



GDS Associates, Inc.
Engineers and Consultants

RENEWABLE ENERGY RESOURCES ELIGIBILITY
GDS TEAM RECOMMENDATION
For Consideration By The
STATE OF RHODE ISLAND PUBLIC UTILITIES COMMISSION
(Version 7 – September 12th, 2016)

Date: 9/12/2016

Docket #: 4624

Application Received: 6/23/2016. Supplemental information was requested on 7/29/2016 regarding facility and river layout, GIS number, efficiency increase calculation, and turbine efficiency curves. Response received on 8/10/2016.

Generation Unit Information:

Unit Name: Lyons Falls Mill Facility

Unit Owner: Northbrook Lyons Falls, LLC

Unit Size (max. MW): 5.5 **Location (city, state):** Lyons Falls, NY

Commercial Operation Date: Unit#1: 12/1923. Unit#6: 4/1963. Unit#7: 5/1966. Unit#8: 3/1974. Unit#9: 4/1971 – These existing units will be retired and replaced in 2017.

Type of Certification Requested:

- Standard Certification
 Prospective Certification (Declaratory Judgment)

Generation Type and Technology Information: *(check all that apply)*

- Repowered Project Incremental Generation Incremental Intermittent
 Customer-Sited or Off-Grid System (or associated aggregations)
 Generation Unit Located in Control Area Adjacent to NEPOOL: NY ISO
 Solar Wind Ocean Thermal Geothermal Small Hydro
 Eligible Biomass Unlisted Biomass Biomass (fossil co-fired/multi-fuel) Fuel Cell (using an eligible renewable resource)

Recommendation:

- Approve (GIS Certification #: TBD) Reject Public Hearing Needed
 Existing Renewable Energy Resource New Renewable Energy Resource
 Capable of Producing as Both Existing & New Renewable Energy Resource

Comments: Conditional Approval recommended: Existing units will be retired and replaced in 2017. Verification of Commercial Operation Date, GIS number and as-built construction, actual capital costs and efficiency details needed before unique RI RER certification number can be issued. Copy of Unit-Specific, Bilateral Contract will also be required. Approved as Tier 1 Renewable Energy Facility by Maryland PSC on June 11, 2014.

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RENEWABLE ENERGY RESOURCES ELIGIBILITY DETAILED
GDS TEAM APPLICATION REVIEW RESULTS

(Template V6 – September 12th, 2016)

Date of Final Review: 9/12/2016

Note: Depending on the type of application (project vintage, type, location, fuel source, etc.) not all of these data items will be applicable.

A. Renewable Energy Resource – Vintage (*see appropriate Sections of RES Regulations, Application Sections 3.1-3.9 and Appendix C*):

A.1 Generation Unit meets the definition of an Existing Renewable Energy Resource noted in RES Regulations Section 3.10 (first entering commercial operation before 12/31/1997).

Yes No N/A

Comments: Repowered. Prime mover has not yet been replaced, so approval as an eligible resource should be conditional.

A.2 Generation from the Unit meets one of the definitions of New Renewable Energy Resource in RES Regulations Section 3.23.

Yes No N/A

Comments: See below.

A.2.1 If Generation Unit is at a new site, adequate documentation is provided to ensure that it first entered commercial operation after December 31, 1997.

Yes No N/A

Comments: Facility is at an existing site, all units of which will have their prime movers replaced with new equipment.

A.2.2 If Generation Unit is at the site of an Existing Renewable Energy Resource, adequate documentation is provided to ensure that it first entered commercial operation after December 31, 1997 and that the Existing Renewable Energy Resource has been retired and replaced with such new Generation Unit.

Yes No N/A

Comments: Applicant has requested qualification as Repowered Generation Unit. Anticipated commercial operation date will occur in 2017.

A.2.3 If a Repowered Generation Unit (as defined in Section 3.29 of the RES Regulations – complete replacement of Prime Mover, material increase in efficiency or material decrease in air emissions, and demonstration that at least 80% of resulting tax basis of the entire Generation Unit’s plant and equipment is derived from capital expenditures made after December 31, 1997), adequate documentation is provided to ensure that the entire output of said unit first entered commercial operation after December 31, 1997 at the site of existing Generation Unit.

Yes No N/A

Comments:

- A detailed description of the proposed renovations was provided

and when completed as described will satisfy the repowered definition requirement of the Prime Mover being completely replaced.

- An Excel worksheet was submitted and supporting documentation reviewed that demonstrates a material increase in efficiency.
- Sufficient documentation was provided to demonstrate that at least 80% of resulting tax basis of the entire Generation Unit's plant and equipment will be derived from capital expenditures made after December 31, 1997
- Commercial operation will be achieved following completion of all specified turbine replacement and related construction activities – not anticipated until 2017.

A.2.4 If a multi-fuel facility, adequate documentation is provided to ensure that the renewable energy fraction of output from a Generation Unit in which an Eligible Biomass Fuel is first co-fired with fossil fuels after December 31, 1997.

