstrate that the two combined cycle facilities are needed to meet the electrical demands of Seminole and its Member Cooperatives and otherwise satisfy all of the criteria set forth in section 403.519, Florida Statutes. Seminole's analyses demonstrate that the resource plan that includes the SHCCF coming into service in late 2021, and the SCCF coming into service in late 2022, along with the removal from service of one of Seminole's existing coal units, is the most cost-effective alternative for meeting Seminole's capacity needs, and will enable Seminole to maintain system reliability and fuel diversity at a reasonable cost.

Based on its continuing evaluation of its Member Cooperatives' electricity needs, Seminole projects a need for 901 MW of additional generating capacity by the

end of 2021. This projected need results primarily from the expiration of power purchase agreements (PPAs), including the expiration of a 150 MW PPA on December 31, 2020, followed by the expiration of two more PPAs totaling 750 MW of winter capacity in May, 2021. Because an additional 300 MW PPA expires the following year, along with load growth, Seminole's projected need increases to 1,265 MW by the end of 2022. Although Seminole and its Members utilize renewable energy sources and technologies as well as conservation measures to the extent reasonably available, there are no cost-effective renewable energy resources or conservation/demand-side management (DSM) measures available to offset the need.

Seminole's Board of Trustees selected the resource plan that includes the SCCF and the SHCCF facilities to meet Seminole's capacity needs based on the results of a multi-stage resource planning process. That process included extensive economic analyses of self-build options and over 200 power purchase alternatives, including numerous renewable energy proposals, identified during a robust Request for Proposal (RFP) process, as well as careful consideration of non-economic attributes and risk factors. Seminole's analyses demonstrate that the resource plan that includes the SCCF, along with the removal of service of one of Seminole's existing coal units, and the tolling agreement with SHEC for the SHCCF is the most cost-effective alternative to meet Seminole's capacity needs and would result in projected net present value (NPV) savings of approximately \$530 million as compared to the next ranked alternative over the study period. The SCCF and SHCCF will provide adequate electricity at a reasonable cost and they also will contribute to the reliability and integrity of Seminole's power supply system. (All Seminole/SHEC Witnesses)

Intervenors: Intervenors Michael Tulk, Patrick Daly, and Quantum Pasco Power, L.P., urge the Commission to deny both the need petition for the Seminole Combined Cycle Facility ("SCCF") and the need petition for the Shady Hills Combined Cycle Facility ("SHCCF"). Mr. Tulk and Mr. Daly are end-use customers – "member-consumers" of Withlacoochee River Electric Cooperative ("WREC"), and as such, they will be on the hook for whatever Seminole bills to WREC. In summary, the Commission should deny both petitions because the proposed SCCF and SHCCF are not needed for reliability, nor are they needed for adequate electricity at a reasonable cost, and they are not the most cost-effective alternatives available to Seminole to meet the needs of its Member Cooperatives, including WREC, and the end-use member-consumers who depend on Seminole for their power supply. Further, adding the SCCF and the SHCCF will in fact reduce fuel diversity in Peninsular Florida and uneconomically duplicate other available capacity. Seminole's proposed plan will add dramatic amounts of debt, plus thirty years of fixed cost obligations to Shady Hills Energy Center, LLC, pursuant to the Tolling Agreement, to an already massive debt load and will thus impose significant additional risks on the member-consumers who depend on Seminole for their power supply. In short, at best, Seminole's petitions are ten

years too early for a need that probably does not exist. The Commission should deny both petitions.

Reliability Need

Seminole bases its claims regarding reliability need on its load forecasts. Its forecasts have, for the past twelve years, been consistently and dramatically biased in overstating loads vs. the loads that were actually served. Seminole's criticisms of the testimony of Dr. Paul Sotkiewicz are flawed; Dr. Sotkiewicz relied on statements in Seminole's Ten Year Site Plans in preparing his analyses, and even if one looks at only the forecasts for 2014, 2015, and 2016, all of which were made when Seminole knew that it would not have to serve the loads of Lee County Electric Cooperative in those years, the data shows that Seminole's load forecasts were still substantially biased in overstating forecasted values vs. actuals. Seminole now claims to have updated its forecasting methodology, but at best, that forecasting methodology is unproven.

Moreover, Peninsular Florida reserve margins are projected to be entirely adequate to meet all reliability criteria through at least 2026 without either the SCCF or the SHCCF. The cost savings available from the All-PPA Portfolio are based on Seminole's probably-overstated forecasts, such that, to the extent that the forecasts are in fact overstated, even greater savings would accrue. These savings should lead the Commission, in protecting consumers' best interests, to deny Seminole's petitions so that customer savings can appropriately be realized while the risks of Seminole's questionable, historically biased, forecasting (and of its unproven new forecasting methodology) are minimized.

Most Cost-Effective Alternative & Need for Adequate Electricity at a Reasonable Cost

Seminole's own analyses show that the All-PPA Portfolio would be \$136 Million more cost-effective than Seminole's proposed/preferred plan through 2027. (Seminole's proposed last-minute "corrections" to its filed analyses are discussed briefly at the end of this section.) Further, Seminole and its portfolio evaluator and witness, Alan Taylor, used escalation rates (1.0% to approximately 2.5%) that are significantly below Seminole's discount rate of 6 percent: this tells the Commission that delay will improve the Cumulative Present Value Revenue Requirements ("CPVRR") of delaying the need for the SCCF and the SHCCF, even if they were to be needed. Of course, delay also avoids the risks associated with these long-long-term commitments.

Seminole did not properly evaluate the All-PPA Portfolio as compared to its chosen SCCF/SHCCF plan. Of significance in this regard, of all the portfolios evaluated, Seminole only gave its chosen SCCF/SHCCF portfolio cost savings benefits for closing one of the SGS coal units. These savings are several hundred

million dollars. Even knowing that significant savings were available from the All-PPA Portfolio over the first ten years of the analysis period, neither Seminole nor Mr. Taylor ever even analyzed an All-PPA Portfolio that would likewise have enabled Seminole to close one of its coal units. This is a clear bias in Seminole's and Mr. Taylor's analyses, obviously in favor of the SCCF/SHCCF plan, and evidence of imprudence by Seminole.

On February 28, 2018, notwithstanding that Seminole had a team of several professionals and experts working on, and presumably vetting thoroughly, its testimony and exhibits throughout the Fall of 2017, leading up to filing its case on December 21, 2017, apparently in answering a Staff interrogatory, Seminole discovered an error in the calculations for the All-PPA Portfolio. Seminole now proposes to change its testimony and exhibits to show that the first-ten-years savings are \$69 Million in CPVRRs as opposed to the \$136 Million in CPVRRs in its case as filed. This change does not change the conclusion that the All-PPA Portfolio is still better over the first ten years of the analysis period, nor does it change the Intervenors' concerns and positions regarding load forecasting inadequacies discussed above, nor does it change the Intervenors' profound concerns regarding the risks that Seminole's decisions would impose on member-consumers, imprudently and unnecessarily in the Intervenors' view, as discussed below. The fact that Seminole spent many person-months of effort preparing its testimony and exhibits and failed to discover this error also leaves the Intervenors wondering what other errors may yet lie in Seminole's analyses. The Commission should not expose the customers who depend on Seminole for their power supply to the risks that Seminole's plan would impose upon them.

