

DATE: December 13, 2018

TO: Chairman and Members of the Board

FROM: Kevin H. Roche, CEO/General Manager

**SUBJECT:** Agenda - Executive Committee Meeting

There is an **ecomaine** Executive Committee meeting **scheduled for December 20, 2018** @ **4:00 PM**. The agenda for this meeting is as follows:

- 1. Approval of the Minutes (*Attachment A*)
- 2. Outreach & Recycling Committee Report Caleb Hemphill, Chair
- 3. Finance & Audit Committee Report Erik Street, Chair
- 4. Electric Trucks Grant from Department of Transportation (DOT) (Attachment B)
- 5. Authorization for CEO to proceed with vendor selection, negotionations and execution of the Power Purchase Agreement (*Attachment C*)
- Executive Session: Update on Collective Bargaining Agreement between ecomaine and Local 877 &
   Local 4, International Union of Operating Engineers. IAW Section 405 6 D of Title 1 of the Maine Revised Statutes.
- 7. Manager's Report:
  - Update Building Construction/Improvements
  - Update Legislative & DEP

#### Financial Statements **FY 19**

- Financial Summary (Attachment D1)
- Tonnage Graph (Attachment D2)
- Statement of Revenue & Expenses (*Attachment D3*)
- Statistical Data (*Attachment D4*)
- Summary Analysis of All Tons by Community(Attachment D5)
- Historical Generations Summary (Attachment D6
- 7. Other:

### **Future Committee Meetings:**

Finance & Audit Committee	01-17-2019 @ 3pm	Finance & Audit/BudgetReview	04-04-2019 @ 4pm
Full Board of Directors	01-17-2019 @ 4pm	Full Board of Directors	04-18-2019 @ 4pm
Outreach & Recycling Committee	01-24-2019 @ 4pm	Finance & Audit Committee	05-16-2019 @ 3pm
Outreach & Recycling Committee	02-14-2019 @ 3pm	Executive Committee	05-16-2019 @ 4pm
Executive Committee	02-14-2019 @ 4pm	Outreach & Recycling Commttee	05-23-2019 @ 4pm
Outreach & Recycing Committee	03-07-2019 @ 3pm	Annual Board of Directors Meeting	06-20-2019 @ 11:30am
Full Board of Directors	03-21-2019 @ 4pm		



### ATTACHMENT A

**DATE:** October 31, 2018

TO: Chairman and Members of the Board

FROM: Kevin H. Roche, CEO/General Manager

**SUBJECT:** Executive Committee Meeting Minutes – October 18, 2018

There was an Executive Committee **Meeting** held on the date noted above. The meeting was called to order by Matthew Frank, Chairmen.

### **Item #1:** Approval of the Minutes

Troy Moon motioned to accept the minutes as written. The motion was seconded by Linda Boudreau. All in favor.

### **Item #2:** Outreach & Recycling Committee—Caleb Hemphill, Chair

Caleb reported out that the Outreach & Recycling Committee last met on September 13, 2018 and reported out to the Full Board of Directors on September 20, 2018. He provided the following re-cap:

- School Grant's program is underway, applications will be accepted through October 19<sup>th</sup>, 2018.
- This year's Annual Open House was held on September 29<sup>th</sup>, 2018 and 1000 people attended.
- The committee continues to review recycling contamination & education stats and have noticed a slight decrease across all communities in contamination levels. **ecomaine** educational staff continues to work with communities conducting educational sessions. Additional outreach efforts include earned media, TV, radio, online print and promotion of the Recyclopedia.

### **Upcoming:**

eco-Excellence Awards solicitations will begin in November and we will accept nominations thru the end of January 2019.

The next meeting of the Outreach & Recycling Committee is January 24<sup>th</sup> at which time the committee will review applications for the School Grants Program.

### **Item #3:** Finance & Audit Committee– Erik Street, Chair

Erik Street reported that the Finance & Audit Committee last met on September 20, 2018 and reported out to the Full Board on that same day;

The committee reviewed and discussed the following:

- Erik discussed his review with staff of the Cash Disbursements with the Finance & Audit Committee.
- The committee reviewed and discussed the 5 Year Plan.
- We reviewed, discussed and recommended to the Full Board a 3.5 percent increase for FY 20 for MSW tipping fees (\$70.50 to \$73.00) and a \$35.00 per ton tipping fee on single sort recycling effective 07/01/2019.
- We also discussed the recommendation on Rates for FY 19 of \$15 per ton recycling charge for single sort recycling beginning November 1, 2018. This recommendation was deferred to the Full Board for discussion and decision at the November 15, 2018, Full Board of Directors Meeting.

After a lengthy discussion of the Executive Committee on the \$15 per ton charge for FY 19, Bill Shane motioned that the committee recommend to the Full Board to not approve the \$15 per ton charge effective November 1, 2018 and that **ecomaine** cover this with internal cash flow. The motion was second by Erik Street. All in favor.

