

*Exhibit DPS-SMA-4*

Generation, Cost, and Emissions data for Future  
Energy Portfolios

Generation, Cost and Emissions data for future energy portfolios

Combined Cycle Natural Gas Plant				Costs†			Emissions				Source
	GWh	MW	Capacity Factor	Build Costs/ kW (2008 \$)	Total Build Cost (2008\$)	Plant Lifetime Levelized Cost per MWh (2008\$)	CO2 (tons/ year)	SO2 (tons/ year)	NOx (tons/ year)	Mercury (tons/ year)	
Combined Cycle Natural Gas	2122	285	85%	\$853	\$243,183,592	\$54.06	845661	0	106	0	CEA
<b>TOTAL</b>	<b>2122</b>	<b>285</b>	<b>85%</b>	<b>\$853/kW</b>	<b>\$243,183,592</b>	<b>\$54.06</b>	<b>845661</b>	<b>0</b>	<b>106</b>	<b>0</b>	
Renewable Portfolio Additions				Costs†			Emissions				Source
Type	GWh	MW	Capacity Factor	Build Costs/ kW (2008 \$)	Total Build Cost (2008\$)	Plant Lifetime Levelized Cost per MWh (2008\$)	CO2 (tons/ year)	SO2 (tons/ year)	NOx (tons/ year)	Mercury (tons/ year)	
Biomass - Wood	645	80	92%	\$2,579	\$206,320,000	\$70.37	0	0	161	0	CEA Report
Hydro Capacity/Efficiency Improvements	110	25	50%	\$1,300	\$32,500,000	\$39.68	0	0	0	0	Case Studies
Wind	1250	444	32%	\$2,108	\$935,952,000	\$77.61	0	0	0	0	CEA Report
Landfill Gas	62	7.5	95%	\$1,150	\$8,625,000	\$50.00	0	0	0	0	Case Studies
Manure Digesters	37	5	85%	\$4,000	\$20,000,000	\$84.72	0	0	0	0	Case Studies
Customer Sited Solar	5	3	20%	\$9,000	\$27,000,000	\$257.85	0	0	0	0	Case Studies
<b>TOTAL</b>	<b>2109</b>	<b>565</b>	<b>43%</b>	<b>\$2,180/kW</b>	<b>\$1,230,397,000</b>	<b>\$73.19</b>	<b>0</b>	<b>0</b>	<b>161</b>	<b>0</b>	
Vermont's Usage from VY				Costs†			Emissions				Source
	GWh	MW	Capacity Factor	Build Costs/ kW (2008 \$)	Total Build Cost (2008\$)	Plant Lifetime Levelized Cost per MWh (2008\$)	CO2 (tons/ year)	SO2 (tons/ year)	NOx (tons/ year)	Mercury (tons/ year)	
Nuclear	2100	277	87%	-	-	Discount off Market‡	0	0	0	0	EIA
<b>TOTAL</b>	<b>2100</b>	<b>277</b>	<b>87%</b>	<b>-</b>	<b>-</b>	<b>Discount off Market‡</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	
Import Scenario				Costs†			Emissions				Source
	GWh	MW	Capacity Factor*	Build Costs/ kW (2008 \$)	Total Build Cost (2008\$)	Plant Lifetime Levelized Cost per MWh (2008\$)	CO2 (tons/ year)	SO2 (tons/ year)	NOx (tons/ year)	Mercury (tons/ year)	
From NEPOOL System Mix	700	92	87%	-	-	Market	244300	556.5	241.5	0.0105	GIS Reports
From New York System Mix	700	92	87%	-	-	Market	342300	1445.5	511	0.0035	GIS Reports
From Quebec System Mix	700	92	87%	-	-	Market	11200	66.5	28	0	GIS Reports
<b>TOTAL</b>	<b>700</b>	<b>92</b>	<b>87%</b>	<b>-</b>	<b>-</b>	<b>Market</b>	<b>597800</b>	<b>2068.5</b>	<b>780.5</b>	<b>0.014</b>	

\*Capacity Factor for import scenario assumed to be the same as VY since power can be pulled from the grid as needed. Assuming the same capacity factor provides Vermont with the same amount of energy and capacity as was available from VY.

†While these prices were developed with the best information available at the time, it should be kept in mind that energy is a worldwide commodity and the world economic structure is changing rapidly. Demand, and therefore price, for fuel to power generators and steel, copper and other commodities necessary to build them is dependent on the level of growth seen worldwide. These costs therefore may need to be adjusted to reflect changes in these prices. As a result, some values in the CEA report may already be outdated. For example, recent project quotes received by Vermont utilities are in the \$2700-2900/kW range.

‡See Chapter 11 for extensive discussion of prices and discounts available from Vermont Yankee.

Price Forecast

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
AESC 2007 Forecast - Energy (w/forwards) (\$/MWh Nominal)	\$79.44	\$77.82	\$80.61	\$82.26	\$86.70	\$91.92	\$92.74	\$94.14	\$99.63	\$103.82	\$108.51
AESC 2007 Forecast - Capacity (adjusted) (\$/kW-yr Nominal)	\$68.71	\$92.41	\$116.12	\$139.83	\$163.54	\$167.62	\$171.82	\$176.11	\$180.51	\$185.03	\$189.65
<b>Total Price (including Energy and Capacity)</b>	<b>\$87.28</b>	<b>\$88.37</b>	<b>\$93.86</b>	<b>\$98.22</b>	<b>\$105.37</b>	<b>\$111.06</b>	<b>\$112.36</b>	<b>\$114.24</b>	<b>\$120.24</b>	<b>\$124.95</b>	<b>\$130.16</b>

	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032
AESC 2007 Forecast - Energy (w/forwards) (\$/MWh Nominal)	\$112.84	\$117.34	\$122.01	\$126.88	\$131.93	\$137.19	\$142.66	\$148.35	\$154.26	\$160.41
AESC 2007 Forecast - Capacity (adjusted) (\$/kW-yr Nominal)	\$194.39	\$199.25	\$204.23	\$209.34	\$214.57	\$219.94	\$225.44	\$231.07	\$231.07	\$231.07
<b>Total Price (including Energy and Capacity)</b>	<b>\$135.03</b>	<b>\$140.08</b>	<b>\$145.33</b>	<b>\$150.77</b>	<b>\$156.43</b>	<b>\$162.30</b>	<b>\$168.40</b>	<b>\$174.73</b>	<b>\$180.64</b>	<b>\$186.79</b>