Massaro, Luly (PUC)

From: Scott Albert <Scott.Albert@gdsassociates.com>
Sent: Tuesday, July 14, 2015 11:02 AM
To: knydam@covanta.com; w.shortiii@verizon.net; rlarocca@pierceatwood.com
Cc: Renewable Energy Standard
Subject: RE: Covanta Jonesboro - Docket No. 4997
Attachments: Covanta Jonesboro - Open Meeting Calculation 2015-07-13.xlsx

Good Morning,

In accordance with the Commission's May 21st, 2015 memorandum regarding their Open Meeting Decision on Declaratory Judgment Petition – Covanta Maine, LLC, GDS Associates has worked with the Applicant to confirm acceptable data required for calculating the average annual hours of operation during the Covanta Jonesboro facility's baseline period. Using this data, the proxy hours of operation during the baseline period was calculated by GDS to be 654 hours. Please see the attached spreadsheet that shows derivation of these proxy hours. Key variables that were agreed to by the Applicant and then used by GDS to calculate these proxy hours included all data in the attached spreadsheet under the following two sections:

1) Historical Operations Data Provided by Applicant - Reviewed, verified and revised collaboratively where appropriate
2) 1998 Green Tons of Wood Burned Provided by Applicant - reviewed and verified collaboratively

Consistent with the Commission's May 21st memorandum, the following process was then used by GDS to calculate the average annual hours of operation during the baseline period and to derive a Percent New amount for the Covanta Jonesboro facility (please refer to the second tab on the attached spreadsheet for Percent New calculation):

1) In the event acceptable data is supplied, the PUC consultant should calculate the average annual hours of operation during the baseline period. ***← Done, 654 hours calculated***

Based on the information provided to GDS by the Applicant, which was reviewed, verified and collaboratively revised where needed, GDS calculated and recommends the Commission accept a value of 654 hours as the proxy for Covanta Jonesboro's average annual hours of operation during the baseline period. It is important to note that a <u>maximum</u> average annual hours of operation during the baseline period could calculate to be 984 hours. This value is derived assuming, unrealistically, that the facility was running for 24 hours during each day the facility generated electricity (25 days of operation in 1995 and 57 days of operation in 1997 = 41 average days of operation during the baseline period x 24 hours per day = 984 hours).

Based on the recommended proxy of 654 average annual hours for operation during the baseline period, GDS utilized the remainder of the Commission's process as follows:

2) The current-year production (MWH) should be divided by the current-year hours of operation. ***← Done, resulting in 18.4 MWH/hr (127,216 MWH / 6,912 hours = 18.4 MWH/hr post improvement)***
3) The production calculated in Step 2 should be multiplied by the average annual hours of operation calculated in Step 1. ***← Done, resulting in 12,032 MWHs (18.4 MWH/hr x 654 hrs = 12,032 MWH pre-improvement)*****
4) The consultant must also calculate either the annual average or hourly-weighted annual average generation during the baseline period (in MWH). ***← Done, resulting in 10,647 MWHs ([14.4 MWH/hr in 1995 + 18.1 MWH/hr in 1997]/2 x 654 hrs = 10,647 MWH)*****
5) The production calculated in Step 3 less the production calculated in Step 4 may be considered the non-operation additional capacity resulting from capital investments. This difference divided by the value calculated

in Step 3 (multiplied by 100) may be considered the "percentage new" due solely to capital investments for the purposes of registering some portion of the current facility as a New Renewable Resource in Rhode Island. ← ***Done, resulting in 12% New* (12,032 MWH post improvement – 10,647 MWH pre-improvement = 1,385 MWH improvement / 12,032 MWH x 100 = 12% New) ****

* Please note, if instead of using GDS's recommended 654 average annual hours of operation as a proxy for operating hours during the baseline period the Commission's process was followed using the maximum 984 average annual hours of operation (using unrealistic 24 hours per day operating assumption), a Percent New value of 42% would result.