Yes No N/A

Comments:

A.2.5 If Incremental Output from a non-Intermittent Existing Renewable Energy Resource, adequate documentation is provided to ensure that such output is attributable to capital investments for efficiency improvements or additions of capacity that were demonstrably completed after December 31, 1997 and that are sufficient to, were intended to, and can be demonstrated to increase annual electricity output in excess of ten percent (10%) over a Historical Generation Baseline as determined per Section 3.23.v of the RES Regulations.

Yes No N/A

Comments:

A.2.6 If Incremental Output from an Intermittent Existing Renewable Energy Resource, adequate documentation is provided to ensure that such output is attributable to capital investments for efficiency improvements or additions of capacity that were demonstrably completed after December 31, 1997 and that are sufficient to, were intended to, and can be demonstrated to increase annual electricity output in excess of ten percent (10%) over a Historical Generation Baseline as determined per Section 3.23.v of the RES Regulations.

Yes No N/A

Comments: Applicant is repowering the entire facility, removing all existing prime movers and replacing them with new equipment that fully meets the RES regulations Repowering definition, including requirement for material increase in efficiency.

B. Eligible Customer-Sited/Off-Grid Generation Facility:

(see appropriate Sections of RES Regulations, Application Section 5 and Appendix D)

Yes No N/A

B.1 Adequate documentation provided to ensure that NEPOOL GIS Certificates are created by way of an aggregation of Generation Units, physically located in the State of Rhode Island, using the same generation technology (see RES Regulations Section 6.8.i).

Yes No N/A

Comments:

B.2 Proposed Aggregation Agreement (as specified in Section 6.8.iii of the RES Regulations) is reasonable and complete.

Yes No N/A

Comments:

B.3 Aggregation Agreement includes name and contact information of the aggregator owner.

Yes No N/A

Comments:

B.3.1 Aggregation Agreement includes name and contact information and adequate evidence of qualifications of the Verifier to ensure that the Verifier will accurately and efficiently carry out its duties.

Yes No N/A

Comments:

B.3.1.1 Additional evidence of Verifier qualifications requested and provided.

Yes No N/A

Comments:

B.3.2 Aggregation Agreement includes a declaration of any and all business or financial relations between aggregator and Verifier sufficient to ensure the independence of the Verifier in accordance with Section 6.8.iii.c of the RES Regulations (10% or more ownership in voting stock, or family officer/etc.).

Yes No N/A

Comments:

B.3.3 Aggregation Agreement includes statement indicating under what circumstances the Verifier would not be considered sufficiently independent of the individual Generation Unit, and that Generation Units not meeting this independence test would not be allowed to participate in the aggregation.

Yes No N/A

Comments:

B.3.4 Aggregation Agreement identifies the type of technology that will be included in the aggregation and provides a statement that the aggregation will include only individual Generation Units that meet all the requirements of the RES Regulations (physical location, vintage, etc.).

Yes No N/A

Comments:

B.3.5 Aggregation Agreement provides an adequate description of proposed operating procedures for the aggregation, by which the Verifier shall ensure that individual Generation Units in the aggregation comply with all eligibility requirements and that the NEPOOL GIS Certificates created accurately represent generation (see Section 6.8.iii.e of the RES Regulations).

Yes No N/A

Comments:

B.3.5.1 At a minimum the proposed operating procedures include reasonable and sufficient details for:

- Determining that the Generation Unit exists and is in compliance with RES Regulations and Commission-approved Aggregation Agreement.

Yes No N/A

- Meter reading procedure that allows the Verifier to verify these readings (manual or remote, via the aggregators own system or an independent system) in a manner fully compliant with NEPOOL GIS Operating Rules regarding metering.

Yes No N/A

- Specifying how generation data will be entered into NEPOOL GIS to create Certificates.

Yes No N/A

- Documenting a procedure to verify independently that the GIS Certificates created for the aggregation are consistent with the meter readings.

Yes No N/A

- Correcting discrepancies in NEPOOL GIS Certificate generation identified by the Verifier.

Yes No N/A

Comments:

B.3.6 Aggregation Agreement provides an adequate description of how the Verifier will be compensated for its services by the aggregator (in no instance is the Verifier is compensated in a manner linked to the number of NEPOOL GIS Certificates created by the aggregation).

Yes No N/A

Comments:

C. Generation Unit Location (see appropriate Sections of RES Regulations, Application Section 5 and Appendix E):

C.1 Generation Unit is located in NEPOOL Control Area.

Yes No

Coordinate Location: 43° 37' 4/75" 21' 26"

C.1.1 Generation Unit is located in Rhode Island.

Yes No

Facility Address: 410 Center Street, Lyons Falls, NY 13368

C.2 Generation Unit is located in a control area adjacent to NEPOOL and, in accordance with Section 5.1.ii of the RES Regulations, will apply the associated Generation Attributes to the RES only to the extent that the energy produced by the Generation Unit is actually delivered into NEPOOL for consumption by New England customers.

