NORTH CAROLINA
PUBLIC STAFF
UTILITIES COMMISSION

November 25, 2008

VIA E-MAIL AND REGULAR MAIL

Ms. Renné C. Vance, Chief Clerk
North Carolina Utilities Commission
4325 Mail Service Center
Raleigh, North Carolina 27699-4325

Re: Docket No. E-7, Sub 856
Duke Energy Carolinas, LLC

Dear Ms. Vance:

I am writing to advise the Commission and parties that the Public Staff failed to redact certain confidential information from the public version of its proposed order filed yesterday in the above-referenced docket. The Public Staff also failed to designate this information as confidential in the confidential version of its proposed order, filed on November 21, 2008. We request the Commission and all parties to destroy the copies of the proposed order that have previously been filed with or served on them.

Enclosed herewith are 21 copies of a corrected confidential version of the proposed order and two copies of a corrected public version. Please replace the originally filed copies of the proposed order with these corrected copies.

A copy of this letter is being sent to each party of record, together with a copy of either the corrected confidential version of the proposed order or the corrected public version, depending on whether or not the party has signed a confidentiality agreement.

(21)
ajp

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The Public Staff apologizes for all inconvenience resulting from this most unfortunate but entirely inadvertent error. Please do not hesitate to contact me at (919) 733-0970 if you have any questions concerning this matter.

Yours very truly,

Robert S. Gillam

Robert S. Gillam
Staff Attorney

RSG/bll

cc: All Parties of Record

STATE OF NORTH CAROLINA
UTILITIES COMMISSION
RALEIGH

DOCKET NO. E-7, SUB 856

BEFORE THE NORTH CAROLINA UTILITIES COMMISSION

In the Matter of Application of Duke Energy Carolinas, LLC, for Approval of a Solar Photovoltaic Distributed Generation Program and for Approval of the Proposed Method of Recovery of Associated Costs	)))))	PROPOSED ORDER GRANTING CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY WITH CONDITIONS

HEARD IN: Commission Hearing Room, Dobbs Building, 430 North Salisbury Street, Raleigh, North Carolina, October 23, 2008

BEFORE: Commissioner Lorinzo L. Joyner, Presiding, Chairman Edward S. Finley, Jr., and Commissioners Sam J. Ervin, IV, William T. Culpepper, III, Howard N. Lee, and Robert V. Owens, Jr.

APPEARANCES:

For Duke Energy Carolinas, LLC:

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For Southern Alliance for Clean Energy:

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For the Using and Consuming Public:

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BY THE COMMISSION: In August 2007 the General Assembly enacted G.S. 62-133.8, which establishes a Renewable Energy and Energy Efficiency Portfolio Standard (REPS). The REPS requires all North Carolina electric utilities, as well as other electric suppliers, to include specified percentages of renewable generation in their generation mix. Subsection (d) of G.S. 62-133.8 provides that specified percentages "of the total electric power in kilowatt hours sold to retail electric customers in the State, or an equivalent amount of energy, shall be supplied by a combination of new solar electric facilities and new metered solar thermal energy facilities . . . ." The required percentages of solar energy are 0.02% for 2010-11, 0.07% for 2012-14, 0.14% for 2015-17, and 0.20% for 2018 and subsequent years. Under G.S. 62-133.8(h), a utility may recover the incremental cost of compliance with the REPS from customers through an annual rider. The amount of the rider for any given customer account is subject to an annual limit (the "per-account cap"), which is set by the statute at different levels for

residential, commercial and industrial customers. If a utility's incremental costs of compliance for a given year are equal to the combined total of the per-account caps for all its North Carolina retail customers (the "utility-wide ceiling"), the utility is conclusively deemed to be in compliance with the REPS for the year, notwithstanding its failure to achieve the percentages of renewable generation provided for in the statute. No incremental costs of REPS compliance in excess of the utility-wide ceiling may be recovered from ratepayers.

On June 6, 2008 Duke Energy Carolinas, LLC (Duke or the Company), filed with the Commission an application for a blanket Certificate of Public Convenience and Necessity (CPCN) for a distributed generation program (the Program) consisting of solar photovoltaic (PV) facilities to be owned by the Company, together with a proposed tariff for the Program. Duke also requested the Commission to affirm that it would be allowed to recover its costs associated with the Program through the REPS rider and to find that implementation of the Program is prudent and consistent with the promotion of adequate and reliable utility service.

In an order issued on July 8, 2008 the Commission set the case for hearing on October 23, 2008, directed Duke to give notice to its customers, and established discovery guidelines and procedural deadlines.

A notice of intervention was filed by Roy Cooper, Attorney General, on June 23, 2008. The Attorney General's intervention is recognized pursuant to G.S. 62-20. Petitions to intervene were filed by the following parties and granted by order of the Commission: Carolina Utility Customers Association, Inc. (petition filed on July 11, 2008 and approved on July 18, 2008); The Kroger Co. (petition filed on July 25 and allowed on July 29); Southern Alliance for Clean Energy (petition filed on August 6 and approved on August 13); the North Carolina Sustainable Energy Association (NCSEA) (petition filed on August 27 and allowed on August 29); Wal-Mart Stores East, LP, and Sam's East, Inc. (collectively Wal-Mart) (petition filed on September 24 and allowed on October 9); and The Vote Solar Initiative (Vote Solar) and The Solar Alliance (petitions filed on September 24 and allowed on October 9). The intervention of the Public Staff is recognized pursuant to G.S. 62-15(d) and Commission Rule R1-19(e).

On July 25, 2008 Duke filed the testimony of Ellen T. Ruff, its President; Janice D. Hager, Managing Director, Integrated Resource Planning and Environmental Strategy for Duke Energy Corporation's operating utilities; and Jane L. McManeus, Duke's Director – Rates, as well as the testimony and exhibit of Owen A. Smith, Managing Director, Regulated Renewable Energy and Carbon Strategy for Duke Energy Corporation. On October 8, 2008 NCSEA filed the testimony of Rosalie R. Day, its Policy Director. On October 10, 2008 Wal-Mart filed the testimony of Ken Baker, its Senior Manager of Sustainable Regulation; the Solar Alliance filed the testimony of Carrie Cullen Hitt, its President; Vote Solar filed the testimony and exhibits of Thomas J. Starrs, an independent solar energy consultant; and the Public Staff filed the joint testimony and exhibits of Elise Cox, Assistant Director of its Accounting Division, and James McLawhorn, Director of its Electric Division. On October 20, 2008 Duke filed the

revised direct testimony of witness Ruff, the rebuttal testimony of witness McManeus, and the rebuttal testimony and exhibit of witness Smith. The testimony and exhibits of Public Staff witnesses Cox and McLawhorn, and the rebuttal testimony of Duke witness McManeus, were filed in both public and confidential versions. On October 21, 2008, at Duke's request, the Public Staff filed revised public and confidential versions of the joint testimony of witnesses Cox and McLawhorn, for the purpose of designating as confidential certain portions of the testimony that Duke had not previously so designated, and withdrew the previously filed versions of the witnesses' testimony.

