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STATE OF FLORIDA



KEITH C. HETRICK  
GENERAL COUNSEL  
(850)413-6199

# Public Service Commission

September 11, 2018

Kenneth J. Plante, Coordinator  
Joint Administrative Procedures Committee  
Room 680, Pepper Building  
111 W. Madison Street  
Tallahassee, FL 32399-1400

**Re: Docket No. 20180169-EQ – Petition for declaratory statement regarding PURPA solar qualifying facility power purchase agreements, by Duke Energy Florida, LLC.**

Dear Mr. Plante:

The Florida Public Service Commission received a Petition for Declaratory Statement from Duke Energy Florida, LLC, on September 7, 2018. A copy of the petition is enclosed. A notice was published in the Florida Administrative Register on September 11, 2018.

Sincerely,

A handwritten signature in black ink, appearing to read "Rosanne Gervasi".

Rosanne Gervasi  
Senior Attorney

Enclosures

cc: Office of Commission Clerk

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2018 SEP 11 PM 1:10  
COMMISSION  
CLERK

## Notice of Declaratory Statement

### **PUBLIC SERVICE COMMISSION**

NOTICE IS HEREBY GIVEN that the Florida Public Service Commission received a petition for a Declaratory Statement from Duke Energy Florida, LLC on September 7, 2018. Docket No 20180169-EQ.

The petition seeks a declaratory statement from the Commission that pursuant to Commission Order No. PSC-2011-0439-PAA-EQ and Rule 25-17.250, F.A.C., a negotiated term of two (2) years is an appropriate contract length for a 100 percent levelized or fixed price in a PURPA solar QF power purchase agreement.

A copy of the petition may be obtained by contacting: Carlotta Stauffer, Office of Commission Clerk, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, [clerk@psc.state.fl.us](mailto:clerk@psc.state.fl.us), (850)413-6770.

Except for good cause shown, motions for leave to intervene pursuant to Rule 28-105.0027, F.A.C., must be filed within 21 days after publication of this notice.

Please refer all comments to: Rosanne Gervasi, c/o Carlotta Stauffer, Office of Commission Clerk, Docket No. 20180169-EQ. Rosanne Gervasi's contact information is [rgervasi@psc.state.fl.us](mailto:rgervasi@psc.state.fl.us) (850)413-6224.



DOCKET NO. 20180169-EQ  
FILED 9/7/2018  
DOCUMENT NO. 05895-2018  
FPSC - COMMISSION CLERK

Dianne M. Triplett  
Deputy General Counsel

September 7, 2018

**VIA ELECTRONIC FILING**

Ms. Carlotta Stauffer, Commission Clerk  
Florida Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee, Florida 32399-0850

Re: *Duke Energy Florida, LLC's Petition for Declaratory Statement regarding PURPA solar qualifying facility power purchase agreements; Undocketed*

Dear Ms. Stauffer:

Enclosed for filing on behalf of Duke Energy Florida, LLC ("DEF") is DEF's Petition for Declaratory Statement regarding PURPA solar qualifying facility power purchase agreements.

Thank you for your assistance in this matter. Please feel free to call me at (727) 820-4692 should you have any questions concerning this filing.

Sincerely,

*/s/ Dianne M. Triplett*

Dianne M. Triplett

DMT/cmK  
Enclosure

**BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

In re: Petition for Declaratory Statement  
by Duke Energy Florida, LLC, Regarding  
PURPA Solar Qualifying Facility Power  
Purchase Agreements

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Docket No. \_\_\_\_\_

Filed: September 7, 2018

**DUKE ENERGY FLORIDA, LLC'S PETITION FOR  
DECLARATORY STATEMENT REGARDING PURPA SOLAR  
QUALIFYING FACILITY POWER PURCHASE AGREEMENTS**

Duke Energy Florida, LLC ("DEF" or "the Company"), pursuant to Section 120.565, Fla. Stat., and Rule 28-105.002, F.A.C., hereby petitions the Florida Public Service Commission ("Commission") for a declaratory statement regarding Public Utility Regulatory Policies Act of 1978 ("PURPA") for negotiated solar qualifying facility ("QF") power purchase agreements ("PPA") and how Order PSC-2011-0439-PAA-EQ and Rule 25-17.250, F.A.C. apply to DEF's particular set of circumstances as described below. More specifically, DEF on behalf of its customers seeks a declaration that the order and rule cited above permit DEF to fix one hundred percent (100%) of the price for PURPA solar QF PPAs no more than two years at a time.

In support of this petition, DEF states as follows:

**I. Introduction and Background**

DEF, on behalf of its customers, has a strong history of engaging in good faith negotiations with counterparties pursuant to its obligation to do so under PURPA, Federal Energy Regulatory Commission ("FERC") regulations and precedent, Florida statutes, and Commission Rules. Indeed, since the implementation of PURPA, DEF, on behalf of its customers has entered into over 50 QF contracts. There have been about 24 QF counterparties owning facilities totaling over 1,200 MWs of firm capacity and energy; and, another 30 As-Available QF contracts for non-firm energy only. Whether these contracts were As-Available

contracts, Standard Offer contracts or Negotiated contracts they advanced PURPA's goals and provided DEF many lessons learned for over three decades of administering PURPA contracts on behalf of its customers. Recent unprecedented changes to the amount and technology type of potential solar QFs in DEF's interconnection queue over the last three years have created uncertainty as to DEF's obligations on behalf of its customers to negotiate in good faith with QF counterparties while also protecting DEF customers from the risk associated with the significant increase in renewable energy QFs. These recent changes, as explained in more detail below, have led DEF to request this Commission to issue the following declaratory statement: "A negotiated term of two (2) years is an appropriate contract length for a 100 percent levelized or fixed price in a PURPA solar QF power purchase agreement."

