

REDLINE Version of JCP&L's Proposed Revisions to F. DeSanti
Proposed DG Definition

[Memorandum]

[To: ~~Alice Bator~~]

[From: ~~Fred DeSanti~~]

[Date: ~~May 28, 2013~~]

[Subject: ~~Proposed DG Definition and Rate Modeling Criteria~~]

~~[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]~~ **The following definition of "Distributed Generation[~~the following~~"]** is proposed for use in utility standby tariffs:

"Distributed [~~Generation,~~ **generation,**" for [~~the~~] purposes of **applying** utility [~~tariff definition, is]~~ **standby tariffs, means** a small electric production facility [~~with an average~~] **that is a district energy system, a combined heat and power facility (as defined in section 3 of P.L.1999, c.23 (C.48:3-51)), or which generates energy from other forms of clean energy efficient electric generation systems, located at a customer's site within the franchised service territory of the utility and used exclusively to meet the customer's load requirements at the site that maintains a 12 month rolling average monthly** capacity factor in excess of 50% [~~dedicated to support nearby associated load.~~] **(as set forth in the utility's tariff).**¹ Such Distributed generation [~~can~~] **may** utilize **(i)** non-renewable fossil fuels (**i.e.,** fossil fuels) [~~or renewable energy~~], **provided that such fossil fuel systems qualify as clean, energy-efficient electric generation systems, or (ii) clean energy and renewable** resources [~~wind~~], **including** water, bio mass fuels (**e.g.,** 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~~

¹ **Please note that JCP&L's current tariff, which would be expanded to include DG, does not use the terminology "capacity factor," but rather refers to, and defines, the use of Generation Availability (GA). GA is the customer's Annual Average Generation on peak (based on a rolling 12 months) (AG) divided by contract demand (CD). Accordingly, for purposes of a generic or generally applicable definition of DG that refers to a capacity factor, JCP&L would need to clarify that for purposes of its tariff, the use of the term "capacity factor" refers to GA as defined in its tariff.**

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~~various voltage levels.]), but, in either case, excluding any generating systems that are net-metered under the Board's net-metering regulations; provided, however, that the Distributed generation (from any permitted fuel source) maintains a 12 month rolling average monthly capacity factor in excess of 50% (as set forth in the utility's tariff). Interconnection of Distributed generation with the utility distribution or transmission system must be at the voltage and electrical characteristics suitable for connection to the customer's side of the meter and consistent with both the utility's interconnection requirements and tariff provisions.~~

The following [~~systems/technologies (but not limited to this list) would be considered Distributed Generation resources~~]Distributed generation resources, meeting the above criteria and qualifications, are eligible for the utility's standby tariff:

- Combined heat and power systems (as defined in section 3 of P.L.1999, c.23 (C.48:3-51));
- 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;
- Clean-energy and renewable resource non net-metered electric generation systems (meeting the capacity factor requirement above).

Unless and until further determined by the Board (after application made and an opportunity to be heard by all interested parties), the following technologies, whether or not meeting the capacity factor requirements set forth above, do not qualify as Distributed generation eligible for the utility's standby tariff:

- Reciprocating engines;
- CHP Micro-grid technologies; and
- [~~CHP Micro-grids~~]Any other clean, energy-efficient electric generation system not specifically listed above.

~~[Rate Modeling Criteria:]~~

~~[For the purposes of economic and DG operating requirement comparisons across~~

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~~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.]~~