The matter came on for hearing as scheduled on October 23, 2008. Duke presented the testimony and exhibits of witnesses Ruff, Smith, Hager and McManeus; Wal-Mart presented the testimony of witness Baker; the Solar Alliance presented the testimony of witness Hitt; Vote Solar presented the testimony and exhibits of witness Starrs; and the Public Staff presented the testimony and exhibits of witnesses Cox and McLawhorn.

Based upon the foregoing, the testimony and exhibits introduced at the hearings, and the Commission's record of this proceeding, the Commission now makes the following

FINDINGS OF FACT

1. Duke is a public utility providing electric service to customers in its service area in North Carolina subject to the jurisdiction of the Commission.

2. The Commission has jurisdiction over this application. Pursuant to G.S. 62-110.1 and Commission Rule R8-61(b), a public utility must receive a CPCN prior to constructing electric generating facilities in North Carolina.

3. In its application Duke requested authorization to install new solar PV electric generating facilities with a total capacity of approximately 20 megawatts (MW). These facilities will be dispersed throughout Duke's North Carolina service territory and will be installed on the rooftops of businesses and homes of Duke's customers, or as ground-mounted facilities located on the property of Duke or its customers. In its application Duke estimated that the cost of the proposed facilities would be approximately $100 million. In its rebuttal testimony Duke stated that it had reduced the size of its proposed Program to 10 MW, with an estimated cost of $50 million.

4. In order to meet the requirements of G.S. 62-133.8(d), there is a need for Duke to acquire solar energy. Duke's proposed construction of 10 MW of solar generating facilities is an appropriate method of meeting a portion of the statutory requirements.

5. In addition to developing its Program for construction of solar PV facilities on its own system, Duke also issued a Request for Proposals (RFP), which was open to bidders who could provide at least 2.0 MW of bundled renewable generation. The RFP

was not open to bidders with a capacity of less than 2.0 MW, to bidders offering renewable energy certificates (RECs) separately from the underlying electric energy, or to providers of solar thermal energy.

6. The lowest solar bid submitted in response to Duke's RFP was from SunEdison in the amount of **[CONFIDENTIAL]** per megawatthour (MWh).[1] Duke has entered into a contract to purchase the energy offered by SunEdison.

7. Duke received numerous other solar bids in response to its RFP, including bids of **[CONFIDENTIAL]** per MWh from **[CONFIDENTIAL]**, **[CONFIDENTIAL]** per MWh from **[CONFIDENTIAL]**, and **[CONFIDENTIAL]** per MWh from **[CONFIDENTIAL]**.

8. When expressed in per-MWh terms, the estimated cost of Duke's proposed Program is **[CONFIDENTIAL]** per MWh. Duke, as a public utility, is required to follow certain tax normalization requirements with respect to the treatment of the federal energy investment tax credits. The bidders responding to Duke's RFP are not public utilities and are not subject to the tax normalization requirements. Absent the normalization requirements, the estimated cost of Duke's proposed Program would be approximately **[CONFIDENTIAL]** per MWh.

9. Duke employed an engineering firm, Black & Veatch, to analyze the bids submitted in response to its RFP and determine whether any of them **[CONFIDENTIAL]**. Black & Veatch found that some of the bids were in fact **[CONFIDENTIAL]**, but the bids of SunEdison, **[CONFIDENTIAL]**.

10. Duke anticipates that in addition to simply providing solar energy to meet the REPS requirements, the Program will provide certain additional benefits, which cannot be obtained through a purchase from a third party. These additional benefits include enabling the Company to develop competency as an owner of solar renewable assets; to leverage volume purchases; to build relationships with PV developers, manufacturers and installers; to gain experience with the installation and operation of various types of solar distributed generation (DG) facilities; and to evaluate the impact of such facilities on its electric system. In addition, Duke expects that the Program will help it to understand the types of DG facilities desired by customers, will promote the commercialization of solar facilities in North Carolina, and generally will fill knowledge gaps to enable successful, widespread deployment of PV technologies. Moreover, Duke notes that if it owns solar generating facilities, it will not be entirely dependent on purchases from outside entities to meet the solar requirements of the REPS.

11. Duke should not be required to make reports to the Commission on the information it gathers from the solar PV facilities installed in connection with the Program, or to gather comparable information from PV facilities owned by others.

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[1] The bids received by Duke were submitted in a variety of formats and could not be compared directly. Duke adjusted the bids so that they would be comparable with each other and with the costs of Duke's own Program. All bid amounts referenced in this order represent the amounts as adjusted by Duke.

12. The costs of Duke's Program, like the costs of any purchase of bundled solar energy, include avoided costs that are quantifiable. Under G.S. 62-133.8(h), avoided costs are not incremental costs and may not be recovered through the REPS rider. Moreover, the avoided costs of Duke's Program may not be recovered through the fuel and fuel-related costs rider under G.S. 62-133.2.

13. G.S. 62-133.8(h) states that "incremental costs" may be recovered through the REPS rider. G.S. 62-133.8(h)(1) provides that costs must be "reasonable and prudent" in order to be classified as incremental costs. To the extent that the costs of the Program exceed **[CONFIDENTIAL]** per MWh, Duke has not met its burden of proving that these costs are reasonable and prudent for inclusion as incremental costs through the REPS rider.

14. The costs of Duke's Program include the costs associated with the broader benefits of the Program described in Finding of Fact 10 above. They also include the costs associated with the public utility tax normalization requirements discussed in Finding of Fact 8 above. G.S. 62-133.8(h)(1) provides that incremental costs include, among other things, "costs incurred by an electric power supplier to . . . [c]omply with the requirements of subsections (b), (c), (d), (e), and (f)" of G.S. 62-133.8. The costs associated with the broader benefits of Duke's Program, and with Duke's tax normalization obligations, were not incurred to comply with the requirements of G.S. 62-133.8(b)-(f). Consequently, they may not be recovered through the REPS rider, except to the extent that they may be shown in a future proceeding come within the scope of G.S. 62-133.8(h)(1)(b).