In addition, the Executive Committee authorized staff to continue to manage contamination fees as they are currently doing with owner communities. Past practice shows that Contamination fees for owner communities have been charged when loads are heavily contaminated and not demonstrating improvements. This policy should continue.

### **Item# 4: Executive Session**:

Christopher Branch made the motion to go into Executive Session for the purpose of discussing the Collective Bargaining Agreement between Ecomaine and **Local 877 & Local 4, International Union of Operating Engineers**. IAW – Section 405 – 6 D of Title 1 of the Maine Revised Statutes. The motion was second by Troy Moon. All in favor.

William Shane made the motion to end Executive Session. The motion was second by Linda Boudreau. All in favor.

### **Item# 5: Managers Report**

Kevin Roche reported out to the Executive Committee on the following:

Reviewed and discussed Financial Statements for FY 19.

Briefed the committee on recycling markets.

Re-cap on recent conference call with 9 Dragons and the prospect of potential business opportunities for recycled paper.

Update of upcoming Outage.

Fire Prevention Detection design and improved detection capabilities.

Legislative Update on Casella & DEP landfill extension.

Matthew Sturgis motioned to adjourn. The motion was seconded by Caleb Hemphill. All in favor.

### **Present:**

Jeff Amatrudo, Anne Bilodeau, Christopher Branch, Deb Cabana, Matthew Frank, Caleb Hemphill, Troy Moon, Dave Morton, Rod Regier, Bill Shane, Mike Shaw, Erik Street & Matthew Sturgis

### Staff:

Matt Baum, Matt Grondin Denise Mungen, Kevin Roche & Kevin Trytek

### **Denise Mungen**

### ATTACHMENT B

From: Kevin Roche

Sent: Thursday, November 15, 2018 10:37 AM

To: 'Abbott, Dennis '; 'Beecher, Maxine'; 'Benner, Sherrie'; 'Bilodeau, Anne'; 'Boudreau,

Linda'; 'Bradstreet, Alan'; 'Branch, Christopher'; 'Cabana, Deborah'; 'Donovan, William';

'Frank, Mathew'; 'Garvin, Jamie'; 'Hemphill, Caleb'; 'Jeff Amatrudo

(JAmatrudo@roadrunner.com)'; 'L'Heureux, Greg'; 'Maloy, Jessica'; 'McDevitt, Maureen'; 'Moon, Troy'; 'Morton, David'; 'Plante, Tony'; 'Poore, Nathan'; 'Randall, Robert'; 'Regier, Rodney'; 'Rita Perron (Rperron@hollismaine.org)'; 'Shane, William'; 'Shaw, Michael'; 'Street, Erik'; 'Sturgis, Matthew E.'; 'Thibodeau, Spencer'; 'Tibbetts, John E.'; 'Timothy Pellerin (tpellerin@harrisonmaine.org)'; 'Van Gaasbeek, Len'; 'Wood,

Rob'

Cc: Denise Mungen

Subject: RE: Grant for Trucks

Attachments: scan0072.pdf; 110918 Revised List of Pros and Cons.docx

#### Dear Board:

We recently received notice from the Maine DOT and the EPA that we have been selected to receive funding for two ash hauling electric trucks. As outlined in my email from September (pasted below), we requested funding of \$480,000 (80%). Our contribution would be \$370,000 which covers some equipment not included in the funding such as the trailers (\$125,000 each) and 20% of the electric trucks. The Board requested a review of the ROI which I've attached and will review at the meeting later today. In our review, we compared the capital costs and operational costs of the 2 electric vehicles against 2 new traditional diesel trucks. Financially speaking (with the grant funding), the two alternatives wash out to about the same amount of money. While there's some risk associated with the new heavy duty electric trucks, there are several benefits associated with the environmental and PR aspects which are more difficult to place a value on. I've also attached a list of pros and cons that should be reviewed and evaluated.

The next step would be to finalize a contract which is expected to happen in early 2019. At our September Board meeting, there was support <u>for and against</u> this initiative. My hope is to begin the discussion at today's board meeting (now that we have the available funding) and see what questions and issues arise. We can then discuss them next month and hopefully determine our direction forward.

Kevin

To: ecomaine Board of Directors

From: Kevin Roche

**Subject: ecomaine's** Intent to Pursue a Maine Department of Transportation (MDOT) Grant for Two All-Electric Ash Hauling Vehicles

\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*\*

ecomaine staff have been in the process of compiling a detailed submittal to MDOT seeking a large grant to help cover the bulk of costs associated with the purchase of two all-electric semi-tractor trailer trucks. We believe that this addition, if successful, would complement and present a positive enhancement to our organization's mission. We would really be unique in being both the power generator and user of this energy, ultimately originated from solid waste. At present, only TESLA corporation intends to have a vehicle powerful enough to haul ash from our WTE plant to the ash fill

ready for market sometime next year. MDOT (and other Maine agencies) have this funding available as part of the U.S. Department of Justice settlement with Volkswagen for the emissions reporting issues on diesel cars.