Yes No

Comments: Located in NY ISO control area (Lyons Falls, NY)

C.2.1 Applicant acknowledges that satisfactory documentation (i.e., a report from neighboring Generation Attribute accounting system or an affidavit) must be provided to verify that Generation Attributes from a Generation Unit located in a control area adjacent to NEPOOL have not otherwise been, nor will be, sold, retired, claimed or represented as part of electrical energy output or sales, or used to satisfy obligations in jurisdictions other than Rhode Island (such assurances may consist of a report from a neighboring Generation Attribute accounting system or an affidavit from the Generation Unit).

Yes No

Comments:

C.2.2 Applicant acknowledges that energy delivered from such Generation Unit into NEPOOL will be verified by the following:

- A unit-specific bilateral contract for the sale and delivery of such energy into NEPOOL
- Confirmation from ISO that the energy was actually settled in the ISO Market Settlement System, and
- Confirmation through the North American Reliability Council tagging system that the import of the energy into NEPOOL actually occurred, or such other requirements as the Commission deems appropriate

Yes No

Comments:

- D. Eligible Fuel Source – Solar, Wind, Ocean Thermal, Geothermal, or Fuel Cell** (using an eligible renewable resource) (see appropriate Sections of RES Regulations and Application Section 2.4):

Yes No

Fuel Source:

- E. Eligible Fuel Source – Small Hydro Facilities** (see appropriate Sections of RES Regulations and Application Sections 2.5-2.6):

Yes No

E.1 Aggregate capacity does not exceed 30 MW.

Yes No N/A

Comments: 5.5 MW

E.2 If “New Renewable Energy Resource”, applicant acknowledges that facility does not involve any new impoundment or diversion of water with an average salinity of 20 parts per thousand or less.

Yes No N/A

Comments: Existing impoundment

- F. Eligible Fuel Source – Biomass Facilities** (see appropriate Sections of RES Regulations, Application Sections 2.7 and Appendix F):

Yes No

F.1 Generation Unit uses a biomass fuel source listed in RES Regulations Section 3.7.

Yes No N/A

Comments:

F.2 If source is other than RES Regulations Section 3.7-listed, said source has been designated as “clean wood.”

Yes No N/A

Comments:

F.3 Fuel Source Plan can reasonably be expected to ensure that only Eligible Biomass Fuels will be used, and in the case of co-firing ensure that only that proportion of generation attributable to an Eligible Biomass Fuel be eligible.

Yes No N/A

Comments:

F.3.1 Fuel Source Plan specifies the type of Eligible Biomass Fuel to be used.

Yes No N/A

Comments:

F.3.2 If proposed fuel is “clean wood”, Fuel Source Plan provides adequate substantiation as to why the fuel source should be considered a clean wood.

Yes No N/A

Comments:

F.3.3 In the case of co-firing with a fossil fuel, Fuel Source Plan includes an adequate description of how such co-firing will occur and how the relative amounts of Eligible Biomass Fuel and fossil fuel will be measured, and how the eligible portion of generation output will be calculated (with such calculations based on the energy content of the proposed fuels used).

Yes No N/A

Comments:

F.3.4 Fuel Source Plan includes an adequate description of what measures will be taken to ensure that only the Eligible Biomass Fuel is used (e.g., standard operating protocols or procedures that will be implemented at the Generating Unit, contracts with fuel suppliers, testing or sampling regimes).

Yes No N/A

Comments:

F.3.5 Fuel Source Plan includes adequate assurance that the fuels stored at or brought to the Generation Unit will only be Eligible Biomass Fuels or fossil fuels used for co-firing.

Yes No N/A

Comments:

F.3.6 If proposed fuel includes recycled wood waste, Fuel Source Plan provides adequate documentation to ensure that such fuel meets the definition of Eligible Biomass Fuel and also meets material separation, storage, or handling standards acceptable to the Commission and furthermore consistent with the RES Regulations.

Yes No N/A

Comments:

F.3.7 Applicant certifies that it will file all reports and other information necessary to enable the Commission to verify the on-going eligibility of the renewable energy generators pursuant to Section 6.3 of the RES Regulations.

Yes No N/A

Comments:

F.3.8 A copy of the Generation Unit's Valid Air Permit or equivalent authorization has been attached and the effective date and issuing state or jurisdiction has been identified.

Yes No N/A

Comments:

- G. Other Comments/Observations:** Conditional Approval recommended: Existing units will be retired and replaced in 2017. Verification of Commercial Operation Date, GIS number and as-built construction, actual capital costs and efficiency

details needed before unique RI RER certification number can be issued. Copy of Unit-Specific, Bilateral Contract will also be required. Approved as Tier 1 Renewable Energy Facility by Maryland PSC on June 11, 2014.