15. Any quantification of the costs incurred by Duke to comply with G.S. 62-133.8(b)-(f), as distinguished from the costs associated with the broader benefits of Duke's Program and the costs associated with tax normalization, is necessarily difficult and involves a degree of subjective judgment. Despite this difficulty, it is necessary to quantify these costs, and under the circumstances of this case, **[CONFIDENTIAL]** per MWh is a fair and reasonable quantification of the costs incurred by Duke to comply with G.S. 62-133.8(b)-(f).

16. The public convenience and necessity require the implementation of Duke's proposed Program, subject to the following conditions: (1) that the facilities constructed to implement the Program shall not exceed a total of 10 MW in capacity, and (2) that no more than **[CONFIDENTIAL]** per MWh of the costs of the Program, less avoided costs, may be recovered through the REPS and REPS Experience Modification Factor (EMF) riders pursuant to G.S. 62-133.8(h)(1)(a).

17. Duke has estimated the construction cost of the Program at $50 million. The Commission approves this estimate and finds, pursuant to G.S. 62-110.1(e), that construction of these facilities will be consistent with the Commission's plan for expansion of electric generating capacity, provided, however, that the Commission's

approval of the estimate does not amount to approval of recovery of costs in excess of **[CONFIDENTIAL]** per MWh.

18. Duke should not be required to allow the host of a solar facility to retain a portion of the RECs produced by the facility, or to retain a portion of the energy produced.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT 1-2

These findings of fact are essentially informational, jurisdictional and procedural in nature and are not controversial.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT 3-4

The evidence supporting these findings of fact appears in Duke's application and in the testimony of Duke witnesses Ruff and Smith and Public Staff witnesses Cox and McLawhorn.

Duke witness Ruff testified that the REPS statute, G.S. 62-133.8, includes a "set-aside" or "carve-out" provision for solar energy. This provision requires each electric public utility to satisfy its REPS requirement in part with a combination of new solar electric facilities and new metered solar thermal energy facilities amounting to 0.02% of North Carolina retail sales beginning in 2010, 0.07% beginning in 2012, and higher percentages in subsequent years. Duke's proposed solar PV facilities are "renewable energy facilities" within the meaning of the REPS statute and thus will enable Duke to partially fulfill its obligations under the REPS and the solar carve-out in particular (Tr. Vol. 1 pp. 15-17).

Duke witness Smith, in his direct testimony, provided a detailed description of the solar PV facilities that Duke proposes to install. He stated that the facilities are expected to have a total combined capacity of approximately 20 MW direct current, which will be converted to about 16 to 17 MW alternating current. The facilities will be installed on both customer- and Company-owned property in Duke's North Carolina service area (Tr. Vol. 1 pp. 39-40). They will consist of large- or medium-scale ground-mounted facilities and rooftop installations on commercial, industrial and residential buildings (Tr. Vol. 1 pp. 41-42). The facilities will be installed over a two-year period following approval by the Commission, and their total cost is estimated to be $100 million (Tr. Vol. 1 pp. 48-49). Witness Smith described Duke's proposed tariff for the Program, and he explained that a blanket CPCN for the Program is needed, because the precise location of the facilities cannot be specified at this time, and waiting to determine such locations before filing multiple applications for individual CPCNs would unduly delay the Program and increase its costs (Tr. Vol. 1 pp. 46-47, 52).

Public Staff witnesses Cox and McLawhorn testified that Duke's proposed Program appears to be needed to meet the starting date for the solar set-aside requirements, but it should be limited to 10 MW rather than the 20 MW proposed by

Duke (Tr. Vol. 2 p. 217). In support of their recommendation to reduce the size of the project, witnesses Cox and McLawhorn noted that Duke has already entered into a contract to purchase solar energy from SunEdison, and in combination with the SunEdison project, Duke's Program will produce much more solar energy than is needed for compliance with the solar set-aside from 2010 through 2014 (Tr. Vol. 2 p. 216). The witnesses stated that while solar generation should be encouraged, it should not be pursued at the expense of other, less costly, renewable resources, because this could result in Duke's prematurely reaching the "utility-wide ceiling" established by G.S. 62-133.8(h)(3) and (4). If Duke generates an excessive amount of costly solar energy, the total number of renewable MWh it can purchase or generate within the limits of its utility-wide ceiling will be reduced. This may result in a need to operate its fossil-fired plants more often, possibly leading to increased emissions of pollutants and greenhouse gases (Tr. Vol. 2 pp. 217-18). Witnesses Cox and McLawhorn further testified that if Duke generates substantially more solar energy in 2010-14 than is needed for compliance with the solar set-aside, it could bank the renewable energy certificates (RECs) associated with the excess solar generation and use them in later years. However, in their view, this type of large-scale banking of solar RECs is not a desirable practice, because it raises issues of intergenerational equity, and also because there is a substantial possibility that the costs of solar power may decrease in future years. In that event, Duke will be spending money unwisely by accumulating large numbers of solar RECs in advance of the need for them (Tr. Vol. 2 pp. 218-19).

Duke witness Smith stated in his rebuttal testimony that Duke had decided to reduce the size of the Program from 20 MW to 10 MW direct current, and this would result in a reduction of the costs of the Program to $50 million. He testified that the proposed tariff for the Program had been revised accordingly and was attached to his testimony as Smith Rebuttal Exhibit 1 (Tr. Vol. 1 p. 62).

The Commission agrees with Duke and the Public Staff that the solar facilities Duke proposes to construct, not to exceed 10 MW in capacity, are needed for compliance with G.S. 62-133.8(d).

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT 5-7

The evidence supporting these findings of fact appears in the testimony of Duke witness Smith and Public Staff witnesses Cox and McLawhorn.

Public Staff witnesses Cox and McLawhorn testified that they had reviewed the process used by Duke to solicit bids for renewable energy. Their review indicated that Duke issued an RFP for renewable energy in 2007 and received **[CONFIDENTIAL]** solar bids in response. The lowest of the solar bids (exclusive of those that were subsequently found to have **[CONFIDENTIAL]**) were a bid from SunEdison in the amount of **[CONFIDENTIAL]** per MWh, a bid of **[CONFIDENTIAL]** per MWh from **[CONFIDENTIAL]**, a bid of **[CONFIDENTIAL]** from **[CONFIDENTIAL]**, and a **[CONFIDENTIAL]** bid from **[CONFIDENTIAL]** (Tr. Vol. 2 pp. 211-12, 220-21). Duke's RFP was restricted to bidders offering at least 2.0 MW in capacity, and all solar facilities

seeking to sell RECs separately from the underlying electricity were excluded. In addition, solar thermal projects, which do not produce any electricity but do produce RECs that can be used to satisfy the REPS solar set-aside, were ineligible to submit bids (Tr. Vol. 2 pp. 216-17).