An expectation of this grant is a 20% cost sharing element on items covered by the grant (for us this would include the TESLA hauling trucks and special TESLA charging station; excluded would be the cost of the trailers that would be attached to each truck).

The estimated project costs break down as follows:

Two TESLA semi-trucks: \$200,000 each ("Founders series);

Two Ram Eject Trailers (not covered by the grant): \$125,000 each

• TESLA charging station (estimated cost): \$200,000

Total project cost: \$400,000 (trucks) + \$250,000 (trailers) + \$200,000 (*estimated* cost of charging station) = \$850,000

Total possible grant funding: 80% of \$600,000 = \$480,000

ecomaine's share: \$370,000

I discussed this opportunity last month with the Board Chairman and Vice Chair and they were supportive of pursuing this opportunity. While next year's budget (FY20) has not yet been developed, presented or approved, we would like to move forward with submitting this application. I've added this item to the agenda of our first Board meeting of this fiscal year (September 20<sup>th</sup> at 4pm). Please let me know if you have any questions of concerns.

Thanks, Kevin

Kevin Roche

eco

Telephone: 207-773-1738

roche@ecomaine.org www.ecomaine.org

# **Costs Associated With The Addition Of New Vehicles**

	Electric Powered Vehicles	Gas/Diesel Powered Vehicles	Variance
Estimated Cost	850,000 (a)	280,000 (b)	570,000
Estimated Mainenance Costs - 10 Year	20,000	20,000	
Charging or Fuel Expense - 10 Year Total Cost	39,321 (c) 909,321	149,030 (d) 449,030	<u>(109,709)</u> 460,291
Less: Grant Funding	(480,000)		(480,000)
Net Acquisition and Operating Costs	429,321	449,030	(19,709)
Cost per Mile	1.65	1.73	(0.08)

- (a) Cost of electric powered vehicles includes tractors, trailers and charging stations
- (b) Cost of non-electric vehicles are comparable with the replacment of the Volvo and Mack trucks
- (c) Charging cost is based on lost revenue during the charging during off-peak hours with estimated increase in revenue per MWH each year
- (d) Current fuel cost for two trucks is approximately \$13K per year with an estimated increase in price per gallon each year

Over a 10 year period there would be an estimated \$.08 savings on the cost per mile with the grant funded electric vehicles



# STATE OF MAINE DEPARTMENT OF TRANSPORTATION 16 STATE HOUSE STATION AUGUSTA, MAINE 04333-0016

David Bernhardt

October 29, 2018

Dear VW Settlement Applicant,

Thank you for your recent application for vehicle replacement funding through the VW Settlement Agreement. The Maine Department of Transportation (MaineDOT) received 36 applications of which the application scoring results can be found at this link: https://file.ac/OOvB-1pKxtk/

You have been selected to receive 2 ash hauler vehicle replacements.

The next step in this process will involve the vehicle contracts which will be sent to you in early 2019. This is when the funding amount will be finalized with the successful applicants. The ash hauler vehicle contract will be administered by the Maine Department of Environmental Protection (Maine DEP). The contact at Maine DEP is Lynne Cayting at lynne.a.cayting@maine.gov.

Again, MaineDOT appreciates the time and effort in developing your applications and looks forward to seeing some of these new, low-emission vehicles funded through this Settlement on Maine roads in the near future.

Sincerely,

Joyce Taylor, Chief Enginee



### List of Pros and Cons Associated with an All-Electric Ash Hauling Vehicle

### **PROS**

- A collaborative project like this with US EPA Region 1 and Maine DEP would further enhance our reputation with the regulators.
- **ecomaine** could potentially have a national and international following by being the first waste agency to use allelectric vehicles to move ash from point of generation to final resting place.
- Would enhance **ecomaine**'s image with the general public.
- Would be non-polluting.
- Grant will essentially be covering the full cost of two new hauling vehicles (we are responsible for the dump body costs).
- We could link the WTE plant with vehicle propulsion (signage on the new trucks). This would help to further enhance our education message.
- Lab USA processing facility, when operational, will be readily accessible to electric semis.
- We are allowed to take the two oldest diesel vehicles out of service at receipt of the two new vehicles. This leaves **ecomaine** with the two newest diesel trucks in our fleet for backup as necessary.
- **ecomaine** may not be limited solely to a Tesla semi. Another truck company, BYD, has an available all-electric semi (staff are researching this further).
- Empty push-out trailer could be used to back haul MSW stored at the landfill saving on annual haul-back costs.

### **CONS**

- TESLA requires a \$20,000 deposit per vehicle in order for a company to be put in the que.
- Commercial production of the TESLA electric semi is scheduled for some time next year (2019), with commercial production ramping up in 2020. This timeline cuts us close to the grant deadline requirement for delivery.
- This truck would require all our ash truck drivers to have a class A license (currently only one of our drivers holds a class A license).
- This truck would also need a hauling body (push out) to attach to the TESLA truck. This trailer cost is on us (estimated \$125,000 each).
- A TESLA electric vehicle requires a special TESLA charging station. Staff are attempting to more clearly identify these costs (which are covered by the grant).
- It is unclear how the electronics on an all-electric hauling vehicle would hold up in the harsh ash environment.
- Cold weather operation is likely to adversely impact the performance of an electric ash truck but is not considered a big performance problem for us due to the short hauling distance to the landfill.