#### **A. Applicable Legislation and Rules**

Congress enacted PURPA in response to the mid-1970s energy crisis, with the dual intentions of lessening the country's dependence on foreign oil and controlling consumer costs. To achieve these goals, PURPA promoted electric utilities' conservation of oil and natural gas and, under Section 210, encouraged the development of efficient cogeneration meeting fundamental use tests and small renewable power production generating facilities. Through PURPA, Congress established a scheme of "cooperative federalism," directing FERC to promulgate regulations to implement PURPA, while ultimately authorizing state regulatory authorities, such as the Commission, to provide state-by-state implementation consistent with FERC's regulations.<sup>1</sup> In 1980, FERC established regulations implementing PURPA through

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<sup>1</sup> See 16 U.S.C. § 824a-3(a), (f)(1); *FERC v. Mississippi*, 456 U.S. 742, 750-51, 102 S. Ct. 2126 (1982); see also Memorandum of Agreement between the FERC and the Idaho Public Utilities Commission at 2 (Dec. 24, 2013) (available at <https://www.ferc.gov/legal/mou/mou-idaho-12-2013.pdf>, last visited August 31, 2018) (explaining that PURPA established a program of cooperative federalism where State Commissions are responsible for implementing PURPA and may do so "in a manner that accommodates local conditions and concerns so long as the implementation is consistent with PURPA and the FERC's regulations implementing PURPA.").

Order No. 69.<sup>2</sup> As explained in Order No. 69, “[e]ach electric utility is required under section 210 [of PURPA] to offer to purchase available electric energy from cogeneration and small power production facilities which obtain qualifying status . . . [and] to pay rates which are just and reasonable to the ratepayers of the utility, in the public interest, and which do not discriminate against cogenerators or small power producers.”<sup>3</sup> PURPA provides that rates for such purchases from cogenerators and small power producers that meet qualifying criteria (“qualifying facilities” or “QFs”) may not exceed “the incremental cost to the electric utility of alternative electric energy,” which is “the cost to the electric utility of the electric energy which, but for the purchase from such cogenerator or small power producer, such utility would generate or purchase from another source.”<sup>4</sup> FERC’s regulations term this cost the “avoided cost.”<sup>5</sup>

Under PURPA’s cooperative federalism framework, state commissions are afforded “great latitude” in determining just and reasonable PURPA policies, recognizing that the states are best suited to consider local concerns and to balance PURPA’s goals with the “economic and regulatory circumstances [that] vary from State to State and utility to utility.”<sup>6</sup> Beginning with Florida’s initial implementation of PURPA in 1981, the Commission has sought to adequately address and fairly balance PURPA’s goals in a manner that is just and reasonable to Florida electricity consumers and in the long term public interest of the State. Consistent with FERC’s regulations, in Rules 25-17.080 through 25-17.091, F.A.C., the Commission set the framework for utilities and QFs entering into PPAs with rates for purchases set at the utilities’ full avoided costs. That framework provides for standard rates, terms, and conditions specifically approved

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<sup>2</sup> See *Final Rule Regarding the Implementation of Section 210 of the Public Utility Regulatory Policies Act of 1978*, Order No. 69, 45 Fed. Reg. 12,214, 12,215 (1980) (“Order No. 69”).

<sup>3</sup> Order No. 69 at 12,215; see also 16 U.S.C. § 824a-3(b) (2012).

<sup>4</sup> 16 U.S.C. § 824a-3(b), (d).

<sup>5</sup> 18 C.F.R. § 292.304(a)(2) (2017).

<sup>6</sup> Order No. 69 at 12,230-12,231.

by the Commission for firm capacity and energy from smaller QF facilities known as the “standard offer contract”<sup>7</sup> and recognizes the right of the utility and QF to negotiate contracts pursuant to PURPA for QF projects falling outside this standard format. These rules further obligate the utility to offer as-available purchase rates to QFs who choose not to or cannot make commitments to the quantity, time, or reliability of energy delivery, and provide standards for state jurisdictional interconnection of QF facilities.

In 2005, after the Commission adopted the rules implementing PURPA described above, the Florida Legislature enacted Section 366.91, Florida Statutes, to encourage renewable energy resources and require the purchase of capacity and energy from renewable energy resources under certain conditions. The Commission adopted Rules 25-17.200 through 17.310, F.A.C., to implement the new legislation. These new rules reference back to and adopt certain parts of the existing rules (for example, the interconnection standards that apply to QFs also apply to renewable facilities) and require that each utility file a standard offer contract for the purchase of firm capacity and energy from renewable generating facilities.<sup>8</sup> Currently, DEF’s Commission-approved standard offer contract for small QFs and renewable QFs is based on DEF’s next planned generating unit, a 226 MW natural gas-fueled combustion turbine (“CT”) facility.<sup>9</sup>

DEF has always used, and continues the same long-standing practice of using, the standard offer contract as the starting point for all negotiations with potential QFs for a negotiated QF PPA.<sup>10</sup> Pursuant to Rules 25-17.0832(2) and 25-17.240(2), F.A.C., DEF files for

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<sup>7</sup> Rule 25-17.0832(4), F.A.C.

<sup>8</sup> Rule 25-17.250(1), F.A.C.

<sup>9</sup> See *In Re: Petition for approval of standard offer contract (Schedule COG-2) based on a combustion turbine avoided unit, by Duke Energy Florida, LLC*, Docket No. 20180073-EQ, Order No. PSC-2018-0314-PAA-EQ (June 19, 2018), consummating Order No. PSC-2018-0352-CO-EQ. DEF notes that the same standard offer contract applies both to renewable generating facilities (Rule 25-17.250, F.A.C.) and small QF facilities (Rule 25-17.0832, F.A.C.).

