# STATE OF NEW HAMPSHIRE

**Intra-Department Communication** 

**DATE:** December 31, 2014 **AT (OFFICE):** NHPUC

NHPUC 2JANY 15AKB: 31

FROM: Barbara Bernstein Sustainable Energy Analyst

DE 14-368

DE 14-370

DE 14-374

DE 14-376

DE 14-378

**SUBJECT:** Application for Certification as REC Eligible Facilities – Knollwood Energy of MA LLC

DE 14-364 DE 14-366 Town of Bristol – Minot Sleeper Library Christine Nguyen

Ryan McCarthy

David Hartman

John Rowell

**Richard Sirois** 

Keith Yeaton

**Staff Recommends Approval** 

DE 14-365David SegattoDE 14-367Neil ShifrinDE 14-369Andrew NitschelmDE 14-371Paul NicolosiDE 14-375Vernon JohnDE 14-377Matt TilleyDE 14-379James Roux

- **TO:** Chair Martin P. Honigberg Commissioner Robert R. Scott Debra A. Howland, Executive Director and Secretary
- CC: David J. Shulock, Staff Attorney

## Summary

On December 15, 2014, the Commission received applications filed by Knollwood Energy of MA, LLC<sup>1</sup> (Knollwood Energy) requesting Class II eligibility for the following photovoltaic (PV) arrays<sup>2</sup> and inclusion in the Knollwood Energy aggregation.

Applicant	Application Receipt Date	Applicant	Application Receipt Date
Town of Bristol – Minot Sleeper Library			
(Minot Sleeper Library)	12-15-2014	David Segatto (Segatto)	12-15-2014
Christine Nguyen (Nguyen)	12-15-2014	Neil Shifrin (Shifrin)	12-15-2014
Ryan McCarthy (McCarthy)	12-15-2014	Andrew Nitschelm (Nitschelm)	12-18-2014
David Hartman (Hartman)	12-18-2014	Paul Nicolosi (Nicolosi)	12-18-2014
John Rowell (Rowell)	12-26-2014	Vernon John (John)	12-26-2014
Richard Sirois (Sirois)	12-26-2014	Matt Tilley (Tilley)	12-26-2014
Keith Yeaton (Yeaton)	12-26-2014	James Roux (Roux)	12-26-2014

<sup>&</sup>lt;sup>1</sup> The Commission approved Knollwood Energy of MA, LLC as an aggregator of RECs on November 12, 2013, DE 13-256.

<sup>&</sup>lt;sup>2</sup> Pursuant to RSA 362-F, New Hampshire's Electric Renewable Portfolio Standard law. Class II eligibility requires a facility to produce electricity from solar technologies that began operation after January 1, 2006 (RSA 362-F:4, II).

The Commission, in a non-adjudicative process, is required to issue a determination of whether a facility meets a particular classification within 45 days of receipt of a completed application. The above-named facilities are customer-sited sources and meet the Class II eligibility requirements under RSA 362-F:4, II. Based on review of the applications, Staff recommends that the Commission certify the above-listed facilities as eligible to produce Class II RECs as of the application receipt date listed in the previous table. In addition, staff recommends the Commission approval these facilities inclusion in the Knollwood Energy aggregation.

# Analysis

To qualify as a REC eligible facility, Puc 2505.08 (b) requires sources to provide the following information:

Name	Facility Address	City	State	Zip
Minot Sleeper Library	35 Pleasant Street	Bristol	NH	03222
Segatto	1 Gates Lane	Hudson	NH	03051
Nguyen	26 Orchard Street	Milford	NH	03055
Shifrin	10 East Ridge Road	Newbury	NH	03255
McCarthy	157 Snow Pond Road	Concord	NH	03301
Nitschelm	384 Peverly Hill Road	Portsmouth	NH	03801
Hartman	7 Pumpkin Hill Road	Warner	NH	03278
Nicolosi	8 Birchwood Road	Salem	NH	03079
Rowell	375 East Penacook Road	Contoocook	NH	03229
John	32 Weir Road	Boscawen	NH	03303
Sirois	140 Linda Lane	Manchester	NH	03104
Tilley	184 Hensmith Road	Salisbury	NH	03268
Yeaton	143 Sanborn Hill	Epsom	NH	03234
Roux	27 Lynn Grove Road	Northwood	NH	03261

1. The name and address of the applicants.

2. A complete list of the equipment used at the facility, including the meter and, if applicable, the inverter. The following equipment was used at these facilities:

Minot Sleepe	r Library	Segatto	
Quantity	Equipment Type	Quantity	Equipment Type
58	Sunmodule 265 W panels	39	Canadian 255 panels
16	PowerOne Aurora 5000 inverters	39	Enphase M215 inverters
1	Itron Centron meter	1	Schlumberger meter
0.015	Nameplate Capacity (megawatts)*	0.008385	Nameplate Capacity (megawatts)*
Nguyen		Shifrin	
Quantity	Equipment Type	Quantity	Equipment Type
32	Suniva 250W panels	30	Sun Edison F265 panels
32	Enphase M215 inverters	30	Enphase M250 inverters
1	Itron Centron meter	1	AEE Solar meter
0.00688	Nameplate Capacity (megawatts)*	0.0075	Nameplate Capacity (megawatts)*
McCarthy		Nitschelm	
Quantity	Equipment Type	Quantity	Equipment Type
52	Sun Edison F265 panels	24	LG 280s panels
52	Enphase M250 inverters	1	Solar edge Se 7600 inverter
1	AEE Solar meter	1	Schlumberger meter
0.013	Nameplate Capacity (megawatts)*	0.00835	Nameplate Capacity (megawatts)*
Hartman		Nicolosi	
Quantity	Equipment Type	Quantity	Equipment Type
16	ET Solar 250w	32	Sun Edison F270 panels

16	Enphase 215	32	Enphase M250 inverters
1	Itron Centron meter	1	AEE Solar meter
0.00344	Nameplate Capacity (megawatts)*	0.00768	Nameplate Capacity (megawatts)*
Rowell		John	
Quantity	Equipment Type	Quantity	Equipment Type
20	REC Solar 250w panels	20	Canadian Solar 250 w
20	Enphase M215 inverters	20	Canadian Solar 250 inverters
1	Itron Centron meter	1	GE meter
0.0043	Nameplate Capacity (megawatts)*	0.005	Nameplate Capacity (megawatts)*
Sirois	· · · · · · · · · · · · · · · · · · ·	Tilley	
Quantity	Equipment Type	Quantity	Equipment Type
24	Canadian Solar 250 w	30	Sun Edison F265 panels
24	Canadian Solar 250 inverters	30	Enphase M250 inverters
1	Itron Centron meter	1	AEE Solar meter
0.006	Nameplate Capacity (megawatts)*	0.0075	Nameplate Capacity (megawatts)*
Yeaton		Roux	
Quantity	Equipment Type	Quantity	Equipment Type
48	Sun Edison F270 panels	36	Sun Edison F265 panels
48	Enphase M250 inverters	36	Enphase M250 inverters
1	AEE Solar meter	1	AEE Solar meter
0.012	Nameplate Capacity (megawatts)*	0.009	Nameplate Capacity (megawatts)*

\*The AC rating of the facility.

3. The name, license number and contact information of the installer of the applicable generation or solar heating equipment, or a statement that the equipment was installed directly by the customer.

Applicant	Installer Name	Address	Electrician/ License #
Minot Sleeper Library	Frase Electric	789 Whittier Highway, S. Tamworth, NH 03883	Kim Frase 4146M
Segatto	New England Clean Energy	Tracy Cournoyer	N/A
Nguyen	SunRay Solar	249 Loudon Road, Concord, NH 03301	Eric Whipple 10803M
Shifrin	SunRay Solar	249 Loudon Road, Concord, NH 03301	Troy Corey 12571M
McCarthy	SunRay Solar	249 Loudon Road, Concord, NH 03301	Shawn Marvel 13363M
Nitschelm	Big Sky Renewable Energy	4 Bicentennial Sq., Concord, NH 03301	Harry O Electrical 4373M
Hartman	SunRay Solar	249 Loudon Road, Concord, NH 03301	Keith Firman 10803M
Nicolosi	SunRay Solar	249 Loudon Road, Concord, NH 03301	Shawn Marvel 13363M
Rowell	SunRay Solar	249 Loudon Road, Concord, NH 03301	Keith Firman 10803M
John	SunRay Solar	249 Loudon Road, Concord, NH 03301	Keith Firman 10803M
Sirois	SunRay Solar	249 Loudon Road, Concord, NH 03301	Keith Firman 10803M
Tilley	SunRay Solar	249 Loudon Road, Concord, NH 03301	Radiant Electric 2821M
Yeaton	SunRay Solar	249 Loudon Road, Concord, NH 03301	Shawn Marvel 13363M
Roux	SunRay Solar	249 Loudon Road, Concord, NH 03301	Shawn Marvel 13363M