Fuel Diversity

Seminole's proposed SCCF/SHCCF plan would reduce fuel diversity by increasing Seminole's and the State's dependence on natural gas, and by doing so with two new single-fuel units: neither the SCCF nor the SHCCF has dual fuel capability. The Quantum Pasco Power Plant does have dual-fuel capability. Seminole's decision to close a coal unit plant should be made independently, based on an apples-to-apples, level playing field comparison of all options on a comparable basis. Here, that means evaluating an All-PPA Portfolio with the opportunity for Seminole to close a coal unit but replace that unit's capacity and energy with PPAs. The SCCF/SHCCF plan was assigned several hundred million dollars in benefits from closing a coal unit, but Seminole didn't even bother to look at whether an expanded All-PPA Portfolio might provide similar benefits, in addition to the first-ten-years benefits shown in Seminole's analyses. Again, Seminole's decision not to perform that analysis is evidence of imprudent management: Seminole did not perform the analyses that it should have in order to ensure the customers who depend on it that they are getting the best deal.

Other Matters Within the Commission's Jurisdiction

Uneconomic Duplication of Facilities. Seminole obviously had enough proposals based on PPAs to know that using PPAs for the first ten years would save approximately \$136 Million, based on its analyses done throughout its 2017 planning and decision-making processes. To the extent that Seminole would still, if it were given its way, add approximately 1,700 MW of additional capacity to its – and the State's – fleet, given the fact that a lower-cost option is available through 2027, is prima facie evidence of uneconomic duplication of facilities. Moreover, where Seminole's discount rate exceeds its assumed escalation rates, delay in committing to these long-term obligations (ownership of the SCCF and the Tolling Agreement for the SHCCF) will only benefit member-consumers by reducing CPVRRs.

Customers' Best Interests and the Public Interest. The member-consumers who depend on Seminole for their power supply have only one opportunity to be protected from a bad decision, and this is their opportunity: to ask the Commission to deny the petitions. After that, all affected consumers will be at the mercy of Seminole to properly manage its processes prudently.

Seminole alleges that its proposal to add 1,700 MW of new gas-fired combined cycle capacity is the best risk-managed portfolio for the member-consumers whose needs Seminole is responsible for serving. These allegations are false. Contrary to its claims, Seminole is poised to impose higher costs and tremendous additional risks on the member-consumers of Seminole's Member Cooperatives who depend on Seminole.

The most troubling aspect of Seminole's plan is that it would ignore lessons that Seminole should have learned from its own experience:

1. The risks of long-term, major capital obligations; and
2. The benefits of shorter-term PPAs with optionality running in favor of Seminole.

Regarding the risks of long-term capital commitments, Seminole already has massive debt obligations: according to its 2017 annual report, Seminole had approximately \$1.35 Billion in debt and capital lease obligations as of the end of 2016. Several hundred million dollars of that debt is attributable to Seminole's 1984 vintage coal-fired power plants, referred to as SGS 1 and SGS 2 in its Ten Year Site Plans and other documents. These units came into service in 1984, yet they still account for several hundred million dollars – a majority- of Seminole's debt. Worse, those units are probably worthless today: two younger coal-fired units, the St. Johns River Power Park units owned by FPL and JEA, have recently been shut down, as recognized in recent Commission proceedings.

In the face of, and with knowledge of, these risks, Seminole would now ask its Member Cooperatives, and the member-consumers that they serve, to step up to an additional \$650 Million or more in debt for the SCCF, and to take on the long-term fixed cost obligations of the Tolling Agreement for the SHCCF. This is questionable enough standing on its own, but to put forth this proposal in light of Seminole's experience with the massive debt on its aged coal plants and in light of the lower-cost All-PPA Portfolio (over at least the first ten years of the analysis period), this proposal is facially imprudent.

Seminole's imprudence is compounded and underscored by the fact that it did not even evaluate scenarios in which it would defer the SCCF or the SHCCF for several years, thereby realizing consumer savings until 2027 or so, and that it did not even present the All-PPA Portfolio to its Board of Trustees in its final decision process. This imprudence is further compounded by the fact that Seminole's multi-member evaluation team never analyzed an expanded All-PPA Portfolio that would have been given credit for the hundreds of millions of dollars in savings from closing one of its coal units, as the SCCF/SHCCF plan was given in Seminole's decision-making processes.

Further, Seminole should know the benefits of shorter-term PPAs from its first-hand experience with its PPA for the output of the Osprey Energy Center. The Commission approved that project in 2002, based on a minimum 5-year PPA between Osprey and Seminole, and the project and the PPA served Seminole well. The Intervenor believe that Seminole should have learned another valuable lesson from the Osprey experience, namely that short-term PPAs with optionality in favor of Seminole are beneficial, yet Seminole now wants to put consumers on the hook for 30 years' of SHCCF fixed costs under the Tolling Agreement. Again, Seminole's actions here are simply imprudent.

Summary

In summary, Seminole does not need 1,700 MW of new capacity in 2021 and 2022. Seminole's analyses are deeply flawed and biased against the All-PPA Portfolio, which Seminole developed, and which would save customers. Delaying commitments to the SCCF and the SHCCF benefits customers by saving money using PPAs in the next several years and by improving CPVRRs if Seminole later determines that adding new owned capacity is the best option in the mid-2020s. It also greatly reduces the risks that Seminole would otherwise impose on the member-consumers who depend on Seminole for power supply. Allowing Seminole to go forward with its proposed SCCF/SHCCF plan is contrary to consumers' best interests. These consumers are depending on the Commission to make the right decision, and the Commission should accordingly protect consumers by denying both petitions.

Staff: Staff's positions are preliminary and based on materials filed by the parties and on discovery. The preliminary positions are offered to assist the parties in preparing for the hearing. Staff's final positions will be based upon all the evidence in the record and may differ from the preliminary positions stated herein.

VIII. ISSUES AND POSITIONS

ISSUE 1A: Is there a need for the proposed Seminole Combined Cycle Facility (SCCF), taking into account the need for electric system reliability and integrity, as this criterion is used in Section 403.519(3), Florida Statutes?

Petitioners: Yes. Seminole's power supply planning process begins with the development of its nine Members' load forecasts, which are aggregated to represent the Seminole load forecast. The aggregated peak demand forecasts are used to determine Member capacity requirements and an additional 15 percent of demand is added to satisfy Seminole's Reserve Margin requirement. Based on its continuing evaluation of its Member Cooperatives' electricity needs, Seminole projects a need for 901 MW of additional generating capacity by the end of 2021. This projected need results primarily from the expiration of PPAs, including the expiration of a 150 MW PPA on December 31, 2020, followed by the expiration of two more PPAs totaling 750 MW of winter capacity in May, 2021. Because an additional 300 MW PPA expires the following year, along with load growth and reserve requirements, Seminole's projected need increases to 1,265 MW by the end of 2022. (Ward, Wood, Hong, Diazgranados).