On cross-examination, Duke witness Smith confirmed that the lowest solar bidders in response to Duke's RFP were SunEdison, **[CONFIDENTIAL]** (Tr. Vol. 1 pp. 150-51). He stated that Public Staff Smith Confidential Cross-Examination Exhibit 1 was a listing, initially prepared by Duke, of the solar bidders responding to the RFP and the amounts of their bids (Tr. Vol. 1 p. 152).

On these matters there is no disagreement among the parties. The Commission finds the facts to be as set forth above.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT 8

The evidence supporting this finding of fact appears in the testimony of Duke witness McManeus.

Duke witness McManeus stated in her rebuttal testimony that the estimated per-MWh cost of Duke's proposed Program is **[CONFIDENTIAL]**. She testified that this figure had been revised from the **[CONFIDENTIAL]** per MWh cost that Duke had previously provided to the Public Staff in discovery, and it reflected refinement of the impact of the federal energy investment tax credit and recognition of the tax benefits of the North Carolina property tax exclusion for solar investment. In addition, she testified that as a public utility Duke is required to follow certain tax normalization requirements with respect to the treatment of the federal energy investment tax credit, and absent these requirements, the cost of the Program would be approximately **[CONFIDENTIAL]** per MWh (Tr. Vol. 2 p. 37). Non-utilities, such as the bidders responding to Duke's RFP, are not subject to these tax normalization requirements (Tr. Vol. 2 pp. 71-72).

None of the parties disagreed with witness McManeus's testimony as to the per-MWh cost of Duke's Program, or as to what the Program would cost if Duke were not subject to tax normalization requirements. The Commission finds the facts to be in accordance with the testimony of Duke witness McManeus.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT 9

The evidence supporting this finding of fact appears in the testimony of Public Staff witnesses Cox and McLawhorn and Duke witness Smith.

Public Staff witnesses Cox and McLawhorn testified that in their review of Duke's RFP process, they ascertained that Duke had employed the firm of Black & Veatch to perform a **[CONFIDENTIAL]** analysis and determine whether there were aspects of any of the **[CONFIDENTIAL]**. Black & Veatch reviewed the **[CONFIDENTIAL]** solar bids and determined that **[CONFIDENTIAL]** of them were **[CONFIDENTIAL]**. As a result,

Duke excluded those **[CONFIDENTIAL]** bids from further consideration (Tr. Vol. 2 p. 212).

On cross-examination, Duke witness Smith stated that Duke had employed Black & Veatch to perform a **[CONFIDENTIAL]** analysis (Tr. Vol. 1 p. 152). He testified that Public Staff Smith Confidential Cross-Examination Exhibit 2 was a summary of the **[CONFIDENTIAL]** analysis, while Public Staff Smith Confidential Cross-Examination Exhibit 3 was a memorandum prepared by Black & Veatch setting out the results of the analysis in detail (Tr. Vol. 1 pp. 152-53). The two exhibits indicate that the bids of SunEdison, **[CONFIDENTIAL]**.

In its detailed memorandum (Exhibit 3) Black & Veatch listed the **[CONFIDENTIAL]** of each bid, and, as witness Smith acknowledged (Tr. Vol. 1 p. 153), the bid submitted by **[CONFIDENTIAL]**, which was the lowest in price other than that of SunEdison, had **[CONFIDENTIAL]**. However, witness Smith pointed out that in a separate portion of the memorandum, Black & Veatch expressed concern about **[CONFIDENTIAL]** in the United States (Tr. Vol. 1 pp. 153-54). He went on to say that Duke was not confident that **[CONFIDENTIAL]**; however, he acknowledged that Duke, too, has limited experience in developing solar installations in the United States (Tr. Vol. 1 p. 158).

Although there may be some differences of opinion among the parties concerning the qualifications and reliability of some of the bidders responding to Duke's RFP, the evidence is undisputed that Duke employed Black & Veatch to conduct a **[CONFIDENTIAL]** analysis of the bids submitted in response to its RFP; that Black & Veatch found some of the bids to contain **[CONFIDENTIAL]**; and that the bids of SunEdison, **[CONFIDENTIAL]** were not found to be **[CONFIDENTIAL]**. The Commission finds the facts to be in accordance with this undisputed testimony.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT 10-11

The evidence supporting these findings of fact appears in the testimony of Duke witnesses Ruff and Smith, Solar Alliance witness Hitt, and Public Staff witnesses Cox and McLawhorn.

Duke witness Ruff testified that in addition to providing solar energy to meet customer demand and satisfy Duke's REPS obligations, the Program will have a variety of other benefits. It will help promote the development of solar generation resources in North Carolina. The distributed nature of the generation of electricity under the Program will enable Duke to develop competency as an owner of solar renewable assets, leverage volume purchases, build relationships with PV developers, manufacturers and installers, and gain experience with the installation and operation of multiple types of solar DG facilities. Additionally, if Duke owns some of the generating facilities that it uses to meet the solar requirements of the REPS, it will not be dependent solely on power purchases to meet these requirements (Tr. Vol. 1 p. 18).

Duke witness Smith testified that the Program will facilitate Duke's evaluation of the impact of significant DG on the Company's electric system. In addition, it will allow Duke to explore the nature of solar DG offerings desired by customers, fill knowledge gaps to enable successful, wide-scale deployment of solar PV DG technologies, and promote the commercialization of the solar market in North Carolina through utility ownership (Tr. Vol. 1 pp. 39-40). It will promote energy security, attract investment and create jobs in the solar industry, and drive down the cost of solar PV installations through standardizing inspection requirements and leveraging volume purchases (Tr. Vol. 1 p. 52).

Solar Alliance witness Hitt testified that she was in agreement with Duke that the Program will enable Duke to learn more about solar PV (Tr. Vol. 2 p. 137). She supported Duke's proposal to collect information about the economic and physical impacts of its planned PV installations. She recommended that Duke be required to collect comparable information from a sampling of installations that it does not own, and to make all of this information available to the public through the Commission (Tr. Vol. 2 pp. 139-41).

Public Staff witnesses Cox and McLawhorn expressed agreement with Duke's witnesses that the Company, through its proposed Program, seeks to obtain benefits that go beyond the simple acquisition of solar energy for REPS compliance purposes (Tr. Vol. 2 p. 222).