### ATTACHMENT B

DATE: December 13, 2018

**TO:** Chairman and Members of the Executive Committee

FROM: Kevin H. Roche, CEO/General Manager

**SUBJECT:** CEO Authorization - Power Purchase Agreement

**ecomaine** entered a Power Purchase Agreement with Exelon Generation Company LLC (ExGen) on February 1, 2018. Our agreement will expire on January31, 2019. Staff is currently preparing contracts for the sale of electricity for next year. We anticipate that the bids will only be open for an hour in order to minimize market risk (and maximize our interests).

Staff is requesting approval from the Executive Committee for the CEO to select a vendor, proceed with negotiations and execute a Power Purchase Agreement with a qualified vendor providing the best rate on energy for **ecomaine.** 

Please let me know if you have any questions.

## Financial Summary November, 2018 (FY19) ATTACHMENT C1

	Revenues YTD- Compared to Budget and Last Year											
	Compared to Budget								Compa	ared to Prior	Year	
		Revenue VTD Units Revenue \$/Units		Revenue YTD			Units		Revenue \$/Units			
Owner	1	\$76,277	<b>↑</b>	4%	1	1%	<b>↑</b>	\$74,243	<b>↑</b>	4%	1	1%
Associate	<b>↑</b>	\$10,559	$\downarrow$	1%	<b>↑</b>	3%	<b>↑</b>	\$10,853	$\downarrow$	1%	<b>↑</b>	3%
Contract	$\downarrow$	\$143,068	$\downarrow$	15%	$\downarrow$	8%	<b>↑</b>	\$354,985	1	203%	<b>↑</b>	4%
Commercial	<b>↑</b>	\$318,940	<b>↑</b>	12%	<b>↑</b>	2%	1	\$310,493	<b>↑</b>	12%	1	1%
Spot	1	\$6,714	1	4%	1	0%	$\downarrow$	\$556,746	$\downarrow$	82%	<b>↑</b>	25%
Recycling	<b>↓</b>	\$224,877	$\downarrow$	10%	$\downarrow$	34%	$\downarrow$	\$658,467	$\downarrow$	10%	$\downarrow$	57%
Electrical	$\downarrow$	\$8,309	$\downarrow$	6%	1	6%	<b>↑</b>	\$20,795	$\downarrow$	4%	<b>↑</b>	5%
Overall	1	\$36,517					$\downarrow$	\$442,918				

Cash Expenses YTD									
Expense	Status	% of Annual Budget	Notable Items Affecting Expenses YTD						
Total Departmental Costs ↓	\$470,883	40%	Favorable  * Recycle Material (\$126k) - Market lower than anticipated on cardboard  * Spare Parts (\$66k) - Timing- budgeted recycling plant work to occur in early 2019  * Contingent (\$83k) - contingency not used  * Industrial Cleaning (\$44k) - landfill-work in progress  * Chemicals (\$69k) - Favorable usage of lime, carbon and urea in ops  * Payroll & Benefits (\$110k) - Ops has 2 open positions,  Unfavorable  * Temporary Labor (\$202k) - extra staff at recycling to meet market specification  * Water & Sewer (\$113k) - 10" of rain in November						

Revenue Less	YTD vs. Budget YTD	YTD vs. Prior YTD
Expenses	Rev Exp.	Rev Exp. %
<u>rvhenses</u>	\$1,169,840 93%	\$717,709 \ \ 844%

	<u>Cash Position</u>								
	Notes								
Cash on 7/1/2018	\$30,335,576								
Cash Generated	\$2,842,549								
Non-Operating Income	\$527,526								
Capital Expenditures	-\$4,146,800	Accrued Amount \$1,660,025.10							
Current Cash Position	\$29,558,851	Decreased by -\$776,725							