Intervenors: No. Seminole's load forecasts have historically been consistently and systematically biased toward overstating forecast values as compared to the actual values later observed. Seminole's new load forecasting methodology is at best unproven. Accordingly, Seminole's need forecasts are not reliable. Moreover, even if Seminole's need forecasts were to turn out to be accurate, Seminole can more cost-effectively meet those (probably overstated) needs using power purchase agreements, as reflected in the All-PPA Portfolio developed by Seminole.

Staff: No position at this time.

ISSUE 1B: Is there a need for the proposed Shady Hills Combined Cycle Facility (SHCCF), taking into account the need for electric system reliability and integrity, as this criterion is used in Section 403.519(3), Florida Statutes?

Petitioners: Yes. Seminole's power supply planning process begins with the development of its nine Members' load forecasts, which are aggregated to represent the Seminole load forecast. The aggregated peak demand forecasts are used to determine Member capacity requirements and an additional 15 percent of demand is added to satisfy Seminole's Reserve Margin requirement. Based on its continuing

evaluation of its Member Cooperatives' electricity needs, Seminole projects a need for 901 MW of additional generating capacity by the end of 2021. This projected need results primarily from the expiration of PPAs, including the expiration of a 150 MW PPA on December 31, 2020, followed by the expiration of two more PPAs totaling 750 MW of winter capacity in May, 2021. Because an additional 300 MW PPA expires the following year, along with load growth and reserve requirements, Seminole's projected need increases to 1,265 MW by the end of 2022. (Ward, Wood, Hong, Diazgranados).

Intervenors: No. Seminole's load forecasts have historically been consistently and systematically biased toward overstating forecast values as compared to the actual values later observed. Seminole's new load forecasting methodology is at best unproven. Accordingly, Seminole's need forecasts are not reliable. Moreover, even if Seminole's need forecasts were to turn out to be accurate, Seminole can more cost-effectively meet those (probably overstated) needs using power purchase agreements, as reflected in the All-PPA Portfolio developed by Seminole.

Staff: No position at this time.

ISSUE 2A: **Are there any renewable energy sources and technologies or conservation measures taken by or reasonably available to Seminole Electric Cooperative, Inc. (Seminole), which might mitigate the need for the proposed SCCF?**

Petitioners: No. Seminole is a winter-peaking utility that experiences its highest end-use demand on winter mornings when solar energy is not a viable capacity source to offset peak demand. As such, there are no renewable energy sources and technologies that might mitigate the need for the SCCF. Nevertheless, Seminole utilizes renewable energy resources to the extent reasonably available and has included a new solar energy resource in the selected resource plan that includes the SCCF.

As a wholesale supplier of electric energy to its Members, Seminole is not directly responsible for DSM programs. However, Seminole encourages conservation through its wholesale rate structure, which provides price signals that reflect Seminole's cost of supplying power in aggregate and thereby encourages Members to concentrate their load management efforts on controlling Seminole's overall system peak. Seminole also assists its Members in the evaluation of potential DSM measures. Despite the DSM savings achieved by Seminole's Members, there remains a need for additional capacity and there is not a reasonable scenario in which sufficient DSM or conservation could be added to avoid the need for the additional capacity to be provided by the SCCF. (Ward, Peters, Diazgranados, Taylor, Wood, Hines).

Intervenors: Yes. Seminole received numerous proposals totaling more than 3,000 MW of solar generating capacity, including at least one proposal that included battery storage with the PV system proposed. Thus, there are renewable energy options that are at least “reasonably available” to Seminole in the same time frame as the chosen self-build SCCF and the long-term Tolling Agreement with Shady Hills. At least as significantly, it is well-known that the costs of solar are declining, and that the costs of storage systems to accompany solar facilities are expected to decline, but Seminole completely failed to examine declining costs of solar and potential improvements in solar-plus-storage technologies in its evaluations proffered in this case. In view of Seminole’s knowledge that the All-PPA Portfolio has projected lower costs to its Members and the end-use member-consumers that they serve over the first ten years of Seminole’s analysis period, and in view of the fact that Peninsular Florida is projected to have winter peak reserve margins greater than 35 percent through 2026 (and greater than 25 percent through 2026 even if all demand response and energy efficiency-conservation impacts are excluded from the analysis), Seminole should prudently have solicited additional PPAs to fill its needs (if any) through the mid-2020s, thereby enabling it to take advantage of anticipated improvements in the economics of solar and solar-plus-storage technologies.

Staff: No position at this time.

ISSUE 2B: **Are there any renewable energy sources and technologies or conservation measures taken by or reasonably available to Seminole and Shady Hills Energy Center, LLC (SHEC), which might mitigate the need for the proposed SHCCF?**

Petitioners: No. Seminole is a winter-peaking utility that experiences its highest end-use demand on winter mornings when solar energy is not a viable capacity source to offset peak demand. As such, there are no renewable energy sources and technologies that might mitigate the need for the SHCCF. Nevertheless, Seminole utilizes renewable energy resources to the extent reasonably available and has included a new solar energy resource in the selected resource plan that includes the SHCCF.

As a wholesale supplier of electric energy to its Members, Seminole is not directly responsible for DSM programs. However, Seminole encourages conservation through its wholesale rate structure, which provides price signals that reflect Seminole's cost of supplying power in aggregate and thereby encourages Members to concentrate their load management efforts on controlling Seminole's overall system peak. Seminole also assists its Members in the evaluation of potential DSM measures. Despite the DSM savings achieved by Seminole’s Members, there remains a need for additional capacity and there is not a reasonable scenario in which sufficient DSM or conservation could be added to

avoid the need for additional capacity to be provided by the SHCCF. (Ward, Peters, Diazgranados, Taylor, Wood, Hines).

Intervenors: Yes. Seminole received numerous proposals totaling more than 3,000 MW of solar generating capacity, including at least one proposal that included battery storage with the PV system proposed. Thus, there are renewable energy options that are at least “reasonably available” to Seminole in the same time frame as the chosen self-build SCCF and the long-term Tolling Agreement with Shady Hills. At least as significantly, it is well-known that the costs of solar are declining, and that the costs of storage systems to accompany solar facilities are expected to decline, but Seminole completely failed to examine declining costs of solar and potential improvements in solar-plus-storage technologies in its evaluations proffered in this case. In view of Seminole’s knowledge that the All-PPA Portfolio has projected lower costs to its Members and the end-use member-consumers that they serve over the first ten years of Seminole’s analysis period, and in view of the fact that Peninsular Florida is projected to have winter peak reserve margins greater than 35 percent through 2026 (and greater than 25 percent through 2026 even if all demand response and energy efficiency-conservation impacts are excluded from the analysis), Seminole should prudently have solicited additional PPAs to fill its needs (if any) through the mid-2020s, thereby enabling it to take advantage of anticipated improvements in the economics of solar and solar-plus-storage technologies.