<sup>10</sup> See Order Nos. PSC-2017-0336-PAA-EQ and Order No. PSC-2018-0314-PAA-EQ, at 2 (“The standard offer contract may also serve as a starting point for negotiation of contract terms by providing payment information to an

approval (for cost recovery) of all such negotiated contracts. In one such proceeding, in which DEF submitted a negotiated PURPA contract between DEF and U.S. EcoGen for approval, the Commission specifically noted in its order approving the contract (the “US Ecogen Order”):

“While the company does not make a return on purchased power, it is responsible for protecting the ratepayers during negotiations with renewable power providers and should include terms and conditions that minimize risk to the company’s general body of ratepayers. By using fixed prices for all components of the contract, risks associated with fuel price fluctuations are shifted to the ratepayers, and away from the renewable generator. PEF should strive in its future negotiations to be diligent in protecting its ratepayers from undue or excessive risk. Notwithstanding the benefits of a negotiated purchase power agreement, in negotiating future contracts and to protect the ratepayers, utilities and companies should strive to adhere to Rule 25-17.250, F.A.C., in that only a portion of the base energy costs associated with the avoided unit shall be fixed, and prospectively, utilities should strive not to established a “100 percent fixed” or a majority fixed base energy cost.” (emphasis added).<sup>11</sup>

#### **B. Recent Significant Solar Activity**

Over the last eight years, the cost of installed solar photovoltaic technology has declined by over 70% and over 50% in the last five years.<sup>12</sup> In the past two years, the U.S. installed over

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RF/QF operator, in a situation where one or both parties desire particular contract terms other than those established in the standard offer.”).

<sup>11</sup> *In re: Petition for approval of negotiated power purchase agreement with U.S. EcoGen Polk, LLC by Progress Energy Florida, Inc.*, Docket No. 20110090-EQ, Order No. PSC-2011-0439-PAA-EQ (Oct. 3, 2011) (Consummating Order No. PSC-2011-0506-CO-EQ).

<sup>12</sup> “Solar Industry Research Data.” *SEIA*, 2018, [www.seia.org/solar-industry-research-data](http://www.seia.org/solar-industry-research-data) (accessed 08/31/2018).

24 GW of solar generation and it has accounted for at least 30% of all new electric generating capacity for the last three years.<sup>13</sup> Over the last three years, DEF has seen an unprecedented and marked increase in the number of solar projects in its FERC and state interconnection queues. In late 2015, there were only three solar companies in DEF's state jurisdictional interconnection queue. By Q2-2016, there were almost 1,600 MW of solar projects in all of DEF's interconnection queues; and by Q2-2018, that number has grown to over 6,000 MW of solar projects, where DEF has over 80 active requests for interconnections from solar projects.<sup>14</sup> While some of these solar QFs executed as-available contracts with DEF, others began inquiring about a PPA pursuant to PURPA and others have not approached DEF at all. DEF on behalf of its customers has and continues to negotiate in good faith with the parties by reviewing project descriptions and forecasted performance of the potential solar QF project and gathering information about the level of commitment each project is willing to provide to DEF customers. However, it has become clear that several potential solar QFs believe they are entitled to very long-term PURPA solar QF PPAs (twenty to thirty year terms) at 100 percent levelized (or fixed) cost.

It is against this backdrop of evolving economic, system operations, and regulatory circumstances that DEF believes that fixing 100 percent of costs over a two-year period for PURPA solar QFs is appropriate and fair for DEF customers, while also complying with PURPA and Commission rules. DEF has determined that its customers will be best protected, and the goals of PURPA will be achieved, by limiting the negotiated PPAs it offers to this category of renewable energy source, i.e. solar photovoltaic PURPA projects, to two years at a time. DEF's obligation is to provide reliable electric service and to protect its customers from long-term risk

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<sup>13</sup> *Id.*

<sup>14</sup> "FERC Generator Interconnection Queue." *OATI OASIS*, Duke Energy Florida, LLC, 15 Aug. 2018, 9:36 A.M., [http://www.oatioasis.com/FPC/FPCdocs/Oasis\\_Posting\\_Report\\_08152018\(Rev1\).pdf](http://www.oatioasis.com/FPC/FPCdocs/Oasis_Posting_Report_08152018(Rev1).pdf) (accessed 08/31/2018).

associated with potential solar QF PPAs that are likely to exceed DEF's incremental cost of alternative energy required to serve customers. However, given that: (1) several counterparties have requested a fixed price at much longer terms; (2) the Commission directed DEF in the US Ecogen Order to strive not to fix 100 percent of costs in negotiated PPAs; and (3) the Commission has not squarely considered all of these issues in the context of the current Florida solar activity, DEF is uncertain as to its regulatory requirements in these circumstances and seeks a declaratory statement from the Commission to clarify the propriety of the obligations it is undertaking on behalf of its customers and to ensure that it is negotiating in good faith with PURPA solar QFs. DEF wants to ensure that it is protecting its customers from undue or excessive risk, while also providing a fair structure for PURPA Solar QF PPAs.

## **II. Preliminary Information**

Petitioner, DEF, is an investor-owned utility subject to the jurisdiction of the Commission under Chapter 366, Florida Statutes. The Company's principal place of business is located at 299 First Avenue North, St. Petersburg, Florida 33701.

All notices, pleadings and other communications required to be served on petitioner should be directed to:

Dianne M. Triplett  
Post Office Box 14042  
St. Petersburg, FL 33733-4692  
(727) 820-4692

Matthew R. Bernier  
106 East College Avenue, Suite 800  
Tallahassee, FL 32301  
(850) 521-1428

DEF serves approximately 1.8 million retail customers in Florida. Its service area comprises approximately 20,000 square miles in 35 of the state's 67 counties, including the densely populated areas of Pinellas and western Pasco Counties and the Greater Orlando area in Orange, Osceola, and Seminole Counties, among other counties. DEF supplies electricity at

retail to approximately 350 communities and at wholesale to Florida municipalities, utilities, and power agencies in the State of Florida.

The agency rule on which this declaratory statement is sought is Rule 25-17.250, F.A.C., along with Order Number PSC-2011-0439-PAA-EQ.

### **III. Request for Declaratory Statement**

Pursuant to Section 120.565(1), Florida Statutes, “[a]ny substantially affected person may seek a declaratory statement regarding an agency’s opinion as to the applicability of a statutory provision, or of any rule or order of the agency, as it applies to the petitioner’s particular set of circumstances.” Furthermore, Rule 28-105.001, F.A.C., provides that:

[a] declaratory statement is a means for resolving a controversy or answering questions or doubts concerning the applicability of statutory provisions, rules, or orders over which the agency has authority. A petition for declaratory statement may be used to resolve questions or doubts as to how the statutes, rules, or orders may apply to the petitioner's particular circumstances. A declaratory statement is not the appropriate means for determining the conduct of another person.

