**Approach:** A study committee consisting of interested stakeholders drawn from the individual Duke Energy Progress (DEP), Duke Energy Carolinas (DEC), and South Carolina Electric & Gas Company (SCE&G) DER advisory groups, augmented with other stakeholders as appropriate, should be formed. Also, joint cooperation is recommended — beginning with a meeting in 2017 to discuss not only the progress each utility has made toward fulfilling the goals of Act 236 but also to consider:

- renewable resources in addition to those included in current DER plans;
- program modifications required for an advanced, integrated grid to manage and optimize the increasingly dynamic flow of electricity such as energy storage, microgrids, electric vehicles, power quality, and system security; and
- opportunities to enhance current policy or regulations to further expedite infrastructure modernization, expansion, and service reliability
Act 236 Progression Study Committee

Work Groups

Question 1
- Geoff Penland (Santee Cooper)
- John Raftery (SCANA)
- ORS
- John Frick (ECSC)

Question 2
- Kenneth Sercey (CCL)
- Lauren Bowen (SELC)
- Chris Carnavale (SACE)
- John Raftery (SCANA)
- ORS
- Mark Svrcek (CEPCI)
- John Frick (ECSC)

Question 3
- Elise Fox (SNRL)
- Andrew Streit (Solbright)
- John Raftery (SCANA)
- Kenneth Sercey (CCL)
- ORS
- Mark Svrcek (CEPCI)
- John Frick (ECSC)

Question 4
- Elise Fox (SNRL)
- Lauren Bowen (SELC)
- Chris Carnavale (SACE)
- ORS
- John Raftery (SCANA)
- Amir Yazdi (SEIA)
- Maggie Clark (SEIA)

Question 5
- Andrew Streit (Solbright)
- ORS
- John Raftery (SCANA)
- Mike Smith (ECSC)
- John Frick (ECSC)

Question 6
- Elise Fox (SNRL)
- ORS
- John Raftery (SCANA)
- Lauren Bowen (SELC)
- John Frick (ECSC)

Question 7
- ORS
- John Raftery (SCANA)
- Patty Pierce (SCCEBA)
- Nick Ball (Vivant)
- John Frick (ECSC)

Question 8
- Geoff Penland (Santee Cooper)
- Elise Fox (SNRL)
- Andrew Streit (Solbright)
- ORS
- John Raftery (SCANA)
- Patty Pierce (SCCEBA)
- Kenneth Sercey (CCL)
- Blan Holman (CCL)
- John Frick (ECSC)
Advisory Group

- Stewart Weisberg
- Ned Cochrane (SCEUC)
- John Raftery (SCANA)
- John Tynan (CCL)
- Patty Pierce (SCCEBA)
Submitted Factual Needs

Question 1

- Reports from ORS, utilities, solar companies on DER investment to date, and estimated timing of future Act 236 investments
- Number of leasing of solar facilities, descriptions of types of customers and capacities

Question 2

- What cost shifts currently occur in ratemaking? What is the impact of these cost shifts on current customers? (May need independent expert to assess this)
- Retail rates of electric utilities that apply to solar customers
- The IOUs and co-ops handle the costs of net metering, particularly how they calculate the cost and benefit to them of the extra energy source that DG brings them

Question 3

- Program descriptions for DER by electric utilities
- Independent expert to assess costs and benefits of current net metering program and alternatives; begin by looking at ORS cost shift report data and conclusions
- Examine similar solar cost shift examinations from other states, such as the meta-analysis done by Brookings Institution

Question 4

- What are the primary consumer protection concerns? Who is raising these concerns and why?
- Collect info on consumer complaints in SC, if any. How many complaints have been received and what is the nature of the complaints?
- What consumer protections exist today in SC? How are marketing materials regulated today?
- What are other states doing on these issues?