Staff: No position at this time.

ISSUE 3A: **Is there a need for the proposed SCCF, taking into account the need for adequate electricity at a reasonable cost, as this criterion is used in Section 403.519(3), Florida Statutes?**

Petitioners: Yes. The SCCF will be a highly efficient, state-of-the-art natural-gas fired combined cycle generation plant. This high efficiency yields relatively lower production costs than other options. The high efficiency coupled with the favorable site location adjacent to the Seminole Generating Station (SGS) site, where site infrastructure can be shared and existing transmission infrastructure and capacity exists, adds substantial benefits to Seminole’s member-consumers. Based on the competitive market process following Seminole’s RFP, as well as Seminole’s internal resource planning process, which included consideration of relative risks, the resource plan that includes the SCCF coming into service in late 2022, along with the removal from service of one of the existing SGS units, and the SHCCF coming into service in late 2021, is the most cost-effective alternative for meeting Seminole’s capacity needs, resulting in projected NPV savings of approximately \$530 million as compared to the next ranked alternative over the study period. (Ward, Kezell, Wagner, DeMelo, Peters, Diazgranados, Taylor).

Intervenors: No. The SCCF is not the most cost-effective alternative available to Seminole to meet its needs and the needs of the ultimate member-consumers who would be required to pay for the SCCF's construction costs, other capital costs, operation and maintenance costs, fuel costs, and other costs, and accordingly, the SCCF is not needed to meet the need for adequate electricity at a reasonable cost. Other alternatives are available that will meet all the power supply needs of Seminole and those it serves at lower costs.

Staff: No position at this time.

ISSUE 3B: Is there a need for the proposed SHCCF, taking into account the need for adequate electricity at a reasonable cost, as this criterion is used in Section 403.519(3), Florida Statutes?

Petitioners: Yes. The SHCCF will be a highly efficient, state-of-the-art natural-gas fired combined cycle generation plant. This high efficiency yields relatively lower production costs than other options. The high efficiency coupled with the favorable site location adjacent to the existing Shady Hills power plant site, where existing transmission infrastructure and capacity exists, adds substantial benefits to Seminole's member consumers. Based on the competitive market process following Seminole's RFP, as well as Seminole's internal resource planning process, which included consideration of relative risks, the resource plan that HCCF coming into service in late 2021, and the SCCF coming into service in late 2022, along with the removal from service of one of the existing SGS units, is the most cost-effective alternative for meeting Seminole's capacity needs, resulting in projected NPV savings of approximately \$530 million as compared to the next ranked alternative over the study period. (Ward, Kezell, Wagner, DeMelo, Peters, Diazgranados, Taylor).

Intervenors: No. The SHCCF is not the most cost-effective alternative available to Seminole to meet its needs and the needs of the ultimate member-consumers who would be required to pay for the costs of the SHCCF and the SHCCF's operations pursuant to the 30-year Tolling Agreement, and accordingly, the SHCCF is not needed to meet the need for adequate electricity at a reasonable cost. Other alternatives are available that will meet all the power supply needs of Seminole and those it serves at lower costs.

Staff: No position at this time.

ISSUE 4A: Is there a need for the proposed SCCF, taking into account the need for fuel diversity and supply reliability, as this criterion is used in Section 403.519(3), Florida Statutes?

Petitioners: Yes. Seminole seeks to maintain a diversified portfolio of owned and purchased generating assets with a variety of fuel types, supply sources and delivery options.

Such a portfolio functions as a tool to manage fuel price stability and reliability. The SCCF will be solely fueled by natural gas but is serving to replace expiring purchased power generating resources that were also predominately natural gas fired as their primary fuel source. Seminole's decision to maintain the operation of one SGS coal-fired generating unit will continue to provide diversification in Seminole's fuel portfolio. In addition, Seminole is implementing a natural gas transportation plan that contracts with four different counterparties for a variety of solutions to enhance the diversification of our delivered gas supply. For these reasons, the addition of the SCCF is not expected to significantly impact fuel diversity or supply reliability.

Seminole is finalizing its contracts for adequate gas transportation capacity that will provide a firm transportation path from geographic locations that are expected to have adequate natural gas supply available over the horizon of the Need Study. Such agreements will ensure that reliable gas supply from multiple production basins will continue to be transported to the areas at which Seminole will have transportation rights to purchase gas supply. (Ward, Kezell, Wagner)

Intervenors: No. Seminole's proposed "Clean Power Plan-Combined Cycle" Portfolio, including the SCCF, will actually reduce fuel diversity by increasing the State's dependence on natural gas as a generating fuel. The SCCF lacks dual-fuel capability.

Staff: No position at this time.

ISSUE 4B: **Is there a need for the proposed SHCCF, taking into account the need for fuel diversity and supply reliability, as this criterion is used in Section 403.519(3), Florida Statutes?**

Petitioners: Yes. Seminole seeks to maintain a diversified portfolio of owned and purchased generating assets with a variety of fuel types, supply sources and delivery options. Such a portfolio functions as a tool to manage fuel price stability and reliability. The SHCCF will be solely fueled by natural gas but is serving to replace expiring purchased power generating resources that were also predominately natural gas fired as their primary fuel source. Seminole's decision to maintain the operation of one SGS coal-fired generating unit will continue to provide diversification in Seminole's fuel portfolio. In addition, Seminole is implementing a natural gas transportation plan that contracts with four different counterparties for a variety of solutions to enhance the diversification of our delivered gas supply. For these reasons, the addition of the SHCCF is not expected to significantly impact fuel diversity or supply reliability.

Seminole is finalizing its contracts for adequate gas transportation capacity that will provide a firm transportation path from geographic locations that are expected to have adequate natural gas supply available over the horizon of the

Need Study. Such agreements will ensure that reliable gas supply from multiple production basins will continue to be transported to the areas at which Seminole will have transportation rights to purchase gas supply. (Ward, Mathur, Wagner)

Intervenors: No. Seminole's proposed "Clean Power Plan-Combined Cycle" Portfolio, including the SHCCF, will actually reduce fuel diversity by increasing the State's dependence on natural gas as a generating fuel. The SHCCF lacks dual-fuel capability.

Staff: No position at this time.

ISSUE 5A: Will the proposed SCCF provide the most cost-effective alternative available, as this criterion is used in Section 403.519(3), Florida Statutes?

Petitioners: Yes. Seminole's analyses demonstrate that the resource plan containing the SCCF is the most cost-effective alternative to meet Seminole's capacity needs and would result in projected NPV savings of approximately \$530 million as compared to the next ranked alternative over the study period. An independent evaluation conducted by Sedway Consulting, Inc., confirms that the selected resource plan that includes the SCCF is the most cost-effective alternative. (Ward, Kezell, Wagner, DeMelo, Peters, Diazgranados, Taylor).