Florida courts recognize that “the purpose of the declaratory statement [is] ‘to enable members of the public to definitively resolve ambiguities of law arising in the conduct of their daily affairs or in the planning of their future affairs and to enable the public to secure definitive binding advice as to the applicability of agency-enforced law to a particular set of facts.’”<sup>15</sup>

Given several interactions with various solar QF counterparties, DEF is uncertain as to whether offering a two-year, 100 percent fixed payment rate, solar QF PPA term complies with

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<sup>15</sup> *Exxon Mobil Oil Corp. v. State, Dep’t of Agriculture & Consumer Servs.*, 50 So. 3d 755, 757 (Fla. 1st DCA 2010) (quoting *Fla. Dep’t of Bus. & Prof’l Regulation v. Inv. Corp. of Palm Beach*, 747 So. 2d 374, 382 (Fla. 1999) (quoting Patricia A. Dore, *Access to Fla. Admin. Proceedings*, 13 Fla. St. U. L. Rev. 965 (1986))).

the customer protections envisioned under Rule 25-17.250 F.A.C., which contemplates only fixing a portion of the QF payments.

As discussed in greater length below, DEF submits that the best way to protect customers from unnecessary rate increases, and implement the Commission's rules and prior order, is to limit the solar QF PPA term, over which DEF will provide 100 percent fixed pricing, to two years. DEF will first explain why a two-year term (with a potential re-opener) is needed to protect customers. Next, it will explain why fixing 100 percent of the price for those two years is consistent with the Commission Rules and the US Ecogen Order. Finally, for clarity, DEF will address other types of solar renewable PPAs that would not be subject to this declaratory statement.

**A. A Two-Year PPA Term for PURPA Solar QFs is Consistent with PURPA and Commission Rules and Needed to Protect Customers**

A two-year PUPRA PPA for solar QFs, with a potential priority renewal based on updated pricing, is consistent with PURPA, as previously implemented by this Commission, and is reasonable and appropriate in light of DEF's paramount obligation to (1) mitigate customer risk of long-term overpayments exceeding avoided cost; (2) ensure energy security, fuel diversity, and fuel price stability; and (3) maintain reliable system operations. Under PURPA's cooperative federalism framework, FERC does not mandate or prescribe a minimum PPA term.<sup>16</sup> The Florida Commission must therefore implement standards to ensure that the economic and regulatory circumstances specific to Florida are appropriately addressed. Under the current Commission process, a two-year negotiated solar QF PPA term may use an avoided cost forecast

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<sup>16</sup> See 16 U.S.C. § 824(a) (declaring that "Federal regulation of matters relating to generation to the extent provided in this subchapter and subchapter III of this chapter and of that part of such business which consists of the transmission of electric energy in interstate commerce and the sale of such energy at wholesale in interstate commerce is necessary in the public interest, such Federal regulation, however, to extend only to those matters which are not subject to regulation by the States."); *Windham Solar LLC*, 157 FERC ¶ 61,134 at fn 13 (2016).

that is four years into the future. At this time of significant increased solar activity, four years can reveal tremendous change in renewable markets and advancing technologies. For example, assume in Q4-2018 DEF is negotiating with a solar QF based on its 2018 Standard Offer Contract with updated fuel forecasts and 2019 sensitivities. DEF executes the solar QF PPA in Q1-2019. The Commission reviews and approves the solar QF PPA in Q2-2019 as it continues to forecast customer benefits even under DEF's 2019 Standard Offer that would be filed April 1, 2019. The solar QF works through project development including grid interconnection and places the QF facility in-service two years<sup>17</sup> later in Q2-2021, which is also two years after Commission review and approval. The negotiated solar QF PPA with a two-year term now continues through Q2-2023, four years after the FPSC's review. A two-year initial solar QF PPA term that may include a four year avoided cost forecast is fair and reasonable to the electric customer and the QF. It also provides sufficient customer protections to allow DEF to respond to the expected changing renewable energy market, while a potential priority renewal process provides the solar QFs certainty that their projects will receive priority treatment for the next two-year period. Under the priority renewal process, a solar QF with an existing two-year PPA will receive an updated offer with new pricing, based on a then-applicable PURPA solar QF PPA offer at a set period of time before the expiration of their initial term. This protects DEF customers from taking on all of the solar QF PPA long-term variable risk, but also provides solar QFs with a path forward to obtain another two-year QF PPA for their project at their option.

A two-year PPA term also mitigates DEF customers' risk associated with probable future scenarios. For the first time in DEF's history, DEF currently has over 6,000 MW of solar photovoltaic projects being processed for FERC jurisdictional grid interconnection. Not all of these potential solar QFs in DEF's FERC Generator Queue have inquired about negotiated PPA

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<sup>17</sup> Reflects current timing for FERC jurisdictional interconnections, but may grow longer due to queue size.

terms and conditions that would be available to them once their project is operational, but could use DEF's As-Available Tariff immediately if they met the criteria thereunder as a non-committing QFs. As such, FERC and not the state has jurisdiction over the interconnections and the associated interconnection process under DEF's Open Access Transmission Tariff since such solar QFs with certifying status are not (or cannot be) contractually restricted to sell all of their output to DEF. The increasing development of significantly larger potential solar QFs will ultimately contribute to the growing levels of unscheduled and unconstrained solar QF energy injected into the DEF Balancing Authority eventually creating a future scenario that includes system operational challenges on the DEF system that the state will need to address. Ultimately, given that Florida is a peninsula, its interconnected transmission system operates more like an island due to limited export capability of excess generation. This unique regional characteristic amplifies the impact of solar QF generating facilities, which in turn effectively creates a future scenario that may limit the amount of solar QF energy that can be delivered into DEF's system without impacting customers and system reliability under which the state preserves. If DEF on behalf of its customers were to offer twenty or thirty year solar QF PPA terms to one solar QF, it would be obligated to offer that same term to all similarly situated solar QFs because DEF cannot discriminate against similar QFs under PURPA.<sup>18</sup> If even half of the projects in DEF's interconnection queue were to reach commercial operation, that would result in a future scenario of about 3,000 MW of solar QFs that DEF customers would be obligated to purchase for twenty to thirty years, with limited ability to curtail or dispatch despite DEF's system load or needs.<sup>19</sup> Such an influx of solar generation also could result in the system issues experienced in the late

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<sup>18</sup> Order No. 69 at 12,215; *see also* 16 U.S.C. § 824a-3(b) (2012).