4. The name and contact information of the seller of the applicable generation or heating equipment.

Applicant	Equipment Vendor	Address
Minot Sleeper Library	Same as installer	
Segatto	Same as installer	
Nguyen	Same as installer	
Shifrin	Same as installer	
McCarthy	Same as installer	
Nitschelm	Same as installer	
Hartman	Same as installer	
Nicolosi	Sun Edison	600 Clipper Dr., Belmont CA 94002
Rowell	Same as installer	
John	Same as installer	
Sirois	Same as installer	
Tilley	Same as installer	
Yeaton	Same as installer	
Roux	Same as installer	

5. The name and contact information of the independent monitor of the source. These facilities are customer-sited sources and the output must be monitored and verified by an independent monitor pursuant to Puc 2509.09.

Applicant	Independent Monitor (IM)	IM Approval Date	Docket #
Minot Sleeper Library	Paul Button, Energy Audits Unlimited	06-06-10	DE 10-128
Segatto	Paul Button, Energy Audits Unlimited	06-06-10	DE 10-128
Nguyen	Thomas Kelly, Natural Capital	09-26-11	DE 11-190
Shifrin	Thomas Kelly, Natural Capital	09-26-11	DE 11-190
McCarthy	Thomas Kelly, Natural Capital	09-26-11	DE 11-190
Nitschelm	Paul Button, Energy Audits Unlimited	06-06-10	DE 10-128
Hartman	Thomas Kelly, Natural Capital	09-26-11	DE 11-190
Nicolosi	Thomas Kelly, Natural Capital	09-26-11	DE 11-190
Rowell	Thomas Kelly, Natural Capital	09-26-11	DE 11-190
John	Thomas Kelly, Natural Capital	09-26-11	DE 11-190
Sirois	Thomas Kelly, Natural Capital	09-26-11	DE 11-190
Tilley	Thomas Kelly, Natural Capital	09-26-11	DE 11-190
Yeaton	Thomas Kelly, Natural Capital	09-26-11	DE 11-190
Roux	Thomas Kelly, Natural Capital	09-26-11	DE 11-190

The Independent Monitors will report the facilities' total output quarterly to the customer and to the NEPOOL Generation Information System, and annually to the Commission as part of the Knollwood Energy's Class II aggregation pursuant to Puc 2505.09(h)(3).

6. A copy of the interconnection agreement pursuant to PUC 307.06, if applicable, between the applicant and the distribution utility.

Applicant	Utility	Interconnection Agreement	Date*
Minot Sleeper Library	PSNH	Simplified Process Interconnection Application & Service Agreement	07-19-13
Segatto	PSNH	Simplified Process Interconnection Application & Service Agreement	08-04-14
Nguyen	PSNH	Simplified Process Interconnection Application & Service Agreement	12-12-13
Shifrin	PSNH	Simplified Process Interconnection Application & Service Agreement	
McCarthy	Unitil	Simplified Process Interconnection Application & Service Agreement	06-18-14
Nitschelm	PSNH	Simplified Process Interconnection Application & Service Agreement	08-27-14
Hartman	PSNH	Simplified Process Interconnection Application & Service Agreement	
Nicolosi	Liberty	Simplified Process Interconnection Application & Service Agreement	09-08-14
Rowell	PSNH	Simplified Process Interconnection Application & Service Agreement	
John	PSNH	Simplified Process Interconnection Application & Service Agreement	
Sirois	PSNH	Simplified Process Interconnection Application & Service Agreement	
Tilley	Unitil	Simplified Process Interconnection Application & Service Agreement	

Yeaton	Unitil	Simplified Process Interconnection Application & Service Agreement
Roux	PSNH	Simplified Process Interconnection Application & Service Agreement
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\* The date the utility approved the facility installation.

- 7. An attestation by the applicant that the project is installed and operating in conformance with any applicable building codes. Affidavits signed by Alane Lakritz were provided with each of the applications.
- 8. For an installation with electric output, documentation of the applicable distribution utility's approval of the installation.