Intervenors: No. More cost-effective alternatives are available, including a portfolio consisting of PPAs, such as the All-PPA Portfolio developed and specified by Seminole, over the first ten years of the planning period, to be followed by resource options that are most cost-effective when evaluated in light of conditions in the mid-2020s – e.g., actual load growth and then-current costs for CT and CC capacity, solar, and solar with storage. Because Seminole and its evaluator, Mr. Taylor, assume escalation rates that are significantly less than Seminole's discount rate, delay will improve the CPVRRs for member-consumers while reducing or minimizing the risks inherent in major long-term financial commitments and obligations, which in this instance include the additional debt for the SCCF and the 30 years' of fixed cost commitments under the Tolling Agreement with SHCCF.

Staff: No position at this time.

ISSUE 5B: Will the proposed SHCCF provide the most cost-effective alternative available, as this criterion is used in Section 403.519(3), Florida Statutes?

Petitioners: Yes. Seminole's analyses demonstrate that the resource plan containing the SHCCF tolling agreement is the most cost-effective alternative to meet Seminole's capacity needs and would result in projected NPV savings of approximately \$530 million as compared to the next ranked alternative over the study period. An independent evaluation conducted by Sedway Consulting, Inc., confirms that the selected resource plan that includes the SHCCF is the most cost-

effective alternative. (Ward, Mathur, Wagner, DeMelo, Peters, Diazgranados, Taylor).

Intervenors: No. More cost-effective alternatives are available, including a portfolio consisting of PPAs, such as the All-PPA Portfolio developed and specified by Seminole, over the first ten years of the planning period, to be followed by resource options that are most cost-effective when evaluated in light of conditions in the mid-2020s – e.g., actual load growth and then-current costs for CT and CC capacity, solar, and solar with storage. Because Seminole and its evaluator, Mr. Taylor, assume escalation rates that are significantly less than Seminole’s discount rate, delay will improve the CPVRRs for member-consumers while reducing or minimizing the risks inherent in major long-term financial commitments and obligations, which in this instance include the additional debt for the SCCF and the 30 years’ of fixed cost commitments under the Tolling Agreement with SHCCF.

Staff: No position at this time.

ISSUE 5C: Did Seminole Electric Cooperative, Inc. accurately and appropriately evaluate reasonable alternative scenarios for cost-effectively meeting the needs of its customers over the relevant planning horizon for the SCCF?

Petitioners: Yes. Seminole’s RFP and resource planning process, as well as Mr. Taylor’s independent review, accurately and appropriately evaluated reasonably available alternative scenarios for cost-effectively meeting the needs of Seminole customers. Seminole evaluated over 200 proposals in response to its RFP and developed reasonable portfolios for evaluation using System Optimizer, a standard system planning tool utilized throughout the utility industry. When the removal of an existing coal unit was included as an assumption in the analysis, System Optimizer selected multiple new units, as components of the portfolios it identified as potentially cost-effective and, when restricted to only one new unit, the cost increased significantly. There was no basis to suggest that the type of all “All-PPA” portfolio advocated by Intervenors would be cost-effective when a coal unit is assumed to be taken out of service. Additionally, an All-PPA portfolio would force Seminole to rely on PPA sources in balancing areas where the power is not needed to serve Seminole load; thereby requiring Seminole to wheel it to a different balancing area. This would increase costs and raise reliability concerns given the fact that Seminole is a transmission-dependent wholesale provider. Seminole considered cost-effectiveness over both the short-term and long-term. The resource plan that includes the SCCF and SHCCF was selected because it provided the most cost-effective and risk-managed mix of resources to meet Seminole’s need. (Ward, DeMelo, Peters, Diazgranados, Taylor)

Intervenors: No. Seminole did not accurately or appropriately evaluate all reasonable alternative power supply options for meeting the needs of its Member

Cooperatives and the member-consumers who will have to pay for power supplied to the Member Cooperatives by Seminole. Specifically, even when Seminole's own analyses showed that the All-PPA Portfolio would save approximately \$136 Million in CPVRR terms over the first ten years of Seminole's planning horizon, i.e., from 2018 through 2027, Seminole did not:

- A. Investigate, examine, or evaluate the possibility of deferring the in-service dates of either the SCCF or the SHCCF while meeting near-term needs with PPAs;
- B. Consider possible advances, over the next 5 to 10 years, in CT and CC technology;
- C. Consider possible reductions in CT and CC costs over the next 5 to 10 years;
- D. Consider potential improvements in solar technology and reductions in solar power costs over the next 5 to 10 years; or
- E. Consider potential improvements in, and reductions in costs of, solar-with-storage over the next 5 to 10 years.

The changed testimony of Ms. Diazgranados, which was only revealed to the Intervenor on February 28, 2018, does not change these conclusions. Seminole's load forecasting track record should have led Seminole, acting prudently to meet the needs of its Member Cooperatives and the member-consumers who depend upon and will have to pay for Seminole's decisions, to carefully evaluate all potential alternative power supply scenarios that could produce lower CPVRRs for the Member Cooperatives and their end-use member-consumers. Seminole did none of this. Seminole did not even allow its planning software (System Optimizer) to consider any other in-service dates for the SCCF or the SHCCF.

This failure to evaluate such economically attractive alternatives is not prudent management, and it is not prudent planning to meet the needs of the end-use customers who depend on Seminole (and the Commission) to meet their needs most cost-effectively.

Further, Seminole's team of several employees and experts spent approximately two calendar months and many hours preparing Seminole's testimony and exhibits for these dockets, yet the team did not discover the error that led to the testimony changes until after filing Seminole's rebuttal testimony (and then only after it was called to their attention by Staff discovery). At best, this failure of Seminole's supposedly extensive vetting process in preparing its case between October and December 2017 casts serious doubt as to whether any other errors remain in the analyses presented by Seminole in this case.

Staff: No position at this time.

ISSUE 5D: Did Seminole Electric Cooperative, Inc. accurately and appropriately evaluate reasonable alternative scenarios for cost-effectively meeting the needs of its customers over the relevant planning horizon for the SHCCF?