The Commission does not believe that Duke should be required to make arrangements with other owners of PV facilities to collect data comparable to the data it gathers with respect to its own facilities – although this could potentially be a useful undertaking, and Duke is encouraged to collect such data if it chooses to do so. The Commission notes that the data gathered by Duke will be subject to discovery in future proceedings, particularly integrated resource planning proceedings, and consequently there is no need to require Duke to submit the data formally to the Commission in periodic reports. Duke should refrain from designating this information as confidential, except for any specific data items as to which secrecy is truly essential.

Aside from the issues raised by witness Hitt and addressed above, the parties are in agreement concerning the broader benefits, above and beyond the acquisition of solar energy, that Duke seeks to obtain by constructing its own solar generating facilities. The Commission finds the facts to be in accordance with the testimony of the parties.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT 12

The evidence supporting this finding of fact appears in the testimony of Duke witness McManeus, NCSEA witness Day, and Public Staff witnesses Cox and McLawhorn.

In her direct testimony, Duke witness McManeus stated that Duke proposed to recover all of the costs of the Program, except for avoided costs, through the REPS rider. The costs to be recovered through the REPS rider include not only operation and maintenance costs but also capital costs, which will be calculated on a levelized basis, using a fixed charge rate applied to the investment, and reduced by avoided cost (Tr. Vol. 2 pp. 31-32).

NCSEA witness Day testified that avoided capacity and energy costs should be subtracted from the incremental costs to be recovered through the REPS rider (Tr. Vol. 2 p. 170).

Public Staff witnesses Cox and McLawhorn testified that Duke's original plan, as disclosed during discovery, was to deduct only avoided capacity costs from the total levelized costs of the Program, and to recover all the remaining costs (including avoided energy costs) through the annual REPS rider. However, Duke subsequently changed its position and agreed to deduct all avoided costs from the costs to be recovered in the REPS rider. According to witnesses Cox and McLawhorn, Duke should not recover any avoided costs through either the REPS rider or the fuel and fuel-related costs rider; these costs should be recovered only through base rates (Tr. Vol. 2 pp. 214-15, 226-27).

In her rebuttal testimony and on cross-examination, Duke witness McManeus agreed that neither avoided energy costs nor avoided capacity costs should be recovered through the REPS rider (Tr. Vol. 2 p. 34). She further agreed that given the language of G.S. 62-133.2(a1), these costs could not be recovered through the fuel adjustment rider either, but instead had to be recovered through base rates. She expressed concern, however, that the language of G.S. 62-133.2(a1) places utilities generating renewable energy through their own facilities at an unwarranted disadvantage, in comparison with utilities that purchase renewable energy from third parties and are able to use the fuel adjustment rider for recovery of avoided costs (Tr. Vol. 2, pp. 34-35, 65-66).

As a result of the change in Duke's position, there is no longer any disagreement among the parties on this issue. The Commission concludes that under G.S. 62-133.8(h)(1), neither avoided energy costs nor avoided capacity costs are included in the "incremental costs" that can be recovered through the REPS rider; that under G.S. 62-133.2(a1)(6), the avoided energy and capacity costs of "all purchases of power from *renewable energy facilities and new renewable energy facilities pursuant to G.S. 62-133.8*" can be recovered through the fuel and fuel-related costs rider; and that G.S. 62-133.2 does not authorize a utility to recover through the fuel and fuel-related costs rider *the avoided costs associated with renewable energy that it generates on its own* system.

EVIDENCE AND CONCLUSIONS FOR FINDINGS OF FACT 13-15

The evidence supporting these findings of fact appears in the testimony of Duke witnesses Ruff, Smith and McManeus, NCSEA witness Day, and Public Staff witnesses Cox and McLawhorn.

Duke witness Ruff testified that as a result of constructing its own solar facilities, Duke will not be dependent solely on power purchases to meet the requirements of G.S. 62-133.8(d), and it will be more in control of the facilities than if it had relied on another entity to construct them (Tr. Vol. 1 pp. 18, 29-30).

Duke witness Smith testified that it is inappropriate to compare the estimated cost of the Program with the bids received in response to Duke's RFP, because of the broader benefits that will be provided by the Program but cannot be obtained through a purchase of solar power from a third party. He stated that prior to filing its application in this docket Duke considered whether it would be reasonable to divide the costs of the Program between different recovery mechanisms based upon the multiple benefits of the Program; however, the Company decided not to pursue this approach, because all generation produced by the Program will serve to meet the REPS requirements (Tr. Vol. 1 pp. 74-75). On cross-examination, witness Smith indicated that any proposal to replace Duke's Program with a purchase of power from one of the RFP bidders (in addition to the SunEdison purchase Duke has already agreed to) would require Duke to have full confidence that the RFP bidder's project would come to fruition, and Duke is not comfortable making such an assumption (Tr. Vol. 1 pp. 147-48). In particular, with respect to **[CONFIDENTIAL]**, the second-place bidder, witness Smith stated that Black & Veatch had expressed concern about **[CONFIDENTIAL]** in the United States, and that he is not confident that **[CONFIDENTIAL]** (Tr. Vol. 1 p. 158). However, he conceded that Duke itself has limited experience with solar installations; that in a discovery meeting with the Public Staff, Duke had been asked whether it had identified any **[CONFIDENTIAL]** other than those pointed out by Black and Veatch, and Duke had responded that the bids not identified by Black and Veatch as **[CONFIDENTIAL]** were all good bids; and that in his prefiled rebuttal testimony he had not mentioned any shortcomings in the qualifications or experience of any of the bidders (Tr. Vol. 1 pp. 158-61, 196).

Duke witness McManeus testified that she disagreed with the Public Staff's proposal to limit the amount of Program costs recoverable through the REPS rider. While the Public Staff's witnesses opined that it was the distributed nature of the Program that resulted in costs higher than certain of the solar bids the Company received, in her judgment the impact of the federal tax normalization requirements was the more significant driver of this difference (Tr. Vol. 2 p. 38). She testified that the goals of the Program were different from, and more varied than, the goals that can be achieved through a simple purchase of power. Moreover, Duke would not have undertaken the Program had the REPS legislation not been enacted, and all of the electricity generated by the Program will be used for REPS compliance (Tr. Vol. 2 p. 39). On cross-examination, witness McManeus stated that it was not possible to break

down the cost of the Program into components representing the underlying cost of solar energy, the additional costs associated with the Program's broader benefits, and the additional costs attributable to tax normalization (Tr. Vol. 2 pp. 79-80). In cross-examination relating to Public Staff McManeus Confidential Cross-Examination Exhibit 1, she acknowledged that if Duke chooses to generate solar energy through the Program instead of purchasing it at a lower cost from a third party, it will reach the utility-wide ceiling established by G.S. 62-133.8(h) more quickly. If this occurs, then Duke will not be able to obtain as many MWh of renewable energy within the limits of the ceiling as it otherwise could; consequently, it will have to generate additional MWh from its non-renewable facilities, possibly resulting in increased emissions of pollutants and greenhouse gases (Tr. Vol. 2 pp. 190-93).