Question 5

- Review analyses of integration of solar and other DERs at penetrations similar to South Carolina.
- Review grid modernization efforts underway in other states and learn if and why grid modernization was undertaken and results.
- Review findings of similar inquiries in other states, especially with high penetration levels of DERs.
- Analyze research on capturing grid benefits from DERs.
- Number of DER customers and capacity ranges
Question 6

- Polling these groups to assess unmet demand for DERs.
- Analyze other states’ successful efforts to serve these populations.
- Assess cost-effectiveness of various DERs for these populations.
- Number of community solar projects and capacity

Question 7

- Listing of current monetary incentives (tax and program incentives)

Question 8

- Is there unmet customer demand for DERs in South Carolina (for example, from residential customers, or commercial and industrial customers with sustainability goals, or customers in utility service territories not included within the scope of Act 236)?
- What has been the economic impact to the state from Act 236? What are the potential costs and benefits of increased DER penetration in South Carolina?
- What are other states (such as neighboring states) doing on DERs? A survey of DER rates, leases, etc. in other jurisdictions
- What is the theoretical maximum DG on today’s SC grid, why? Is it different for different suppliers?
- Do we need legislated or regulated goals with the current cost of solar?
- What happens if we remove the current caps, who suffers, how, why and how can we resolve?
- Hawaii has exceeded 10% DG, can South Carolina use a similar or higher target to create economic development opportunities for all energy suppliers and supporting solar companies? In other words what model, goals or removal of caps benefits South Carolina the most?
- When do we tie solar to EV’s and growth?
- Breakdown of the % at least of what we are paying for coal, nuclear, natural gas like our Richland County tax bill breaks out the items we pay for through our taxes.
1. What progress has been made toward meeting the goals of Act 236?
2. How has the way that electric providers have charged for electricity changed since the adoption of Act 236 of 2014?
   a. What principles should guide rate design?
   b. Is the current design sustainable in the face of evolving technology and consumer expectation?
      i. If not, how should it change in the future?
   c. To what extent do those designs shift costs or benefits among customers and customer classes?
      i. How do the cost and benefit shifts compare to those already occurring within utility ratemaking?
      ii. What amount of cost shifting is acceptable in utility ratemaking?
3. How has the way that electric providers compensate distributed generators of electricity changed since the adoption of Act 236 of 2014?
   a. What is the current state of net-metering, as outlined in the settlement agreement, in South Carolina? What are its near-term and long-term prospects?
   b. What is the current state of the value of solar methodology, as outlined in the settlement agreement, in South Carolina? What are its near-term and long-term prospects?
   c. To what extent do net-metering and the value of solar methodology, as outlined in the settlement agreement, shift costs or benefits among customers and customer classes?
      i. How do the cost and benefit shifts compare to those already occurring within utility ratemaking?
      ii. What amount of cost shifting is acceptable in utility ratemaking?
4. How can we ensure consumer protections and best practices are maintained?
   a. Are additional consumer protections needed?
      i. If so, what other state agencies need to be involved?
   b. Should there be a solar “Bill of Rights”?
      i. If so, what should they be?
   c. Should marketing materials be regulated and required to contain up-front disclosures?
5. What are the technological and regulatory factors requiring modernization of the current electrical grid?
   a. What opportunities exist in a modernized grid that do not exist currently?
   b. What are the costs and benefits of grid modernization?
   c. At what penetration will DER require grid modernization?
      i. Can DERs be mobilized to provide grid services? If so, what would the costs and benefits be?
   d. What are the costs and benefits of grid modernization?
   e. What policy changes might be necessary to prompt advisable grid modernization?
6. Do low to moderate income communities, rural communities, municipalities, schools and non-profits have meaningful access to solar and other distributed energy resources?
   a. What steps can be taken to expand access?
i. Which of these steps are cost-effective?

ii. What are the pros and cons of taking those steps?

7. How should tax policy be addressed as part of a comprehensive review of distributed energy resource policy for the purpose of Act 236 review?

8. Should goals beyond those established by Act 236 be established?
   
a. If so, what policies should be implemented to help meet those goals?