Petitioners: Yes. Seminole’s RFP and resource planning process, as well as Mr. Taylor’s independent review, accurately and appropriately evaluated reasonably available alternative scenarios for cost-effectively meeting the needs of Seminole customers. Seminole evaluated over 200 proposals in response to its RFP and developed reasonable portfolios for evaluation using System Optimizer, a standard system planning tool utilized throughout the utility industry. When the removal of an existing coal unit was included as an assumption in the analysis, System Optimizer selected multiple new units, as components of the portfolios it identified as potentially cost-effective and, when restricted to only one new unit, the cost increased significantly. There was no basis to suggest that the type of all “All-PPA” portfolio advocated by Intervenors would be cost-effective when a coal unit is assumed to be taken out of service. Additionally, an All-PPA portfolio would force Seminole to rely on PPA sources in balancing areas where the power is not needed to serve Seminole load; thereby requiring Seminole to wheel it to a different balancing area. This would increase costs and raise reliability concerns given the fact that Seminole is a transmission-dependent wholesale provider. Seminole considered cost-effectiveness over both the short-term and long-term. The resource plan that includes the SCCF and SHCCF was selected because it provided the most cost-effective and risk-managed mix of resources to meet Seminole’s need. (Ward, DeMelo, Peters, Diazgranados, Taylor)

Intervenors: No. Seminole did not accurately or appropriately evaluate all reasonable alternative power supply options for meeting the needs of its Member Cooperatives and the member-consumers who will have to pay for power supplied to the Member Cooperatives by Seminole. Specifically, even when Seminole’s own analyses showed that the All-PPA Portfolio would save approximately \$136 Million in CPVRR terms over the first ten years of Seminole’s planning horizon, i.e., from 2018 through 2027, Seminole did not:

- A. Investigate, examine, or evaluate the possibility of deferring the in-service dates of either the SCCF or the SHCCF while meeting near-term needs with PPAs;
- B. Consider possible advances, over the next 5 to 10 years, in CT and CC technology;
- C. Consider possible reductions in CT and CC costs over the next 5 to 10 years;
- D. Consider potential improvements in solar technology and reductions in solar power costs over the next 5 to 10 years; or
- E. Consider potential improvements in, and reductions in costs of, solar-with-storage over the next 5 to 10 years.

The changed testimony of Ms. Diazgranados, which was only revealed to the Intervenor on February 28, 2018, does not change these conclusions. Seminole's load forecasting track record should have led Seminole, acting prudently to meet the needs of its Member Cooperatives and the member-consumers who depend upon and will have to pay for Seminole's decisions, to carefully evaluate all potential alternative power supply scenarios that could produce lower CPVRRs for the Member Cooperatives and their end-use member-consumers. Seminole did none of this. Seminole did not even allow its planning software (System Optimizer) to consider any other in-service dates for the SCCF or the SHCCF.

This failure to evaluate such economically attractive alternatives is not prudent management, and it is not prudent planning to meet the needs of the end-use customers who depend on Seminole (and the Commission) to meet their needs most cost-effectively.

Further, Seminole's team of several employees and experts spent approximately two calendar months and many hours preparing Seminole's testimony and exhibits for these dockets, yet the team did not discover the error that led to the testimony changes until after filing Seminole's rebuttal testimony (and then only after it was called to their attention by Staff discovery). At best, this failure of Seminole's supposedly extensive vetting process in preparing its case between October and December 2017 casts serious doubt as to whether any other errors remain in the analyses presented by Seminole in this case.

Staff: No position at this time.

ISSUE 6A: **Based on the resolution of the foregoing issues and other matters within its jurisdiction which it deems relevant, should the Commission grant Seminole's petition to determine the need for the proposed SCCF?**

Petitioners: Yes. The analyses and other information presented in the testimony of Seminole's witnesses demonstrate that an affirmative need determination is warranted for the SCCF based on consideration of the relevant factors set forth in section 403.519, Florida Statutes. Due primarily to the expiration of existing PPAs, Seminole will have a need for 901 MW of additional generating capacity by the end of 2021, and that need will grow to 1,265 MW by the end of 2022. The proposed SCCF is part of a resource plan that will ensure that Seminole has an adequate supply of power to serve its Members' needs at a reasonable cost. The competitive RFP process, together with separate economic analyses and risk analyses presented in this Need Study demonstrate that the selected resource plan, including the two new combined cycle facilities, is the most cost-effective, risk-managed alternative to meet Seminole's power supply needs. Seminole and its Members already utilize reasonably available DSM programs and renewable resources and they are committed to implementing more. Even with potential demand and energy reductions that could be achieved from additional conservation and DSM

initiatives, however, there is still a significant capacity need and the resource plan including the new SCCF is part of the least cost alternative to reliably meet that need. (All Seminole witnesses).

Intervenors: No. The evidence in this case clearly demonstrates that Seminole's proposed CPP-CC Portfolio, including the SCCF and the SHCCF, is not the most cost-effective option available to Seminole and that the CPP-CC Portfolio proposed by Seminole is not in the best interests of the member-consumers (i.e., the retail customers) served by Seminole and its Member Cooperatives. Moreover, the evidence clearly shows that Seminole's load forecasting methodology has historically been consistently and systematically biased to overstate projected peak demands and energy requirements.

In short, it is highly probable that Seminole's proposals for the SCCF and the SHCCF are ten years too early for a need that doesn't exist in 2021 or 2022, and may not exist even in 2027, 2028, or later years.

With respect to other matters within the Commission's jurisdiction, neither the SCCF nor the SHCCF is needed for reliability within the Peninsular Florida bulk power supply grid. Adding either or both of these facilities, in the times and with the capacities proposed by Seminole would be uneconomically duplicative of generating resources in Peninsular Florida.

Most significantly allowing Seminole to proceed with its SCCF/SHCCF plan is contrary to the best interests of the customers – the member-consumers of Seminole's Member Cooperatives – who depend on Seminole for their power supply. Seminole's plan would impose unreasonable and unnecessary risks on these consumers, and accordingly, the Commission should deny both petitions.

Staff: No position at this time.

ISSUE 6B: **Based on the resolution of the foregoing issues and other matters within its jurisdiction which it deems relevant, should the Commission grant Seminole and SHEC's joint petition to determine the need for the proposed SHCCF?**

Petitioners: Yes. The analyses and other information described in the testimony and exhibits of Petitioners' witnesses demonstrate that an affirmative need determination is warranted for the SHCCF project based on consideration of the relevant factors set forth in section 403.519, Florida Statutes. Due primarily to the expiration of existing PPAs, Seminole will have a need for 901 MW of additional generating capacity by the end of 2021, and that need will grow to 1,265 MW by the end of 2022. The proposed SHCCF is part of a resource plan that will ensure that Seminole has an adequate supply of power to serve its Members' needs at a reasonable cost. The competitive RFP process, together with separate economic analyses and risk analyses presented in this Need Study demonstrate that the

selected resource plan, including the two new combined cycle facilities, is the most cost-effective, risk-managed alternative to meet Seminole's power supply needs. Seminole and its Members already utilize reasonably available DSM programs and renewable resources and they are committed to implementing more. Even with potential demand and energy reductions that could be achieved from additional conservation and DSM initiatives, however, there is still a significant capacity need and the resource plan including the new SHCCF is part of the least cost alternative to reliably meet that need. (All Seminole/SHEC witnesses).

Intervenors: No. The evidence in this case clearly demonstrates that Seminole's proposed CPP-CC Portfolio, including the SCCF and the SHCCF, is not the most cost-effective option available to Seminole and that the CPP-CC Portfolio proposed by Seminole is not in the best interests of the member-consumers (i.e., the retail customers) served by Seminole and its Member Cooperatives. Moreover, the evidence clearly shows that Seminole's load forecasting methodology has historically been consistently and systematically biased to overstate projected peak demands and energy requirements.