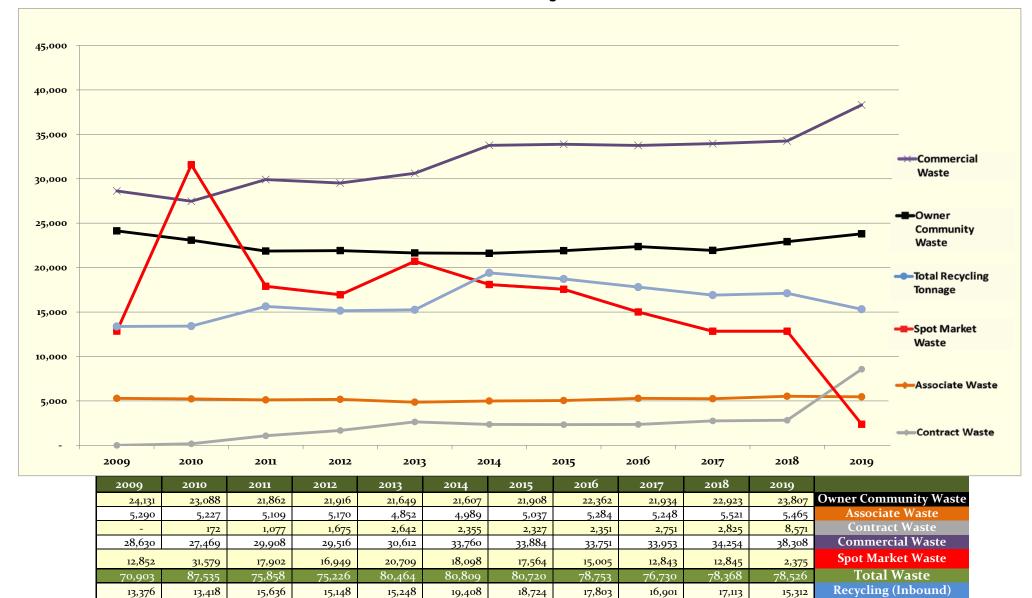
Average WTE Operations										
Power Sold Avg. Boiler Sales-MWHrs Notes % Capacity Availability %										
October	69%	83%	6,224	Maintenance Shutdown began (Oct 22-Nov 03, 2018)						
November	71%	86%	6,187							

<u>Food Waste YTD Tonnage</u>									
	Food Waste In	Food Waste Out	Food Waste Contaminates						
Food Waste Tonnages	2,435	2,188	1030						

Recycling Markets										
Materials	Materials FY18 YTD Average FY19 YTD Average Variance									
Cardboard	\$159	\$86	<b>↓</b>	-46%		\$86				
Paper	\$45	-\$20	$\downarrow$	-145%		-\$15				
Cans	\$150	\$183	1	22%		\$190				
#2 Natural Plastic	\$620	\$844	<b>↑</b>	36%		\$810				
#2 Colored Plastic	\$330	\$323	↓ ·	-2%		\$360				
#1 PET Plastic	\$285	\$298	<b>↑</b>	4%		\$300				
Post Burn Metal	\$61	\$99	1	62%		\$95				



### **November Year to Date Tonnage - FY18**



ecomaine										
	_		ie & Expenses	November, 201	18 (FY19)					
ATTACHMENT D3	Actua	ll - Prior Years Y	YTD	Cur	rent Year To Da	ite	<b>FY19 to FY18</b>			
	2016	2017	2018	Actual	Budget	Variance	Variance			
Operating revenues										
Municipal assessments & rebates	\$0	\$0	\$0	\$0	\$0	\$0	\$0			
Owners tipping fees	1,564,643	1,544,395	1,599,140	1,673,383	1,597,107	76,277	74,243			
Assoc. tipping fees	432,270	438,688	465,019	475,872	465,313	10,559	10,853			
Contract tipping fees	133,952	158,448	165,685	520,670	663,739	(143,068)	354,985			
Commercial tipping fees	2,251,376	2,361,035	2,359,375	2,669,868	2,350,928	318,940	310,493			
Spot market tipping fees	819,139	748,106	724,200	167,454	160,740	6,714	(556,746)			
Electrical generating revenues	1,490,561	1,473,610	1,521,021	1,541,817	1,550,126	(8,309)	20,795			
Sales of recycled goods	1,072,031	1,480,876	1,404,926	628,510	952,962	(324,453)	(776,416)			
Recycling tipping fees	66,348	18,459	38,402	156,351	56,775	99,576	117,949			
Other operating income	43,417	42,061	42,896	43,822	43,540	282	926			
Total operating revenues	\$7,873,736	\$8,265,677	\$8,320,664	\$7,877,746	\$7,841,229	\$36,517	(\$442,918)			
Operating expenses										
Administrative expenses	1,094,445	1,036,220	1,072,499	1,130,951	1,204,142	73,191	(58,452)			
Waste-to-energy operating expenses	3,703,339	3,681,332	3,827,379	3,843,290	4,238,472	395,183	(15,911)			
Recycling operating expenses	812,235	870,600	960,426	998,217	1,041,863	43,646	(37,791)			
Landfill/ashfill operating expenses	581,972	609,643	708,033	707,596	666,460	(41,136)	437			
Contingency	0	0	0	0	104,167	104,167	0			
Landfill closure & post-closure care costs	108,307	123,118	110,589	106,202	114,583	8,382	4,387			
Post-retirement benefit - health Care	29,358	29,358	29,358	35,415	35,417	2	(6,058)			
Depreciation & amortization	1,706,217	1,742,170	1,758,678	1,670,101	1,709,760	39,660	88,577			
Total operating expenses	\$8,035,871	\$8,092,439	\$8,466,961	\$8,491,771	\$9,114,864	\$623,093	(\$24,810)			
Net operating income	(\$162,135)	\$173,238	(\$146,296)	(\$614,024)	(\$1,273,634)	\$659,610	(\$467,728)			
Non-operating income (expense)										
Non Investment Interest	17,303	17,319	19,096	18,955	18,750	205	(141)			
Investment Income Net of Expenses	(110,016)	296,066	756,024	508,570	0	508,570	(247,453)			
Misc. Income / (Expenses)	5,460	1,283	3,841	1,454	0	1,454	(2,387)			
Net non-operating	(\$87,253)	\$314,668	\$778,961	\$528,980	\$18,750	\$510,230	(\$249,981)			
<b>Total Revenue Less Expenses</b>	(\$249,388)	\$487,906	\$632,664	(\$85,045)	(\$1,254,884)	\$1,169,840	(\$717,709)			