<sup>19</sup> DEF recognizes that the Commission rules include the ability to curtail during certain minimum load situations. *See* Rule 25-17.086, F.A.C. DEF believes, however, that this rule may not be enforceable under FERC's interpretation of PURPA. Therefore, DEF has concerns about the ability to curtail and a resulting future scenario where DEF may face daily system emergencies to maintain grid reliability.

1990's, during which so many QFs were operating at off-peak times that DEF's predecessor could not reduce the output of its own units low enough while maintaining reliability to balance generation with load, or "get under the load."<sup>20</sup>

A two-year solar QF PPA term also provides DEF with more accurate forecasts of the MW block size as viable solar projects work their way through the approximate two-year interconnection process. The number of solar QFs that enter into as-available or negotiated PURPA contracts with DEF impacts system reliability and cost. By limiting the term to two years, DEF can take a stepwise approach and determine the most accurate amount of solar QFs that will successfully bring projects to completion. There is an inverse relationship between the amount of solar QF energy DEF purchases on behalf of its customers and the calculation of DEF's forecasted hourly avoided energy costs associated with all as-available energy, such that as the MW block size under Rule 25-17.0825 increases, the avoided cost payment rates will generally decrease. This is simply supply and demand. Since all of the solar QFs will be generating at similar times and at similar levels, the need for energy from other resources may be reduced, and DEF's system incremental cost is therefore reduced until operational challenges or reliability issues prohibit such reduction. A two-year solar QF PPA term will better position DEF to respond to any Florida energy market changes, operational challenges, or reliability issues that may occur and will enable DEF to protect customers from those changes. In contrast, if DEF customers are locked into long-term fixed priced contracts with specific terms and

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<sup>20</sup> See *In Re: Petition for determination that plan for curtailing purchases from qualifying utilities in minimum load conditions is consistent with Rule 25-17.086, F.A.C., by Florida Power Corporation*, Docket No. 19941101-EQ, Order No. PSC-1995-1133-FOF-EQ (Sept. 11, 1995); see also, *In Re: Petition for Expedited Approval of Settlement Agreement with Lake Cogen, Ltd. by Florida Power Corporation*, Docket No. 19961477-EQ, Order No. PSC-1997-1437-FOF-EQ (Nov. 14, 1997) (in which the Commission considered and rejected a settlement agreement between the parties because it would result in higher than avoided costs; order later nullified by Order No. PSC-1998-0450-FOF-EQ); *In re: Petition of Progress Energy Florida for approval of an amendment to its cogeneration contract with Lake Cogen, Ltd.*, Docket No. 20030459-EQ, Order No. PSC-2003-1133-PAA-EQ (Oct. 6, 2003) (approving amendment to QF contract between Progress Energy and Lake Cogen to reduce purchase of energy from Lake Cogen during off-peak periods).

conditions relevant today, DEF will have no flexibility to respond to changes that may arise in the future. Notably, at the end of the two-year term, DEF on behalf of its customers is still obligated under PURPA and current FERC regulations to make purchases from all solar QFs at inherently more accurate avoided energy cost.

As explained in more detail below, a PURPA solar QF is not required by FERC to provide to DEF customers the same level of commitment and reliability focus as DEF provides its customers. That commitment includes, among other things, assurances that the solar project will: (a) meet its commercial in-service date and interconnect in a location that benefits customers and the grid; (b) perform during the entire useful life of the facility to the extent the technology allows; (c) upgrade its facility in the future to account for technological advancements, for the benefit of DEF customers; and (d) provide full rights to curtail and/or dispatch the solar plant in the same way DEF would dispatch a self-owned solar facility. Furthermore, FERC rules implementing PURPA specifically do not permit utilities to include, as a condition in a PURPA PPA, the ability to curtail, except for two very limited circumstances that do not include descriptions under Rule 25-17.086 F.A.C., such as undue burden on the utility that may translate to unnecessary customer costs or general economic reasons, or when purchases from QFs would result in costs greater than those which the utility would incur if it did not make such purchases. Those two circumstances are during light loading periods, in which a utility operating only base load units would be forced to cut back output from those units in order to accommodate the unscheduled QF energy purchases,<sup>21</sup> or during system emergencies, narrowly defined by FERC regulations as “a condition on a utility’s system which is likely to result in imminent significant disruption of service to customers or is imminently likely to

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<sup>21</sup> 18 C.F.R. § 292.304(f)(1); Order No. 69, FERC Stats. & Regs. ¶ 30,128 at 30,886 (1980).

endanger life or property.”<sup>22</sup> DEF is unable to curtail solar QF energy purchases simply because there was a cheaper dispatch option for the DEF system and DEF customers.

A two-year solar QF PPA term therefore appropriately balances PURPA’s goals, while protecting DEF customers from potential overpayments based on the value DEF customers will receive; and, by updating the avoided cost rates paid to potential solar QFs more frequently and thus more accurately, facilitates solar QF payments at DEF’s true avoided costs.

