

# Memorandum

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To: Alice Bator  
From: Fred DeSanti  
Date: May 28, 2013  
Subject: Proposed DG Definition and Rate Modeling Criteria

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Pursuant to our discussion at the recent “standby rate” stakeholder meeting in Trenton the following two items are proposed for further consideration by the full stakeholder group:

*Proposed Definition of Distributed Generation:*

After reviewing a number of legislative, utility tariff and industry definitions of Distributed Generation the following is proposed:

Distributed Generation, for the purposes of utility tariff definition, is a small electric production facility with an average capacity factor in excess of 50% dedicated to support nearby associated load. Distributed generation can utilize non-renewable fossil fuels (fossil fuels) or renewable energy resources wind, water, bio mass fuels (farm waste, etc.) as long as the 50% minimum average capacity factor requirements are achieved. Distributed electric output can be either AC or DC at various voltage levels.

The following systems/technologies (but not limited to this list) would be considered Distributed Generation resources:

- Combined heat and power systems
- Fuel Cells
- Micro combined heat and power systems (Micro CHP)
- Micro-turbine technologies
- Reciprocating engines (capable of 50% continuous duty cycle by design, this would not include traditional diesel standby)
- Tri-generation Systems (simultaneous production of thermal heating, cooling, and electric production)
- Stirling engines
- CHP Micro-grids

Rate Modeling Criteria:

For the purposes of economic and DG operating requirement comparisons across all New Jersey electric utilities the following modeling criteria is proposed:

- I. For a DG System of 100KW AC Capacity:
  - a. All calculations of rate impact shall be based upon a complete DG outage during the interval of the summer highest peak hour demand.
    - i. Calculations shall be disaggregated to allow direct comparison of the following component charges:
      1. Service charge
      2. Summer demand charge
      3. Annual peak demand charges
      4. Generation obligation
      5. Transmission obligation
      6. Societal benefits charges
      7. Taxes
      8. TEFA
      9. Other charges delineated by type and amount
- II. For a DG System of 5MW AC Capacity:
  - a. All calculations of rate impact shall be based upon a complete DG outage during the interval of the summer highest peak hour demand.
    - i. Calculations shall be disaggregated to allow direct comparison of the following component charges:
      1. Service charge
      2. Summer demand charge
      3. Annual peak demand charges
      4. Generation obligation
      5. Transmission obligation
      6. Societal benefits charges
      7. Taxes
      8. TEFA
      9. Other charges delineated by type and amount

If possible all data should be entered into an Excel Spreadsheet format in order to enable direct comparisons of disaggregated charges between EDC's.