Applicant	Utility	Utility Approval	Date*
Minot Sleeper Library	PSNH	Certificate of Completion for Simplified Process Interconnections	07-23-14
Segatto	PSNH	Certificate of Completion for Simplified Process Interconnections	11-04-14
Nguyen	PSNH	Certificate of Completion for Simplified Process Interconnections	12-23-13
Shifrin	PSNH	Certificate of Completion for Simplified Process Interconnections	05-20-14
McCarthy	Unitil	Certificate of Completion for Simplified Process Interconnections	09-15-14
Nitschelm	PSNH	Certificate of Completion for Simplified Process Interconnections	11-10-14
Hartman	PSNH	Certificate of Completion for Simplified Process Interconnections	11-04-13
Nicolosi	Liberty	Certificate of Completion for Simplified Process Interconnections	10-27-14
Rowell	PSNH	Certificate of Completion for Simplified Process Interconnections	07-03-13
John	Unitil	Certificate of Completion for Simplified Process Interconnections	07-29-13
Sirois	PSNH	Certificate of Completion for Simplified Process Interconnections	07-23-13
Tilley	Unitil	Certificate of Completion for Simplified Process Interconnections	07-01-14
Yeaton	Unitil	Certificate of Completion for Simplified Process Interconnections	11-13-14
Roux	PSNH	Certificate of Completion for Simplified Process Interconnections	06-30-14

\* The date the system passed the electrical inspection.

RSA 362-F:6 requires the renewable portfolio standard program to utilize the regional generation information system (GIS) administered by ISO-New England for renewable energy certificates. Knollwood Energy requires each of its participants to acquire a separate GIS facility code.

Applicant	GIS Facility Code	Applicant	GIS Facility Code	Applicant	GIS Facility Code
Minot Sleeper Library	NON 45085	Segatto	NON 44970	Nguyen	NON 44138
Applicant Shifrin	GIS Facility Code NON 44724	Applicant McCarthy	GIS Facility Code NON 44723	Applicant Nitschelm	GIS Facility Code NON 44971
Applicant Hartman	GIS Facility Code NON 45094	Applicant Nicolosi	GIS Facility Code NON 44973	Applicant Rowell	GIS Facility Code NON 44294
Applicant	GIS Facility Code	Applicant	GIS Facility Code	Applicant	GIS Facility Code
John	NON 44303	Sirois	NON 44304	Tilley	NON 44139
Applicant	GIS Facility Code	Applicant	GIS Facility Code		
Yeaton	NON 45381	Roux	NON 45371		

## Recommendation

Staff has reviewed the applications for the above listed PV arrays and participation in the Knollwood Energy aggregation and can affirm each is complete pursuant to Puc 2505.08. Staff has determined that the above-listed facilities meet the requirements for certification as Class II renewable energy sources. Based on review of the applications, Staff recommends that the Commission certify these arrays as eligible facilities for Class II RECs to be included

as part of the Knollwood aggregation effective as of the application receipt date listed in the following table.

Docket #	Facility Name	Facility Location	Effective Date to Produce Class II RECs
DE 14-364	Minot Sleeper Library	Bristol	12-15-14
DE 14-365	Segatto	Hudson	12-15-14
DE 14-366	Nguyen	Milford	12-15-14
DE 14-367	Shifrin	Newbury	12-15-14
DE 14-368	McCarthy	Concord	12-15-14
DE 14-369	Nitschelm	Portsmouth	12-18-14
DE 14-370	Hartman	Warner	12-18-14
DE 14-371	Nicolosi	Salem	12-18-14
DE 14-374	Rowell	Contoocook	12-26-14
DE 14-375	John	Boscawen	12-26-14
DE 14-376	Sirois	Manchester	12-26-14
DE 14-377	Tilley	Salisbury	12-26-14
DE 14-378	Yeaton	Epsom	12-26-14
DE 14-379	Roux	Northwood	12-26-14

Pursuant to N.H. Admin Rule Puc 203.11 (a) (1): Serve an electronic copy on each person identified on the service list.

Executive.Director@puc.nh.gov amanda.noonan@puc.nh.gov barbara.bernstein@puc.nh.gov leszek.stachow@puc.nh.gov linda@knollwoodenergy.com tom.frantz@puc.nh.gov

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#### FILING INSTRUCTIONS:

a) Pursuant to N.H. Admin Rule Puc 203.02 (a), with the exception of Discovery, file 7 copies, as well as an electronic copy, of all documents including cover letter with: DEBRA A HOWLAND

DEBRA A HOWLAND EXECUTIVE DIRECTOR NHPUC 21 S. FRUIT ST, SUITE 10 CONCORD NH 03301-2429

- b) Serve an electronic copy with each person identified on the Commission's service list and with the Office of Consumer Advocate.
- c) Serve a written copy on each person on the service list not able to receive electronic mail.