NCSEA witness Day testified that Duke's Program is too expensive, and the costs of the Program will consume an excessive portion of Duke's utility-wide ceiling (Tr. Vol. 2 p. 169). She stated that Duke should seek conventional power plant financing for the Program, and the only costs of the Program that should be recovered through the REPS rider (aside from research costs) are the operations, leasing and maintenance costs of the PV facilities, less avoided costs (Tr. Vol. 2 p. 170).

Public Staff witnesses Cox and McLawhorn testified that Duke's program is very expensive, as can be seen by comparing the bids received in response to the RFP with the **[CONFIDENTIAL]** per MWh cost of the Program. A major reason for the high cost of the Program is that the Program is designed not only to obtain solar energy for REPS compliance, but also to gain broader benefits, such as expertise in a wide range of solar technologies, information about what Duke's customers desire with regard to solar energy, and increased familiarity with DG. In discovery the Public Staff requested Duke to break down the capital costs of the Program between actual solar generation costs and the costs associated with the Program's broader goals, but Duke responded that it could not do so (Tr. Vol. 2 pp. 220-22). During a meeting with the Public Staff prior to the filing of its application, Duke stated that it intended to seek recovery of only 40% of the capital costs through the REPS rider, with the remainder being recovered through base rates as a research expense; but subsequently Duke elected to seek recovery of all Program costs (except avoided costs) through the REPS rider (Tr. Vol. 2 pp. 222-23). Witnesses Cox and McLawhorn stated that only the actual cost of solar energy (minus avoided costs) should be recovered through the REPS rider. In their judgment, while any quantification of the actual cost of solar energy must be somewhat subjective, **[CONFIDENTIAL]** per MWh is an appropriate quantification under the specific facts of this case (Tr. Vol. 2 p. 224). The remaining costs of the Program, if found to be reasonable and prudently incurred, can be recovered through base rates; or, to the extent that they meet the requirements of G.S. 62-133.8(h)(1)(b), they can be recovered as research costs under that statute (Tr. Vol. 2 pp. 225-26).

On cross-examination, witness McLawhorn stated that although the Public Staff's proposed **[CONFIDENTIAL]** per MWh limit on cost recovery through the REPS rider was equal to the amount of **[CONFIDENTIAL]** third-place bid, he and witness Cox were not contending that Duke necessarily should have agreed to purchase power from

[CONFIDENTIAL], and they were not contending that the costs in excess of **[CONFIDENTIAL]** per MWh were necessarily imprudent; they were simply adopting the **[CONFIDENTIAL]** figure as an estimate of, or proxy for, the actual cost of solar energy (Tr. Vol. 2 pp. 245-49). Witness McLawhorn testified on redirect examination that **[CONFIDENTIAL]** is a leading player in the electric utility industry; that he is not familiar with any instance in which **[CONFIDENTIAL]** has walked away from a major commitment; and that **[CONFIDENTIAL]** does not have a substantial possibility of defaulting on a major contract (Tr. Vol. 2 pp. 251-52).

On this very complex issue the parties are sharply in disagreement. Duke has requested the Commission to affirm that it will be allowed to recover its costs associated with the Program through the REPS rider. In considering this request, the Commission will begin its analysis by reviewing the relevant statutory provisions. Under G.S. 62-133.8(h)(4), "incremental costs" may be recovered through the REPS rider. The term "incremental costs" is defined in G.S. 62-133.8(h)(1), which contains three paragraphs, (a) through (c), that identify three different categories of incremental costs. Paragraph (c) has no bearing on this case, and paragraph (b) will be addressed in a later section of this order. Of critical importance is paragraph (a), which provides that incremental costs include costs incurred "to . . . [c]omply with the requirements of subsections (b), (c), (d), (e), and (f) of this subsection" – i.e., the REPS percentage requirements – "that are in excess of the electric power supplier's avoided costs." Equally important is the introductory clause of G.S. 62-133.8(h)(1), which makes clear that only "reasonable and prudent costs" qualify as incremental costs. Thus, the Commission must deal with the question of whether the costs of the Program are reasonable and prudent costs incurred for the purpose of complying with the REPS.

It is clear from the evidence presented in this case that at least some portion of the costs of Duke's Program will in fact be incurred to acquire solar energy for compliance with the REPS solar set-aside. It is also clear that at least some portion of the costs will be incurred for the purpose of achieving the Program's broader goals – increasing Duke's competency as an owner, installer and operator of solar PV facilities, improving Duke's relationships with PV developers, manufacturers, and installers, gaining a fuller understanding of the impact of DG on Duke's system, and the like. Finally, it is clear that a portion of the Program costs will be incurred to comply with the federal tax normalization requirements applicable to public utilities.

Duke contends that the costs of the Program should be viewed as unitary and indivisible; all of the costs should be viewed as being incurred to promote all of the Program's purposes, and all should be recoverable through the REPS rider. Duke points out that there is no clear or simple method of attributing some of the Program costs to one purpose and some to another. All of the funds spent on the Program will be necessary to the Program's completion; all of the energy generated by the Program will be used for REPS compliance; and the Program would never have been proposed if the REPS legislation had not been enacted.

Duke's position is simple and straightforward, and in many respects it is attractive. However, the Commission is concerned that it may lead to results inconsistent with the public interest, and that it may also be inconsistent with the General Assembly's intent.

In the first place, if Duke is allowed to recover all the costs of the Program through the REPS rider, it may reach the utility-wide incremental cost ceiling prematurely; and this will set a precedent for other utilities in the State. Other utilities will be encouraged to undertake costly projects that are designed not only to comply with the REPS but also to promote other goals, knowing that the entire costs of the project can be recovered through the REPS rider. As Duke witness McManeus acknowledged on cross-examination, if a utility generates renewable energy at a high cost, when it could instead have purchased equivalent energy from a third party at a lower cost, and it subsequently reaches the utility-wide ceiling, the result is that it will not be able to acquire as many renewable MWh, prior to reaching the ceiling, as it could otherwise have acquired. Since the utility must meet its customer demand at all times, it must make up the shortfall in renewable generation by running its conventional plants for more hours, very likely resulting in increased emissions of pollutants and greenhouse gases. In this way the primary intent of G.S. 62-133.8 – to reduce emissions and protect the environment – will be thwarted.

