## Reading Municipal Light Department (RMLD) Board of Commissioners Power & Rate Committee Regular Session Agenda Joint Meeting with the Citizens' Advisory Board Monday, October 24, 2011

7:00 p.m. General Manager's Conference Room

- 1. Bring meeting to order. Power & Rate Committee RMLD Board of Commissioners.
- 2. The retiring/expiring of Renewable Energy Certificates (RECs) Attachment
- 3. Motion to Adjourn

Note: Executive Session is posted in the event there is a need to go into Executive Session.

To:

Vin Cameron

From:

Jane Parenteau

Bill Seldon

Date:

October 21, 2011

Subject:

Renewable Energy Certificates (RECs)

The Reading Municipal Light Department (RMLD) entered into a Purchase Power Agreement (PPA) with Swift River Hydro for the output of four hydro projects including capacity, energy, Renewable Energy Certificates (RECs) and all other environmental attributes. In addition, RMLD has signed a PPA with Concord Steam, a biomass project which is scheduled to be operational in early 2013.

## Swift River Hydro

Table 1 shows the projected monthly Mwh generation for each of the four projects that RMLD has negotiated a PPA: Woronoco, Turners Falls, Pepperell, and Indian River. Swift River currently has a PPA for the Collins project with NSTAR which expires in September, 2013.

Table 1
Projected Monthly Mwh

	Average	Average	Average	2011	2011-12 Total	Average	2015 Total
	Waranaca	Turners Falls	Pepperell <sup>3</sup>	Indian River	Energy Output	Collins	Energy Output
January	993	139	685	307	2,124	581	2,704
February	898	169	688	263	2,018	515	2,533
March	1,367	418	972	440	3,197	707	3,903
April	1,503	392	957	793	3,645	703	4,348
May	1,267	231	8 <del>1</del> 1	634	2,944	665	3,609
June	750	13	529	329	1,621	442	2,063
July	460	247	308	154	1,168	271	1,439
August	387	244	264	129	1,024	258	1,282
September	364	0	233	127	723	215	937
October	521	68	410	207	1,206	313	1,519
November	839	91	566	379	1,875	440	2,314
December	1,001	264	700	467	2,433	561	2,993
Annual Output:	10,350	2,276	7,123	4,228	23,978	5,667	29,645
CT Class   RECs:	3,881 <sup>1</sup>	2,276 4	7,123 <sup>6</sup>	4,228 <sup>8</sup>	17,509	-	17,509
CT Class 2 RECs:	6,469 <sup>1</sup>	-	-	-	6,469	5,667 10	12,136
RI New RECs:	3,881 ²	-	3,775 6	-	7,657	, <u>.</u>	7,657
RI Existing RECs:	6,469 ²	-	3,348 <sup>6</sup>		9,817	_	9,817
MA Class 1 RECs:	4,037 3	-	8,500 7	4,228 9	16,765	5,667 11	22,432
MA Class 2 RECs:	6,314 3	-	-	·	6,314	-	6,314

One REC is equivalent to 1,000 kWhs or 1 Mwh of generation. Based on the projected monthly generation, it is anticipated that the four projects would have an annual generation of 23,978 Mwhs. This would result in the RMLD receiving 23,978 RECs.

Investor Owned Utilities (IOUs) have a Renewable Portfolio Standard (RPS). Below is a summary of the RPS.

- Under the Class I Renewable Portfolio Standard, all retail electricity suppliers must provide a minimum percentage of kilowatt-hours (kWh) sales to end-use customers in Massachusetts from eligible renewable energy resources installed *after* December 31, 1997, according to the following schedule:
  - o 5.0% of sales by 12/31/2010
  - o 6.0% of sales by 12/31/2011
  - o 7.0% of sales by 12/31/2012
  - o 8.0% of sales by 12/31/2013
  - o 9.0% of sales by 12/31/2014
  - o 10.0% of sales by 12/31/2015
  - o 11.0% of sales by 12/31/2016

Currently, Massachusetts municipals are exempt from the Renewable Portfolio Standard.

The current RECs that are attributable to the Swift River Hydro projects have a financial value.

Table 2 shows the projected four year market value of the anticipated RECs from Swift River.

Table 2 Market Value									
	2011		2012		2013		2014		
CT Class I RECs:	\$	418,903.39	\$	\$ 407,478.75	\$	407,478.75	\$ 388	3,437.0	69
CT Class 2 RECs:	\$	2,186.20	¢	\$ 4,372.40	\$	w	\$		-
Annual Value	\$	421,089.59	Ç	\$ 411,851.15	\$	407,478.75	\$ 388	3,437.0	69
MA Class 1 RECs:	\$	494,563.50	Ç	\$ 502,945.93	\$	494,563.50	\$ 486	6,181.0	07
Annual Value	\$	494,563.50	Ç	\$ 502,945.93	\$	494,563.50	\$ 486	5,181.	07

## Concord Steam

In 2013, the RMLD anticipates that the Concord Steam Project should achieve Commercial Operation. Based on an annual plant production of 130,000 Mwhs and the RMLD receiving 33% of the output, the RMLD would have an additional 42,500 Mwhs with an equivalent of 42,500 RECs. The projected market value of NH Class I REC is \$29.00/REC. This would result in an annual value of approximately \$1.2 million.

The RMLD has several options available regarding RECs.

## **Potential Options:**

Option 1: If the RMLD would like to refer to the output of the hydro projects as "renewable", then RMLD would need to retire the RECs from the projects. By doing so, the value of the RECs would be zero.

Option 2: Currently the RMLD does not have a RPS. The RMLD could set a policy where a portion of the RECs are sold and a portion could be retired. This would provide RMLD with additional funds that could be earmarked for other sustainable projects within the RMLD service territory (i.e., Solar on municipal buildings).

Option 3: The RMLD could market all the RECs until it has a RPS. The revenue that RMLD receives as a result of this could be used to lower the overall cost of the project. For Swift River, it is estimated that utilizing this option could reduce the overall cost of the project by approximately \$20/Mwh.

Energy Services would like to work with the RMLD Board and CAB to determine the direction that would best serve the interest of the RMLD customers.

With the lack of an RPS, many municipalities are marketing the value of the RECs associated with their renewable resources. These systems include Ipswich, Princeton, Taunton and Templeton. Additionally, Holden, Wellesley, Middleborough, and Concord are currently selling their Solar RECs (SRECs).

We look forward to discussing this concept with you as well as both the RMLD and CAB Boards.