				comaine					
			Statistical Data	November, 2018		0040			
		Actual - YTD			Year to D		(II C )	Year to Date V	
ATTACHMENT D4	2016	2017	2018	Actual	Budget	Var - Fav / Units	(Uniav) %	Var-Fav / Units	(uniav) %
MSW - Tons	2010	2017	2010	Actual	Duuget	UIIICS	70	Ulits	70
Owner	22,362	21,934	22,923	23,807	22,893	914	4.0%	884	3.9%
Associate	5,284	5,248	5,521	5,465	5,521	(56)	-1.0%	(56)	-1.0%
Contract	2,351	2,751	2,825	8,571	10,035	(1,464)	-14.6%	5,746	203.4%
Commercial	33,751	33,953	34,254	38,308	34,261	4,047	11.8%	4,053	11.8%
Spot	15,005	12,843	12,845	2,375	2,280	95	4.2%	(10,469)	-81.5%
Total MSW	78,753	76,730	78,368	78,526	74,990	3,536	4.7%	158	0.2%
Recycle - Tons									
Inbound - MRF only	17,803	16,901	17,113	15,312	17,113	(1,801)	-10.5%	(1,801)	-10.5%
Outbound- MRF only including glass	15,527	15,112	15,290	13,779	15,290	(1,511)	-9.9%	(1,511)	-9.9%
Outbound- Post Burn	1,891	1,870	1,690	1,437	1,690	(253)	-15.0%	(253)	-15.0%
Outbound- Landfill Metal Mining	(24)	-	-	-	-	0		0	
Outbound Total	17,395	16,982	16,981	15,216	16,980	(1,764)	-10.4%	(1,764)	-10.4%
MSW - Revenue \$/Ton									
Owner	\$69.97	\$70.41	\$69.76	\$70.29	\$69.76	\$0.53	0.8%	\$0.53	0.8%
Associate	81.80	83.59	84.23	87.07	84.28	2.79	3.3%	2.84	3.4%
Contract	56.98	57.59	58.64	60.75	66.14	(5.39)	-8.2%	2.11	3.6%
Commercial	66.71	69.54	68.88	69.70	68.62	1.08	1.6%	0.82	1.2%
Spot	54.59	58.25	56.38	70.50	70.50	0.00	0.0%	14.12	25.0%
Total MSW	66.05	68.43	67.80	70.13	69.85	0.29	0.4%	2.33	3.4%
Recycle - Revenue \$/Ton									
\$/Ton Outbound (Includes glass/metals)	\$65.44	\$88.29	\$85.00	\$51.58	\$60.43	(\$8.84)	-14.6%	(\$33.42)	-39.3%
\$/Ton Inbound- Rev/Cost Sharing	59.26	85.79	76.97	33.38	50.94	(17.56)	-34.5%	(43.59)	-56.6%
Energy									
MWH's Sold	39,474	38,491	36,437	35,062	37,403	(2,341)	-6.3%	(1,375)	-3.8%
\$/MWH	\$37.76	\$38.28	\$41.74	\$43.97	\$41.44	\$2.53	6.1%	\$2.23	5.3%
Steam Plant Capacity Factor %	92.7%	92.8%	94.5%	94.5%					
Average Boiler Availability %	93.9%	93.5%	93.6%	91.6%	93.1%				
Steam Plant Capacity Utilization %	99.0%	99.2%	101.0%	103.2%					
Power Capacity Factor %	88.0%	85.7%	80.8%	78.6%					
Power Sold - % of Capacity to Sell	88.8%	86.6%	82.0%	78.9%	84.2%				

Steam Plant Capacity Factor % - Steam from the two boilers as a % of the total unadjusted capacity (144,000 lbs./hour for time in period with no down time)

Average Boiler Availability % - Percent of hours that boilers are available to burn MSW during period - reflects time out of service for boilers due to equipment problems

Steam Plant Capacity Utilization % - Steam from the two boilers as a % of the adjusted capacity (144,000 lbs./hour for time in period less time not on MSW)

Power Capacity Factor % - Actual power produced (MWH's) by the turbine as a % of the rated capacity (14.1 MW's) for all hours in the period