Moreover, if Duke is allowed to recover all its Program costs through the REPS rider, this will not only have an adverse environmental effect; it will also be inconsistent with the goal of minimizing utility expenses and keeping rates down. Once the precedent has been set in this case, Duke and other utilities will be encouraged to undertake costly renewable generation projects that promote a variety of purposes, in preference to less expensive projects designed solely for REPS compliance, or purchases of renewable energy from third parties. They will know that as long as a project produces some renewable energy, its entire costs (aside from avoided costs) can be recovered without any need for a rate case. The Commission believes that it is in the public interest that utilities minimize the cost of REPS compliance; that the REPS rider be restricted to costs that are truly intended for REPS compliance; and that other utility costs, even when they are fully legitimate and appropriate, be recovered through base rates.

Finally, it is the Commission's belief that when the General Assembly enacted G.S. 62-133.8, as well as other statutes providing for rate riders, the legislative intent was that these riders should be limited strictly to the purposes for which they were originally designed and not be stretched to encompass other purposes. The General Assembly did not intend that riders be used to collect the entire costs of projects designed only partially to implement the goals of the rider.

The Commission therefore concludes that it is inappropriate to treat the costs of Duke's Program as indivisible, with all costs being attributed to all the purposes of the Program. Instead, it is necessary to attribute a portion of the costs to REPS compliance and a portion to other purposes (the broader Program purposes outlined by Duke and

compliance with tax normalization obligations). Only the costs attributed to REPS compliance may be recovered through the REPS rider.

The evidence in this case shows that Duke had the opportunity to purchase solar energy from **[CONFIDENTIAL]** at **[CONFIDENTIAL]** per MWh or from **[CONFIDENTIAL]** at **[CONFIDENTIAL]** per MWh; but instead, it is proposing to generate an equivalent amount of solar energy on its own system at a cost of **[CONFIDENTIAL]** per MWh and to recover that amount, less avoided costs, through the REPS rider. Duke asserts that the broader benefits it hopes to gain from the Program are sufficient to justify recovery of the Program's costs through the REPS rider. However, Duke has described these benefits only in vague conceptual terms; it has not explained why it could not obtain a greater understanding of the effects of DG on its system in other ways at a much lower cost; and it has made no attempt to quantify the value of the broader benefits. If the costs of Duke's Program were only slightly higher than the bids submitted by **[CONFIDENTIAL]** and **[CONFIDENTIAL]**, Duke might be able to justify them through its simple assertion that the Program offers a variety of intangible benefits; but unsupported assertions are decidedly insufficient to support a level of costs **[CONFIDENTIAL]** higher than **[CONFIDENTIAL]** bid.

Duke asserts, through the testimony of witness McManeus, that its federal tax normalization obligations provide a valid justification for the high costs of the Program. The Commission disagrees. If the federal tax code treats self-generation of solar energy by a public utility less favorably than the purchase of solar energy from a third party – and especially if the difference in treatment amounts to as much as **[CONFIDENTIAL]** per MWh – then prudence points in the direction of <u>not</u> self-generating, but instead purchasing the needed solar energy.

Moreover, the Commission is aware that various factors affect the bid prices submitted and the associated cost estimates of the various solar projects. For example, the federal tax normalization issue does not explain the significant difference between Duke's cost estimate of **[CONFIDENTIAL]** per MWh (absent normalization) and SunEdison's bid of **[CONFIDENTIAL]** per MWh.

Duke asserts that it needs to be in control of its generating plants, and that if it constructs its own solar facilities, the risk of default will be lower than if it buys power from a facility built by **[CONFIDENTIAL]** or **[CONFIDENTIAL]**. However, Duke has presented no evidence that either of these firms lacks the engineering or management skills to operate a solar generating facility efficiently, or that their financial condition is such as to pose a risk of default. The record does show that Black & Veatch **[CONFIDENTIAL]** in either firm's bid. If Duke is concerned that **[CONFIDENTIAL]** is too small a firm to undertake a utility-scale solar project – and there is no evidence of this, except for witness Smith's unsupported assertion on cross-examination that he is "not confident" that **[CONFIDENTIAL]** – then Duke can elect to pay **[CONFIDENTIAL]** more per MWh and purchase power from **[CONFIDENTIAL]** in the electric industry.[2]

[2] The record does not show that **[CONFIDENTIAL]** has experience with <u>solar</u> facilities, but neither does Duke.

This would be a much more reasonable approach than increasing the price by **[CONFIDENTIAL]** per MWh to implement Duke's own Program.

During the hearing, Duke appeared to take the position that a solar generating facility is comparable (with respect to the risk of default) to a nuclear plant, which can be brought to a complete shutdown in the event of a mechanical malfunction that creates a potentially unsafe condition, and consequently requires extraordinary management and engineering skills – or to a fossil plant, which similarly may have to be reduced to a low output or shut down altogether in case of a problem with the boiler or emission controls. In fact, however, a solar PV facility, even a very large one, is quite different from a fossil or nuclear plant. It consists of an array of PV panels, and even if one panel malfunctions, the others can continue to operate. Certainly, an entire solar facility may be left inoperable by a natural disaster or other catastrophic event; but Duke presented no evidence that it could protect its solar generating facilities against such eventualities more effectively than **[CONFIDENTIAL]** or **[CONFIDENTIAL]** could.

Given the very large difference between the costs of Duke's Program and the costs at which power can be purchased from **[CONFIDENTIAL]** or **[CONFIDENTIAL]**, Duke has altogether failed to persuade the Commission that the costs of the Program, to the extent that they exceed **[CONFIDENTIAL]** per MWh, are reasonable and prudent costs of REPS compliance. As previously noted, this does not mean that these costs must be disallowed, or that Duke cannot carry its burden of demonstrating their prudence in a future case. It does mean, however, that the costs in excess of **[CONFIDENTIAL]** per MWh do not qualify as "incremental costs" within the meaning of G.S. 62-133.8(h)(1).

Thus, with respect to the specific amount of costs to be attributed to REPS compliance, the Commission agrees with the Public Staff's witnesses that **[CONFIDENTIAL]** per MWh is an appropriate amount. As witnesses Cox and McLawhorn acknowledged, any specific amount is necessarily somewhat subjective in the circumstances of this case; but the Commission notes that **[CONFIDENTIAL]** per MWh is approximately the amount at which Duke could have purchased power from **[CONFIDENTIAL]** or **[CONFIDENTIAL]** and it represents slightly under **[CONFIDENTIAL]** of Duke's total costs.

It is not necessary for the Commission to go further and determine what portion of the remaining **[CONFIDENTIAL]** per MWh is attributable to tax normalization and what portion is attributable to the other purposes of the Program.