#### **B. A Two-Year PPA Term is Aligned with how Other States have Implemented PURPA**

The reasonableness of DEF’s PURPA PPA terms and offerings is also validated by the manner in which numerous other similarly-situated states implement PURPA. Specifically, other traditionally-regulated jurisdictions have approved PPA terms of similar length for utility-scale QF generators. Alabama has approved forecasted energy and capacity rates fixed for a one-year term with an evergreen provision allowing the QF to sell power in future years at updated avoided cost rates.<sup>23</sup> Tennessee<sup>24</sup> and Mississippi<sup>25</sup> have minimum one-year terms. Idaho has approved a two-year term, and Georgia has also approved a two-year term with an annual renewal thereafter.<sup>26</sup> Accordingly, under the principles of cooperative federalism, each

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<sup>22</sup> 18 C.F.R. § 292.307(b)(4).

<sup>23</sup> *For approval of Rate CPE – Contract for Purchased Energy*. AL PSC re Alabama Power, Order, Docket No. U-5213, 2017 WL 9775573 at \*4 (March 7, 2017) (recognizing that “reaching [a] balance between projected cost and actual cost has not occurred in many cases,” and that when that balance is not achieved, “customers [are left] paying more to QFs than what was intended under PURPA”).

<sup>24</sup> Tenn. Valley Auth., *Dispersed Power Production Guidelines*, (updated December 28, 2017) (available at [https://www.tva.gov/file\\_source/TVA/Site%20Content/Energy/Renewables/Dispersed%20Power%20Program/january\\_2018\\_dpp\\_supplier\\_letter\\_and\\_guidelines.pdf](https://www.tva.gov/file_source/TVA/Site%20Content/Energy/Renewables/Dispersed%20Power%20Program/january_2018_dpp_supplier_letter_and_guidelines.pdf)).

<sup>25</sup> *In Re: Notice of a Routine Change in the Standard Rate for Purchases by Entergy Mississippi, Inc., of Electric Energy and Qualifying Cogeneration and Small Power Production Facilities with Design Capacity of 100kW or Less*, Order, Docket No. 2016-UN-170 (Dec. 6, 2016) (approving Entergy’s minimum contract term of one year as “just and reasonable and consistent with applicable law and rules of [the] Commission”); *see also* Entergy Mississippi, *Schedule for Purchases from Qualifying Cogeneration and Small Power Production Facilities*, (effective Dec. 30, 2016) (available at [http://www.entergy-mississippi.com/content/price/tariffs/emi\\_qf.pdf](http://www.entergy-mississippi.com/content/price/tariffs/emi_qf.pdf)).

<sup>26</sup> *Order on Reconsideration, In the Matter of Idaho Power Company’s Petition to Modify Terms and Conditions of PURPA Purchase Agreements*, Case No. IPC-E-15-01, Order 33419 (Nov. 5, 2015) (reaffirming initial conclusion that “[b]y adjusting avoided cost rates more frequently, avoided costs become a truer reflection of the actual costs avoided by the utility and allow QFs and ratepayers to benefit from normal fluctuations in the market” based in part

state is permitted to consider factors specific to its unique circumstances when determining how to implement PURPA. As such, the current trend includes many states reducing the lengths of PURPA contracts to better protect electricity customers from the impacts of evolving markets and advancing technologies.

**C. DEF's Proposal to Fix 100 Percent of a Solar QF's Payment Rate for a Two-Year Period is Consistent with the Intent of FPSC Rule 25-17.250 and the US Ecogen Order Because it Provides Equivalent Customer Protection**

As explained above, DEF is experiencing an unprecedented change in solar renewable activity, since the Commission issued the US Ecogen Order. When coupled with the two-year term, fixing 100 percent of the payment rate for PURPA solar QF PPAs provides sufficient customer protection, while ensuring that DEF complies with the intent of PURPA and treats all solar QFs in a fair and non-discriminatory manner.

DEF recognizes that the standard offer contract Rule 25-17.250(3) F.A.C., has a variable energy payment rate and the renewable QF supplying firm capacity and energy in return receives a minimum QF PPA term of ten years; however, solar QFs are requesting a negotiated contract under Rule 25-17.240 F.A.C. for a much longer (twenty to thirty years) term with a fixed price and with minimal commitments to DEF customers. As a result, as DEF's actual avoided costs will evolve based on Florida solar market conditions, the fixed energy payment rates paid under the PPAs proposed by the potential solar QFs and entered into pursuant to PURPA will become less accurate. When costs to either produce electric power or to purchase power outside of PURPA are in decline, such as DEF has experienced in recent years with decreasing natural gas costs, customers are exposed to the significant risk of paying QF rates that greatly exceed DEF's

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on the utility's showing that a "contract term [of] two years more accurately reflects true avoided costs and appropriately balances 'the competing interest of protecting utility customers and developing QF generation;'" (emphasis added, internal quotations omitted). 2015 Ida. PUC LEXIS 108 (2015); 2015 Ida. PUC LEXIS 159 (2015); 2016 Avoided Cost and Solar Avoided Cost Projections GPSC Docket No. 16573 (Dec. 28, 2017).

actual incremental cost of alternative capacity and energy, or its “avoided” cost, contrary to the directives of both PURPA and FERC.<sup>27</sup> In contrast, Solar QFs assume minimal obligations to contribute to fuel diversity through clean energy deliveries to DEF customers. Simply put, potential solar QFs want to put all the changing market, forecast, and PPA price risk on DEF customers without contributing to fuel diversity or fuel price stability.

The Commission, and the Florida Legislature, have also been very conscious of cost impacts on customers when implementing PURPA. Indeed, Section 366.92(1), Florida Statutes, states “It is the intent of the Legislature to promote the development of renewable energy; protect the economic viability of Florida’s existing renewable energy facilities; diversify the types of fuel used to generate electricity in Florida; lessen Florida’s dependence on natural gas and fuel oil for the production of electricity; minimize the volatility of fuel costs; encourage investment within the state; improve environmental conditions; and, at the same time, minimize the costs of power supply to electric utilities and their customers.” (emphasis added).<sup>28</sup>

The issue of how much of the energy price to fix was discussed during the renewable rulemaking proceeding in which Rules 25-17.200 through 17.310, F.A.C. were adopted. Ultimately the Commission Staff recommended the inclusion of Rule 25-17.250(6) which provides for fixed energy payments, but subject to certain limitations. Specifically, the fixed price is not actually set for the entire time period; rather it must be re-forecasted each year (hence the reference to year-by-year). This provision was discussed during the Agenda Conference at which the rules were adopted. During that hearing, the Commission Staff responded to a question about how the fixed energy price would be projected and indicated that the costs would

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<sup>27</sup> See 16 U.S.C. § 824a-3(b); 18 C.F.R. § 292.304(a)(2).