In short, it is highly probable that Seminole's proposals for the SCCF and the SHCCF are ten years too early for a need that doesn't exist in 2021 or 2022, and may not exist even in 2027, 2028, or later years.

With respect to other matters within the Commission's jurisdiction, neither the SCCF nor the SHCCF is needed for reliability within the Peninsular Florida bulk power supply grid. Adding either or both of these facilities, in the times and with the capacities proposed by Seminole would be uneconomically duplicative of generating resources in Peninsular Florida.

Most significantly allowing Seminole to proceed with its SCCF/SHCCF plan is contrary to the best interests of the customers – the member-consumers of Seminole's Member Cooperatives – who depend on Seminole for their power supply. Seminole's plan would impose unreasonable and unnecessary risks on these consumers, and accordingly, the Commission should deny both petitions.

Staff: No position at this time.

ISSUE 7A: Should Docket No. 20170266-EC be closed?

Petitioners: Yes. Upon issuance of a final order granting Seminole's petition for need determination for the SCCF, Docket No. 20170266-EC should be closed.

Intervenors: Yes. Docket No. 20170266-EC should be closed when the Commission's order denying Seminole's petition for determination of need for the SCCF becomes final and no longer subject to appeal.

Staff: No position at this time.

ISSUE 7B: Should Docket No. 20170267-EC be closed?

Petitioners: Yes. Upon issuance of a final order granting the joint petition of Seminole and SHEC for need determination for the SHCCF, Docket No. 20170267-EC should be closed.

Intervenors: Yes. Docket No. 20170267-EC should be closed when the Commission's order denying Seminole's and Shady Hills' joint petition for determination of need for the SHCCF becomes final and no longer subject to appeal.

Staff: No position at this time.

IX. EXHIBIT LIST

All exhibits pertain to both dockets, with the exception of Witness Ankur Mathur's exhibits, which pertain only to Docket No. 20170267-EC.

Witness	Proffered By	Exh. No.	Description
Michael P. Ward, II	Petitioners	(MPW-1)	Resumé of Michael P. Ward, II
Michael P. Ward, II	Petitioners	(MPW-2)	Sections 1, 2, 3.1, 3.2, and 3.3 of Seminole's Need Study
Michael P. Ward, II	Petitioners	(MPW-3)	Seminole Electric Service Areas
Michael P. Ward, II	Petitioners	(MPW-4)	Seminole's Power Purchase Contracts (as of Dec. 31, 2016)
Michael P. Ward, II	Petitioners	(MPW-5)	Seminole's New Power Purchase Contracts
David Kezell	Petitioners	(DK-1)	Resumé of David Kezell
David Kezell	Petitioners	(DK-2)	Preliminary Arrangement of the SCCF at the SGS Site
David Kezell	Petitioners	(DK-3)	Summary of Estimated Capital Costs
David Kezell	Petitioners	(DK-4)	P2021 Single Fuel Facility Analysis

David Kezell	Petitioners	(DK-5)	Excerpts from Site Certification Application for DBEC
David Kezell	Petitioners	(DK-6)	Excerpt from DBEC Air Permit
David Kezell	Petitioners	(DK-7)	Excerpt from SCCF draft Air Permit
David Kezell	Petitioners	(DK-8)	USDOE/EIA report entitled "Capital Cost Estimates for Utility Scale Electricity Generating Plants"
David Kezell	Petitioners	(MPW-2)	Sections 4.1.1 through 4.1.7, 4.1.10, 4.1.11, and 6.2 of Seminole's Need Study
Ankur Mathur	SHEC	(AM-1)	Resumé of Ankur Mathur
Ankur Mathur	SHEC	(AM-2)	Site Vicinity Map for SHCCF
Ankur Mathur	SHEC	(MPW-2)	Section 4.2 of Seminole's Need Study
David Wagner	Petitioners	(DW-1)	Resumé of David Wagner
David Wagner	Petitioners	(DW-2)	Seminole Fuel Price Forecast
David Wagner	Petitioners	(MPW-2)	Sections 4.1.8, 4.2.7 and 6.4.3 of Seminole's Need Study
Robert DeMelo	Petitioners	(DM-1)	Resumé of Robert DeMelo
Robert DeMelo	Petitioners	(MPW-2)	Sections 3.4 and 4.1.9 of Seminole's Need Study
Kyle D. Wood	Petitioners	(KDW-1)	Resumé of Kyle D. Wood
Kyle D. Wood	Petitioners	(MPW-2)	Sections 5.2 and 7 of Seminole's Need Study

Kyle D. Wood	Petitioners	(KDW-2)	Seminole's current forecasting methodology & model/variable selection process
Kyle D. Wood	Petitioners	(KDW-3)	Comparison of historical error rates based on Sotkiewicz approach
Kyle D. Wood	Petitioners	(KDW-4)	Historical Seminole error rates based on corrected Sotkiewicz approach
Kyle D. Wood	Petitioners	(KDW-5)	Seminole 2017 Load Forecast Error Analysis
Thomas Hines	Petitioners	(TH-1)	Resumé of Thomas Hines
Thomas Hines	Petitioners	(TH-2)	Energy Efficiency and Demand Management Savings Report
Thomas Hines	Petitioners	(TH-3)	Energy Efficiency and Demand Management Program Analysis
Jason Peters	Petitioners	(JP-1)	Resumé of Jason Peters
Jason Peters	Petitioners	(JP-2)	Summary of RFP Responses
Jason Peters	Petitioners	(MPW-2)	Section 6.3 and Appendix B to Seminole's Need Study
Julia Diazgranados	Petitioners	(JAD-1)	Resumé of Julia Diazgranados
Julia Diazgranados	Petitioners	(JAD-2)	Seminole's gap chart (forecasted winter peak demands plus reserves vs. committed resources)
Julia Diazgranados	Petitioners	(JAD-3)	Seminole's initial economic analysis results
Julia Diazgranados	Petitioners	(JAD-4)	Seminole's scorecard analysis