Power Sold - % of Capacity to Sell - Power sold (MWH's) on grid as a % of the power available to sell (generation net of internal load -- 12.1 MW's) for the given time period

### ecomaine

### **Summary Analysis of All Tons - Detail**

### **ATTACHMENT D5**

July 1, 2018 to November 30, 2018

July 1, 2016 to November 30, 2016												
2 "		Waste	1		ood Was	te		ulky/Oth	er		Recycle	T
Community	FY18	FY19	over/(under)	FY18	FY19	over/(under)	FY18	FY19	over/(under)	FY18	FY19	over/(under)
BRIDGTON	1,155	1,126	(29)	-	-	-	32	92	61	260	259	(1)
CAPE ELIZABETH	965	886	(79)	-	-	-	129	250	121	461	405	(56)
CASCO CUMBERLAND	439 597	417 647	(22) 50	-	-	-	- 81	- 84	3	213 390	186 359	(27)
FALMOUTH	858	949	91	-	-	-	75	67	(8)	641	583	(57)
FREEPORT	661	683	23	-	-	-	-	-	-	344	357	13
GORHAM	1,125	1,232	107	-	-	-	3	5	1	515	443	(71)
GRAY	1,237	1,209	(28)	-	-	-	-	-	-	-	-	-
HARRISON	437	449	11	-	-	-	-	-	-	96	80	(16)
HOLLIS	482	513	31	-	-	-	-	-	-	126	110	(17)
LIMINGTON	716	743	27	-	-	-	-	- 440	-	48	33	(15)
LYMAN NORTH YARMOUTH	571 287	601 304	30 17	-	-	-	95	146	51	106 174	93 163	(13)
PORTLAND	3,805	3,943	138	-	-	-	-	-	-	2358	2336	(22)
POWNAL	99	110	12	-	-	-	-	-	-	62	56	(6)
SCARBOROUGH	2,480	2,567	87	7	-	(7)	-	-	-	1057	1007	(50)
SOUTH PORTLAND	2,593	2,521	(72)	23	-	(23)	637	667	30	977	1013	37
WATERBORO	920	974	54	-	-	-	228	319	90	208	152	(56)
WINDHAM	1,053	1,084	31	-	-	-	4	-	(4)	637	601	(35)
YARMOUTH	860	862	1	-	-	-	269	360	91	472	408	(64)
Owner Member Total	21,340	21,821	482	30	-	(30)	1,553	1,989	436	9,144	8,645	(499)
NAPLES	508	503	(5)				-	-	-	-	-	-
PARSONFIELD SACO	308	329	22	-		_	23	19	(4)	33	30	(3)
STANDISH	2,295 1,298	2,426 1,327	131 29	No Curre	ent Associate	Member _	60	63	2	729 173	724 239	(5) 65
TRI-TOWN (BALDWIN, HIRAM & PORTER)	752	775	23	L	d Waste Acco	_	40	23	(17)	71	70	(1)
BALDWIN	251	258	8				13	8	(6)	24	23	
HIRAM	251	258	8		-	1	13	8	(6)	24	23	-
PORTER	251	258	8				13	8	(6)	24	23	-
Associate Member Total	5,161	5,361	200				123	105	(18)	1,007	1,063	57
ANDOVER AUGUSTA	-	-	-			-	-	-	-	22 169	24 151	(18)
BROWNFIELD	-	-	-	No Curro	nt Contract M	- Mombor or	-	-	-	44	41	(3)
BROWNFIELD WASTE	-	163	163		ood Waste A		-	-	-	-		-
CARMEL	-	-	-			_	-	-	-	26	21	(5)
CHEBEAGUE ISLAND	126	133	7				-	-	-	26	26	1
CHELSEA	-	-	-				-	-	-	- 21	8	8
CORNISH ELIOT	135	157	- 22				82	136	54	21	18	(3)
ETNA	-	-	-				-	-	-	8	-	(8)
FRYEBURG	-	-	-				-	-	-	178	154	(24)
GLENBURN	-	-	-				-	-	-	43	30	(13)
GREENLAND, NH JAY	-	-	-				-	-	-	161 93	159 86	(2)
KITTERY	811	799	(13)				-	-	-	- 93	- 00	(7)
LIMERICK	587	619	33				70	62	(9)	43	46	3
LIVERMORE FALLS	237	206	(31)				-	-	-	49	39	(9)
MANCHESTER	-	-	-				-	-	-	55	41	(14)
MIDCOAST MONMOUTH	-	2,770	2,770				-	-	-	122	- 114	- (0)
NEWBURGH	-	-	-				-	-	-	123 25	114	(9)
NEWBORGTON	-	-	-				-	-	-	39	37	(2)
NORTH HAVEN	109	110	1				-	-	-	42	36	(6)
OHSTT	-	1,459	1,459				-	-	-	-	65	65
OLD ORCHARD OTISFIELD	-	-	-				-	-	-	337 4	249 27	(89)
POLAND	-	-	-				-	-	-	145	139	(6)
READFIELD/WAYN	-	-	-				-	-	-	133	126	(7)
ROCKLAND	-	883	883				-	-	-	-	-	-
SANFORD	-	-	-				183	194	11	784	592	(192)
SHAPLEIGH STETSON	-	-	-				-	-	-	64	63	- (6)
STOCKTON SPRINGS	-	-	-				-	-	-	14 8	8 -	(6)
SWANS ISLAND	-	-	-				-	-	-	10	52	41
TRI-COUNTY	-	471	471				-	-	-	-	-	-
VINALHAVEN RECYCLING	-	-	-				-	-	-	-	23	23
WATERVILLE	- 272	- 410	- 20				-	-	-	224	133	(91)
WOOLWICH	372	410	39				-	-	-	89	95	6
Contract Member Total	2,378	8,179	5,801				335	392	56	2,979	2,611	(368)
Commercial Total	26,739	30,706	3,967	-	2,435	2,435	4,320	5,167	847	3,878	2,988	(890)
Spot Market Total	12,216	2,375	(9,841)				-	-	-	-	-	-
Grand Totals	67,833	68,442	609	30	2,435	2,405	6,331	7,653	1,322	17,008	15,308	(1,700)