<sup>28</sup> See also Rule 25-17.200, F.A.C.

be re-projected each year on an annual basis.<sup>29</sup> This is also consistent with how DEF implements its most recently approved Standard Offer Contract Tariff Sheet No. 9.456, section (B) (2).

Given the Commission's rules and the US Ecogen Order, which direct DEF and other utilities to strive to not fix 100 percent of energy costs, it would be reasonable for DEF on behalf of its customers to only offer 100 percent fixed solar QF PPA prices for one year at a time. However, given the unique characteristics of solar renewable generation and typical project development timelines, DEF believes that fixing solar QF payments rates for two years at a time is warranted. To explain, a negotiated QF contract typically has two avoided cost components: energy and capacity. Both payments are based on DEF's next avoided unit, which is currently a natural gas-fueled combustion turbine scheduled to come online in 2027. If DEF were to fix the energy portion of the payment using the same methodology contained in its standard offer contract, it would only fix a portion of the price tied to when the avoided unit is forecasted to operate. Because the 2027 avoided unit is a peaker, it is only scheduled to operate less than five percent of the time. In current 2018 dollars, this would mean only a fraction of the QF energy payment would be fixed. On the capacity payment, DEF accounts for the type of generation and the capacity value to be assigned. DEF assigns its own solar facilities a 57 percent capacity value in the summer. If solar QFs would qualify for the same capacity value, the capacity payment is still reduced further for summer-only deliveries and net present value calculation. Thus, fixing only a portion of the energy and capacity avoided costs results in a very small and unreasonable percentage of the total QF payment rate. Given that DEF has proposed limiting the pricing term to two years, DEF believes it is fair and appropriate to fix 100 percent of the solar QF PPA payment rate.

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<sup>29</sup> See *In the Matter of: Proposed Amendments to Rule 25-17.0832, F.A.C., Firm Capacity and Energy Contracts*, Docket No. 20060555-EI, Transcript of Jan. 9, 2007 Agenda Conference at pp. 22-25.

However, if DEF agreed to the requests from solar QFs to fix prices for 25-30 years, DEF would be unable to refresh and adjust QF payment rates to not exceed DEF's full avoided cost. By not locking in fixed prices in solar QF PPAs for long periods of time when significant market and technology changes are evident, DEF will protect customers from price risk. Avoided costs will undoubtedly change over time as underscored by recent filings before the Commission to approve buy-outs or terminations of uneconomic QF contracts. Over the past several years, Florida Power & Light has received approval for two such buy-outs.<sup>30</sup> DEF also recently received approval to terminate one of its QF contracts with a willing counterparty to save DEF customers money. Furthermore, DEF has proposed the termination of another QF contract with a willing counterparty because DEF's payments under the QF contracts, while cost-effective when initially approved by the Commission, now exceed DEF's current avoided costs.<sup>31</sup> Therefore, the risk that customers will be forced to accept over-priced QF contracts is not hypothetical.

DEF is aware that often solar QFs argue that FERC requires that QF PPAs be of particular length and price to allow the solar QF to attract capital or be "financeable." DEF on behalf of its customers respectfully submits that, to the extent such arguments are made, they still do not dictate that a contract include fixed prices for a particular length of time. DEF is aware that in Order No. 69, FERC has said that "in order to be able to evaluate the financial feasibility of a cogeneration or small power production facility, an investor needs to be able to estimate, with reasonable certainty, the expected return on a potential investment before construction of a facility."<sup>32</sup> DEF is also aware of other FERC precedent in which FERC has stated that it has

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<sup>30</sup> See Order Number PSC-2015-0401-AS-EI, issued in Docket Number 20150075-EI; and Order Number PSC-2016-0506-FOF-EI, issued November 2, 2016, in Docket Number 20160154-EI.

<sup>31</sup> See Order Number PSC-2018-0289-CO-EQ, making Order Number PSC-2018-0240-PAA-EQ effective and final, Docket No. 20170274-EI, (June 5, 2018); Docket No. 20180152, *In re: Petition for approval to terminate qualifying facility power purchase agreement with Ridge Generating Station, L.P., by Duke Energy Florida, LLC*, filed August 3, 2018 (currently pending before the FPSC).

<sup>32</sup> 45 Fed. Reg. 12,214, at 12,219.

“explicitly agreed with previous commenters that ‘stressed the need for certainty with regard to return on investment in new technologies’” and that FERC stated, “a legally enforceable obligation should be long enough to allow QFs reasonable opportunities to attract capital from potential investors.”<sup>33</sup> However, these statements do not require any particular term for a PURPA contract. FERC’s opinion in the cited case (*Windham Solar*) does not address whether a particular negotiated PURPA contract term is long enough to allow “reasonable opportunities to attract capital.” To the contrary, in that case FERC expressly clarified that it has not specified minimum or maximum terms that must be offered to all QFs (“our regulations do not, however, specify a particular number of years for such legally enforceable obligations.”<sup>34</sup>). The question in *Windham Solar* was whether a utility’s approved avoided cost tariff was consistent with PURPA where such tariff offered only “real time pricing” under 18 C.F.R. 292.304(d)(1), instead of options for both “real time pricing” and fixed pricing at the utility’s forecasted avoided cost rate (as required under 18 C.F.R. 292.304(d)(2)). Indeed, FERC does nothing more than simply acknowledge that potential investors in QF projects need to be able to estimate a return on “new technologies” before they can decide whether to invest in a particular project. FERC’s “established policy is to leave to state regulatory authorities...issues relating to the specific application of PURPA requirements to the circumstances of individual QFs.”<sup>35</sup> Contrary to what many QFs argue, FERC has never indicated that PURPA requires that a QF be offered a PPA of sufficient length to be reasonably financeable. Rather, FERC’s statements indicate that QFs should have a “reasonable opportunit[y] to attract capital from potential investors,”<sup>36</sup> not that

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<sup>33</sup> 157 FERC ¶ 61,134 at P 8.