Julia Diazgranados	Petitioners	(JAD-5)	Seminole's sensitivity analysis
Julia Diazgranados	Petitioners	(JAD-6)	Seminole's revised economic analysis
Julia Diazgranados	Petitioners	(MPW-2)	Sections 5.1, 5.3, 5.4, 6.1, 6.4.1, 6.4.2, 6.4.4, 6.5, 6.6, 6.7, 6.8, 8 and 9 of Seminole's Need Study
Alan S. Taylor	Petitioners	(AST-1) Doc. 1	Resumé of Alan S. Taylor
Alan S. Taylor	Petitioners	(AST-1) Doc. 2	Sedway Consulting's Independent Evaluation Report
Tao Hong, Ph.D.	Petitioners	(TAO-1)	Tao Hong Curriculum Vitae
Tao Hong, Ph.D.	Petitioners	(TAO-1)	"Long Term Probabilistic Load Fore-casting and Normalization With Hourly Information."
Paul M. Sotkiewicz, Ph.D.	Intervenors	PS-1	Resumé of Paul M. Sotkiewicz, Ph.D.
Paul M. Sotkiewicz, Ph.D.	Intervenors	PS-2	Summary of Seminole's Winter Peak Forecast Errors, 2005-2016
Paul M. Sotkiewicz, Ph.D.	Intervenors	PS-3	Summary of Seminole's Summer Peak Forecast Errors, 2005-2016
Paul M. Sotkiewicz, Ph.D.	Intervenors	PS-4	Summary of Seminole's Total Energy Requirements Forecast Errors, 2005-2016
Paul M. Sotkiewicz, Ph.D.	Intervenors	PS-5	Seminole Gap Chart (Seminole Exhibit JAD-2)
Paul M. Sotkiewicz, Ph.D.	Intervenors	PS-6	Peak Load, Energy, and Number of Customers History and Forecast Tables from Seminole's Ten Year Site Plans, 2005-2016

Paul M. Sotkiewicz, Ph.D.	Intervenors	PS-7	Seminole's Existing Generating Facilities and Purchased Power Resources, Excerpt from Seminole's 2017 Ten Year Site Plan
Paul M. Sotkiewicz, Ph.D.	Intervenors	PS-8	Seminole's Revised Economic Analysis Results of Portfolios (Seminole Exhibit JAD-6)
Paul M. Sotkiewicz, Ph.D.	Intervenors	PS-9	Specifications of FPL's Proposed Dania Beach Clean Energy Center, Schedule 9 from FPL's 2017 Ten Year Site Plan
Paul M. Sotkiewicz, Ph.D.	Intervenors	PS-10	Seminole's 2017 Specifications for Planned Combined Cycle Facilities as stated in Seminole's 2017 Ten Year Site Plan, Schedule 9 for SGS CC Unit 1 and Unnamed Generating Station CC Unit 2
Paul M. Sotkiewicz, Ph.D.	Intervenors	PS-11	Combined Cycle Costs for 2010-2016, U.S. Energy Information Administration, contained in presentation by Paul M. Sotkiewicz, Ph.D. to Harvard Electricity Policy Group, March 31, 2017
Paul M. Sotkiewicz, Ph.D.	Intervenors	PS-12	FPL Specifications and Escalation Rates associated with a 1,163 MW Combined Cycle Unit with In-Service Date of June 1, 2022, FPL Tariff Sheets No. 10.311 and No. 10.311.1

Parties and Staff reserve the right to identify additional exhibits for the purpose of cross-examination.

X. PROPOSED STIPULATIONS

There are no proposed stipulations.

XI. PENDING MOTIONS

There are no pending motions.

XII. PENDING CONFIDENTIALITY MATTERS

The following confidentiality matters are pending:

- Seminole's Third Request for Confidential Classification of information provided in response to Staff's First Set of Interrogatories (Nos. 1-34), and documents produced in response to Staff's First Request for Production (Nos. 1-19), filed on February 28, 2018.
- Seminole's Fourth Request for Confidential Classification of information provided in response to Staff's Second Set of Interrogatories (Nos. 35, 36), filed on March 1, 2018.
- Seminole's Fifth Request for Confidential Classification of information provided in response to Staff's Fifth Set of Interrogatories (Nos. 67-68), filed on March 8, 2018.
- Seminole's Sixth Request for Confidential Classification of information provided in response to Staff's Third Set of Interrogatories (Nos. 42-62), filed on March 12, 2018.
- Seminole's Seventh Request for Confidential Classification of information provided in response to Staff's First Request for Production (Nos. 1-19), filed on March 16, 2018.
- Seminole's Eighth Request for Confidential Classification for certain portions of the Deposition of Michael Ward, taken on March 9, 2018, filed on March 16, 2018.

XIII. POST-HEARING PROCEDURES

If no bench decision is made, each party shall file a post-hearing statement of issues and positions. A summary of each position of no more than 75 words, set off with asterisks, shall be included in that statement. If a party's position has not changed since the issuance of this Prehearing Order, the post-hearing statement may simply restate the prehearing position; however, if the prehearing position is longer than 75 words, it must be reduced to no more than 75 words. If a party fails to file a post-hearing statement, that party shall have waived all issues and may be dismissed from the proceeding.

Pursuant to Rule 28-106.215, F.A.C., a party's proposed findings of fact and conclusions of law, if any, statement of issues and positions, and brief, shall together total no more than 40 pages and shall be filed at the same time.

XIV. RULINGS

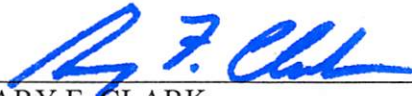
Seminole's Motion for Leave to File Revised Direct Testimony and Exhibits, submitted on March 8, 2018, is hereby granted. Opening statements, if any, shall not exceed 7.5 minutes per side. Post hearing filings are due by April 4, 2018.

It is therefore,

ORDERED by Commissioner Gary F. Clark, as Prehearing Officer, that this Prehearing Order shall govern the conduct of these proceedings as set forth above unless modified by the Commission. It is further ordered

ORDERED that the Motion for Leave to File Revised Direct Testimony and Exhibits filed in Docket Nos. 20170266-EC and 20170267-EC by Seminole Electric Cooperative, Inc., is granted.

By ORDER of Commissioner Gary F. Clark, as Prehearing Officer, this 19th day of March, 2018.



GARY F. CLARK
Commissioner and Prehearing Officer
Florida Public Service Commission
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Tallahassee, Florida 32399
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Copies furnished: A copy of this document is provided to the parties of record at the time of issuance and, if applicable, interested persons.

RD/CWM

NOTICE OF FURTHER PROCEEDINGS OR JUDICIAL REVIEW

The Florida Public Service Commission is required by Section 120.569(1), Florida Statutes, to notify parties of any administrative hearing or judicial review of Commission orders that is available under Sections 120.57 or 120.68, Florida Statutes, as well as the procedures and time limits that apply. This notice should not be construed to mean all requests for an administrative hearing or judicial review will be granted or result in the relief sought.

Mediation may be available on a case-by-case basis. If mediation is conducted, it does not affect a substantially interested person's right to a hearing.

Any party adversely affected by this order, which is preliminary, procedural or intermediate in nature, may request: (1) reconsideration within 10 days pursuant to Rule 25-22.0376, Florida Administrative Code; or (2) judicial review by the Florida Supreme Court, in the case of an electric, gas or telephone utility, or the First District Court of Appeal, in the case of a water or wastewater utility. A motion for reconsideration shall be filed with the Office of Commission Clerk, in the form prescribed by Rule 25-22.0376, Florida Administrative Code. Judicial review of a preliminary, procedural or intermediate ruling or order is available if review of the final action will not provide an adequate remedy. Such review may be requested from the appropriate court, as described above, pursuant to Rule 9.100, Florida Rules of Appellate Procedure.