** Minor difference in numbers shown and calculated within these parentheticals exist and is due to rounding.

I am available to provide additional documentation or answer any questions that you may have.

Thanks for your consideration.

Sincerely,

Scott

GDS Associates, Inc.
Engineers and Consultants

Scott Albert, Principal
Northeast Region Manager
1155 Elm Street
Suite 702
Manchester, NH 03101
phone 603.656.0336, direct 603.391.0040
cell 603-533-3233, fax 866.611.3791
scott.albert@gdsassociates.com

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From: Massaro, Luly (PUC)
Sent: Thursday, May 21, 2015 7:43:24 PM (UTC) Monrovia, Reykjavik
To: knydam@covanta.com; w.shortiii@verizon.net; rlarocca@pierceatwood.com; Renewable Energy Standard
Subject: Covanta Jonesboro - Docket No. 4997

Good afternoon,

Attached is a Memorandum from PUC legal counsel summarizing the decision from yesterday's open meeting wherein the PUC decided that more information is required before it can make a decision on the application for certification under the Renewable Energy Standard. The PUC is not requiring adjustments to the historical generation baseline in this case, but requires more specific information about the historical generation baseline in order to rule on the application.

Sincerely,

Luly Massaro
Commission Clerk

Luly E. Massaro
Commission Clerk
RI Public Utilities Commission
89 Jefferson Bvld.

Hours of Operation - Proxy Derivation **7/13/2015**

1) Historical Operations Data Provided by Applicant - Reviewed, verified & revised collaboratively where appropriate

	1995	1996	1997	1998
kWh Sold	5,394,400	0	16,939,000	1,858,000
Wood Fuel Use (thousand short ton)	10.928	0	28.6197	2.908
Heat Content (HHV)	9.31	0	9.31	9.31
Days Operational	25	0	57	8
PL Use (thousand barrels)	1.99	0	0	0
Est MMBtu all fuel	**106,710**	0	**266,449**	27,073

2) 1998 Green Tons of Wood Burned Provided by Applicant - reviewed and verified collaboratively

Tons - From '98 Daily Operations

12-Jan			
25.0			
28-Jul	29-Jul	30-Jul	31-Jul
215.4	712.9	716.1	778.3
1-Aug			
42.5			
23-Oct	24-Oct		
30.0	388.1		

Month	Total Green Wood (ton)	# of Days Operating
1	25.0	1
2	0	0
3	0	0
4	0	0
5	0	0
6	0	0
7	2,422.7	4
8	42.5	1
9	0	0
10	418.1	2
11	0	0
12	0	0
TOTAL	**2,908.3**	**8**

3) Estimated Green Tons/Day 735.8 <-- Based on average of highest 3 operating days in July 1998

4) Estimated Tons/Hour 30.7 <-- Assumes tons/day (from #3 above) were burned over 24 hour period

5) Resulting MMBtu/Hour 285.4 <-- Based on 9.31 MMBtu/ton (Heat Content from #1 above)

6) Estimated Hours of Operation

1995	1996	1997
374	**0**	**934**

7) Proxy for Average Hours of Operation **654** **hours**

Percent New Calculation - Based on Proxy Operational Hours **7/10/2015**

	Historic Baseline Period			Post Improvement	
	1995	1996	1997	2014	
kWh Sold	5,394,400	0	16,939,000	127,216,000	kWh sold
Days	25	0	57	288	Operating Days
Proxy Hours/Year	374	0	934	6,912	Hours/Year
kWh/hr	14,428	0	18,145	18,405	kWh/hr

Perecnt New - per PUC Formula

1) Average annual hours of operation during baseline period	654	hrs
2) Current-year production (MWH) / current year hrs of operation	18.4	MWH/hr
3) Current year production per hour x average baseyear hours	12,032	MWH
4) Hourly-weighted annual average generation during baseyears	10,647	MWH
5) Non-operation additional capacity from capital investments	1,385	MWH
	12%	**Percent New**