<sup>34</sup> *Windham Solar LLC*, at fn 13.

<sup>35</sup> See *Cuero Hydroelectric Inc.*, 85 FERC ¶ 61,124, at 61,467 (1998) (internal citations omitted); see also *Policy Statement Regarding the Commission’s Enforcement Role under Section 210 of the Public Utility Regulatory Policies Act of 1978*, 23 FERC ¶ 61,304, at 61,646 (1983) (“The Commission’s regulations allow the State . . . a wide degree of latitude in establishing an implementation plan.”).

<sup>36</sup> *Windham Solar LLC*, at P 8.

QFs be able to attract a certain type of investment or that a contract term be “reasonably financeable.” A two-year fixed-price term is sufficient to allow solar QFs such a reasonable opportunity. FERC has also held that state regulatory authorities can consider a number of factors in establishing avoided cost rates, including the QF’s dispatchability.<sup>37</sup> This holding supports a state like Florida’s ability to establish a lower rate for non-dispatchable resources such as solar QFs.

Congress intended for PURPA purchases to be at the utility’s incremental system cost for energy or capacity, not at “financeable” rates. If every PURPA QF contract were “financeable,” then every potential PURPA generator, regardless of actual purchase power costs and utility system needs, would achieve commercial operation and be set at a high QF-profitable rate for a very long duration. In PURPA, Congress required rates and terms to be set to ensure just and reasonable rates for utility customers. Congress did not guarantee profitability for future financiers to the detriment of those same customers. Likewise, Florida Statutes require that the promotion of renewable energy development be done in a manner that protects customers.<sup>38</sup> Further, while Rule 25-17.250(6) does reference fixing energy payments “to facilitate third-party financing of renewable generating facilities,” it does so only on a year-by-year look ahead basis and is intended to provide fuel price stability to electric utility customers.

The bottom line is that DEF customers are not forced to provide a fixed priced solar QF PPA over a particular contract term to make any solar QF project viable or lucrative. DEF customers do not have to give solar QFs the price they want or need to make their projects viable. However, DEF customers remain obligated to purchase from QFs so at the end of the

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<sup>37</sup> *Windham Solar LLC*, at P 6.

<sup>38</sup> Section 366.92(1), Florida Statutes.

two-year term the QF can sign a new then-applicable two-year power purchase agreement thereby enabling the solar producer to sell their output indefinitely.

**D. This Declaratory Statement is Limited to PURPA Contracts; Non-PURPA Solar Generators Will Have Other Opportunities to Negotiate with DEF**

For clarity, this declaratory statement is solely limited to solar QF PPAs that are mandatory purchases by the Company on behalf of DEF customers under PURPA, as implemented by the FPSC rules. DEF notes that there are three paths for third-party solar companies to transact with DEF. These opportunities include: i) DEF's consideration to buy any existing potential projects in various stages of development that meet DEF's reasonable standards, ii) third-party solar companies can always execute DEF's As-Available Tariff; or, a two-year fixed price Negotiated solar QF PPA; or, iii) a non-PURPA avenue by which third-party solar companies can negotiate with DEF for customer and reliability focused terms and conditions under a wholesale PPA. As included in DEF's most recent Ten Year Site Plan ("TYSP"), DEF projects a need for cost-effective, flexible, and emission-free resources that will provide fuel diversity to DEF's supply side resource portfolio. DEF is currently developing the content of a market survey to determine whether any third parties could meet some or all of that projected need in a least cost, flexible manner. Potential solar QFs could respond to this market survey with their QF projects, although the offers would not be made pursuant to PURPA. This market survey would *not* be in lieu of a PURPA offer, but would provide an additional way for third parties to engage DEF. While DEF is still developing the details, at a minimum, DEF expects to initiate the market survey in 2019, with projects to be in service in 2022. DEF will use the market survey to gather information as to what commitments third parties are willing to make to DEF and its customers, defined by wholesale PPA terms and conditions. The wholesale PPAs shall be phased in over time and provide system contributions to fuel diversity and energy

security which are not permitted under PURPA QF contracts. Examples of such terms and conditions include, but are not limited to, the degree that the wholesale resource can be dispatched and/or curtailed, the ability of DEF to buy out the facility, and provisions for the disposition of any environmental attributes from the facility.

The market survey provides potential solar QFs, along with other diverse or emission-free third parties an opportunity to present value-added offers for the benefit of DEF customers, while avoiding the limitations and downsides associated with PURPA contracts discussed above. A market survey that is refreshed at frequent intervals could allow DEF to systematically select the most beneficial projects for its customers and phase in the new solar generation, so that DEF can reliably integrate this relatively new renewable resource into its system.

#### **IV. Requested Relief**

WHEREFORE, DEF respectfully requests, in light of the foregoing, that the FPSC issue a declaratory statement clearly stating “ A negotiated term of two (2) years is an appropriate contract length for a 100 percent levelized or fixed price in a PURPA solar QF power purchase agreement.”

Respectfully submitted,

/s/ Dianne M. Triplett

DIANNE M. TRIPLETT

299 First Avenue North

St. Petersburg, FL 33701

T: 727.820.4692; F: 727.820.5519

E: [Dianne.Triplett@Duke-Energy.com](mailto:Dianne.Triplett@Duke-Energy.com)

MATTHEW R. BERNIER

106 East College Avenue, Suite 800

Tallahassee, FL 32301

T: 850.521.1428; F: 727.820.5519

E: [Matthew.Bernier@Duke-Energy.com](mailto:Matthew.Bernier@Duke-Energy.com)

Attorneys for Duke Energy Florida, LLC