Accordingly, the Commission finds that no more than **[CONFIDENTIAL]** per MWh of the costs of Duke's proposed Program constitute "reasonable and prudent costs incurred by an electric power supplier to . . . [c]omply with the requirements" of the REPS within the meaning of G.S. 62-133.8(h)(1)(a), and no more than **[CONFIDENTIAL]** per MWh may be recovered through the REPS rider pursuant to paragraph (h)(1)(a).

It is important to emphasize that the Commission has given no consideration to disallowing any of the costs of Duke's Program for imprudence. Except in very unusual circumstances, it would be inappropriate to disallow costs in a CPCN proceeding. Public Staff witness McLawhorn made it clear on cross-examination (Tr. Vol. 2 pp. 248-49) that the Public Staff is not proposing to disallow any costs.

As the Commission has previously emphasized, the decision on this issue does not mean that the remaining **[CONFIDENTIAL]** per MWh of the costs of the Program are being disallowed. If Duke is able to demonstrate in a future case that some or all of these costs have been incurred prudently to "[f]und research that encourages the development of renewable energy, energy efficiency, or improved air quality," then it can recover them through the REPS rider pursuant to paragraph (h)(1)(b) of G.S. 62-133.8, subject to the $1,000,000 per year limitation of that paragraph. Duke is also free to seek recovery of these costs through base rates in its next general rate case, provided it can establish that the costs are reasonable and prudent.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT 16

The Commission's findings with respect to the need for Duke's proposed Program, the appropriate size of the Program, and the regulatory treatment of the costs of the Program lead to the conclusion that the Certificate of Convenience and Necessity requested by Duke should be granted, but only on condition that the total capacity of the Program be limited to 10 MW, and that the costs of the Program to be recovered through the REPS and REPS EMF riders pursuant to G.S. 62-133.8(h)(1)(a) be limited to a maximum of **[CONFIDENTIAL]** per MWh.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT 17

The evidence supporting this finding of fact appears in the testimony of Duke witnesses Smith and Hager and Wal-Mart witness Baker.

Duke witness Smith stated in his rebuttal testimony that the estimated cost of the solar generating facilities to be constructed in connection with Duke's proposed Program is $50 million (Tr. Vol. 1 p. 62). He stated that if Duke's cost estimate is lower or higher than what is actually achieved, any variance will be reflected in the cost recovery (Tr. Vol. 1 p. 110).

Duke witness Hager testified that the Program conforms to, and is an important and necessary part of, Duke's integrated resource plan for meeting customer capacity and energy needs (Tr. Vol. 2 pp. 13-14).

Wal-Mart witness Baker testified that Duke's filing does not contain enough information to explain how Duke proposes to acquire solar panels at $5,000 per kilowatt (kW), and that the Commission should consider capping the costs of the Program (Tr. Vol. 2 pp. 95, 100). On cross-examination he admitted that Wal-Mart had never served

any discovery on Duke or engaged in informal discussions with the Company about the costs of solar panels or any other aspect of this proceeding (Tr. Vol. 2 pp. 102-03).

The Commission does not agree with Wal-Mart that the costs of the Program should be capped at $5,000 per kW. Of course, if the costs increase above the present estimate of $5,000 per kW, this will increase the per-MWh Program costs beyond the current estimate of **[CONFIDENTIAL]**, and, as noted above, Duke has not yet demonstrated that the costs in excess of **[CONFIDENTIAL]** per MWh are reasonable and prudent. The burden of proof will be on Duke to show in any future proceeding that the costs above **[CONFIDENTIAL]** per MWh have been prudently incurred.

Although various parties disagreed with Duke's proposals for recovery of the costs of the Program, no party took issue with witness Smith's testimony that the total capital costs of the Program are currently estimated to be $50 million. Neither did any party disagree with the testimony of witness Hager that the Program is consistent with Duke's integrated resource plan. The Commission therefore finds the facts to be in accordance with these witnesses' testimony.

EVIDENCE AND CONCLUSIONS FOR FINDING OF FACT 18

The evidence supporting this finding of fact appears in the testimony of Duke witness Smith and Wal-Mart witness Baker.

Wal-Mart witness Baker testified that Duke should be required to allow the host of a photovoltaic facility to retain a portion of RECs generated by the facility as compensation, and that Duke should likewise be required to allow the host the option to take some portion of the electricity generated by the facility (Tr. Vol. 2 p. 99).

Duke witness Smith testified that Duke's inclination is to offer cash as compensation for siting the solar PV facility on a customer's roof, but Duke would like the flexibility to structure the lease agreement in a manner that would be prudent for fulfilling the Program (Tr. Vol. 1 p. 107). He further stated that cash compensation for the use of the premises can effectively result in the same outcome for the host with much less complexity than compensation by means of retaining RECs or retaining some of the electricity produced. Duke would prefer the flexibility to finalize such decisions related to the lease agreement after its market research studies have concluded (Tr. Vol. 1 p. 84).

Based on the foregoing, the Commission concludes that it is inappropriate to require Duke to allow the host of the solar facilities to retain a portion of the RECs, or to retain a portion of the energy generated. Duke should be allowed some flexibility in structuring the lease agreements so that the outcome is equivalent to cash compensation.

IT IS, THEREFORE, ORDERED as follows:

1. That Duke's application for a Certificate of Public Convenience and Necessity to implement its proposed solar photovoltaic distributed generation program, and to construct the associated generating facilities, is hereby approved, subject to the conditions set forth hereinbelow. This order shall constitute the certificate.

2. That the generating facilities constructed pursuant to this order shall not exceed a total of 10 MW in capacity.

3. That no more than **[CONFIDENTIAL]** per MW of the costs of the Program, less avoided costs, may be recovered through the REPS and REPS Experience Modification Factor riders pursuant to G.S. 62-133.8(h)(1)(a). This restriction is without prejudice to Duke's right to apply for recovery of the remaining costs of the Program through G.S. 62-133.8(h)(1)(b) or in such other manner as may be appropriate.

4. That the facilities certificated herein shall be constructed and operated in strict accordance with all applicable laws and regulations.

5. That the issuance of this order does not constitute approval of the final costs associated herewith for ratemaking purposes and this order is without prejudice to the right of any party to take issue with the ratemaking treatment of the final costs in a future proceeding.

6. That Duke's proposed tariff designated as Smith Rebuttal Exhibit 1, and entitled "Solar Photovoltaic Distributed Generation Program (NC)," is approved.

ISSUED BY ORDER OF THE COMMISSION.

This the ____ day of _____, 2008.

NORTH CAROLINA UTILITIES COMMISSION

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Renné Vance, Chief Clerk