### ATTACHMENT D6

### Historical Generation Summary

Month /	Facility	On Peak					Electricity	ISONE Market
Year	Availability	KWHs	Off Peak KWHs	<b>Total KWHs</b>	On Peak Rate	Off Peak Rate	Revenues	Revenues
Nov-16	91%	3,446,625	3,753,281	7,199,906	\$0.04217	\$0.03289	\$294,422	\$205,078
Dec-16	97%	3,310,435	4,033,021	7,343,456	\$0.04895	\$0.03806	\$341,175	\$415,306
Jan-17	96%	2,955,408	3,727,043	6,682,451	\$0.06833	\$0.05408	\$444,232	\$307,056
Feb-17	97%	2,789,835	3,055,834	5,845,669	\$0.06429	\$0.05131	\$372,331	\$206,816
Mar-17	91%	3,244,869	3,779,313	7,024,182	\$0.04843	\$0.03790	\$338,381	\$283,567
Apr-17	83%	2,824,082	3,954,688	6,418,770	\$0.03558	\$0.02618	\$231,780	\$202,464
May-17	93%	3,598,629	3,852,465	7,451,094	\$0.03023	\$0.02120	\$229,274	\$224,200
Jun-17	96%	3,651,175	3,797,778	7,448,953	\$0.03207	\$0.02129	\$284,508	\$270,207
Jul-17	93%	3,188,959	4,288,568	7,477,527	\$0.04147	\$0.02431	\$323,111	\$288,452
Aug-17	100%	3,842,246	4,205,082	8,047,328	\$0.03860	\$0.02194	\$328,177	\$282,647
Sep-17	100%	3,273,470	4,296,437	7,569,907	\$0.03700	\$0.01969	\$274,814	\$248,563
Oct-17	81%	2,754,238	3,508,041	6,262,279	\$0.03920	\$0.02151	\$242,520	\$242,336
Nov-17	94%	3,302,535	3,777,658	7,080,193	\$0.03620	\$0.02706	\$305,108	\$326,146
Dec-17	84%	2,562,192	3,747,691	6,309,883	\$0.05211	\$0.04169	\$371,530	\$538,471
Jan-18	98%	3,547,121	3,934,352	7,481,473	\$0.07706	\$0.05839	\$590,632	\$857,337
Feb-18	99%	3,193,218	3,680,503	6,873,721	\$0.08393	\$0.06922	\$603,125	\$346,139
Mar-18	86%	2,497,017	3,203,098	5,700,115	\$0.05411	\$0.04482	\$351,571	\$275,371
Apr-18	77%	2,793,025	3,186,637	5,979,662	\$0.03281	\$0.02437	\$248,399	\$331,361
May-18	99%	3,989,257	4,303,506	8,292,763	\$0.02829	\$0.01983	\$280,656	\$270,662
Jun-18	93%	3,420,182	4,066,778	7,486,960	\$0.02928	\$0.01989	\$295,386	\$312,080
Jul-18	96%	3,403,155	4,226,642	7,629,797	\$0.03509	\$0.02258	\$329,409	\$360,694
Aug-18	98%	3,689,400	4,003,175	7,692,575	\$0.03523	\$0.02274	\$335,652	\$409,462
Sep-18	95%	2,919,959	4,408,745	7,328,704	\$0.02931	\$0.01950	\$285,688	\$356,465
Oct-18	83%	2,923,391	3,300,855	6,224,246	\$0.03025	\$0.02043	\$268,456	\$345,434
Nov-18	86%	2,862,852	3,323,802	6,186,654	\$0.03567	\$0.02688	\$313,304	\$489,629
Dec-18					\$0.05324	\$0.04246		

Total for contract period

\$3,311,645

\$3,497,297