Nova Scotia Community Feed-in Tariffs
2010 NSUARB-BRD-E-R-10

Undertaking: U-6

Provide copies of the spreadsheet calculations for each of the sensitivities using the ANSS cost inputs, plus the calculations using all of those inputs combined

Each of the sensitivity analyses requested in this undertaking is described below, and the results of all analyses are summarized in Table 1 below.

6.1 <u>Allocating the Cost of Steam Production</u>

ANSS recommends allocating half the cost of steam production to electricity ratepayers. We have analyzed the impact of this change in the Excel file "Synapse U-6 Steam Cost Allocation." In the steam-only scenario, we cut in half the cost of: project development, the boiler, emission controls, labour, maintenance and fuel. These changes are boxed and shaded on the "Cost Scenarios" worksheet of this file. These changes increase 2012 fuel costs to $1,136,557, as seen in cell D19 of the "Cash Flow" worksheet. The new fuel cost per MWh is derived by dividing these fuel costs by 2012 generation (12,636 MWh). The result is $90.

Calculating the levelized (fixed) portion of the rate requires one to remove fuel costs from the model and solve for an after-tax IRR of 13%. This yields a fixed rate of $127 per MWh. We have included a printout of the "Assumptions" worksheet for this model run (titled "Synapse U-6 Steam Cost Allocation – No Fuel") showing the levelized rate of $127 per MWh.

The total 2012 tariff rate with this allocation of steam costs would be $90 plus $127, or $217 per MWh.

6.2 <u>Capital Structure and Cost</u>

ANSS recommends assuming 100% equity financing and a return on equity of 17.5%. We have analyzed the impact of this change in the Excel file "Synapse U-6 Capital Structure." To examine this, we removed debt from the project and made the corresponding changes to assumptions such as the debt service reserve account, debt and equity closing costs and interest during construction. These changes are boxed and shaded on the "Cost Scenarios" worksheet of this file. These changes only affect the fixed portion of the rate. To show the effect of these changes on the fixed portion of the rate, we have taken fuel costs out of "Synapse U-6 Capital Structure." With this change the fixed portion of the rate is $128 per MWh. The total 2012 rate would be $64 plus $128, or $192 per MWh.

6.3 <u>Installed Costs</u>

ANSS has proposed an installed cost of $13,456,757 for the CHP plant (Direct Testimony of Fenton Travis, p. 4). We have analyzed the impact of this change in the Excel file "Synapse U-6 Installed Cost." In this file, we simply entered ANSS's installed cost figure in the appropriate cell and escalated the figure to 2012 dollars. The revised installed cost is boxed and shaded on the "Cost Scenarios" worksheet of this file. These changes only affect the fixed portion of the rate. To show the effect of these changes on the fixed portion of the rate, we have taken fuel costs out of "Synapse U-6 Installed Cost." The fixed portion of the rate with this change is $165 per MWh. The full 2012 rate would be $64 plus $165, or $229 per MWh.

6.4 <u>Labour Costs</u>

ANSS recommends labour costs of $40,000 for the steam-only scenario and $214,000 for the CHP scenario (Direct Testimony of Fenton Travis, p. 3). We have analyzed the impact of this change in the Excel file "Synapse U-6 Labour." In this file, we entered these figures in the appropriate cells and escalated the figures to 2012 dollars. The resulting labour costs are boxed and shaded on the "Cost Scenarios" worksheet of this file. These changes only affect the fixed portion of the rate. To show the effect of these changes on the fixed portion of the rate, we have taken fuel costs out of "Synapse U-6 Labour." The fixed portion of the rate with this change is $106 per MWh. The full 2012 rate would be $64 plus $106, or $170 per MWh.

6.5 <u>Capacity Factor</u>

ANSS recommends a capacity factor of 90% for the CHP scenario. We have analyzed the impact of this change in the Excel file "Synapse U-6 Capacity Factor." Here we have changed the capacity factor of the turbine in condensing mode from 25% to 30% to give the plant an overall capacity factor of 90%. This change can be seen in cell L16 of the "Cost Scenarios" worksheet. This change increases the 2012 fuel cost to $891,418 as seen on the "Cash Flow" worksheet, or $66 per MWh.

Calculating the levelized (fixed) portion of the rate requires one to remove fuel costs from the model and solve for an after-tax IRR of 13%. This yields a fixed rate of $89 per MWh. We have included a printout of the "Assumptions" worksheet for this model run (titled "Synapse U-6 Capacity Factor – No Fuel") showing the levelized rate of $89 per MWh.

6.6 <u>Parasitic Loads</u>

ANSS recommends including the cost of parasitic loads equal to 14% of CHP plant generation, or 1,769 MWh. We have analyzed the impact of this change in the Excel file "Synapse U-6 Parasitic Loads14%." In this file, we created a new line item in the "Operating Expenses" section of the "Assumptions" worksheet. We assumed that the CHP plant would purchase the electricity to meet these loads from NSPI at a rate of $80 per MW. This change increases the fixed portion of the COMFIT rate to $107 per MWh. It does not affect fuel costs, so the total 2012 rate would be $64 plus $107, or $171 per MWh.

6.7 <u>Boiler Efficiency</u>

ANSS recommends using a boiler efficiency of 69% (Direct Testimony of Fenton Travis, p. 3). We have analyzed the impact of this change in the Excel file "Synapse U-6 Boiler Efficiency." In this file, we changed the boiler efficiency to 69% in cells H18 and I18 on the "Cost Scenario" worksheet. This increases the annual net fuel use to 220,143 mmBtu, as seen in cell F10 of the "Assumptions" worksheet. Total fuel cost is now $74 per MWh. This is derived by dividing total 2012 fuel cost ($933,405) by total generation (12,636 MWh) in the "Cash Flows" worksheet.

This change does not affect the fixed portion of the rate, so the total 2012 rate would be $74 plus $95, or $169 per MWh.

6.8 All ANSS Assumptions

In addition to the individual sensitivities discussed above, we also entered all the ANSS assumptions into the model at the same time. This model run is the Excel file "Synapse U-6 All." The various changes to assumptions are boxed and shaded on the "Cost Assumptions" worksheet. The fuel cost in this scenario is $105 per MWh, derived by dividing total 2012 fuel cost ($1,417,871) by total generation (13,534 MWh) on the "Cash Flows" worksheet.

To determine the impact of these changes on the fixed portion of the rate, we took out the fuel cost in a second workbook titled, "Synapse U-6 All – No Fuel." We have attached the printout from the "Assumptions" worksheet of this file, showing a levelized cost of $269 per MWh. Thus, the total 2012 rate would be $105 plus $269, or $374 per MWh.

In the Table 1, we show the results of the individual sensitivities discussed above and the analysis of all the ANSS recommendations together, as described in Section 6.8. To facilitate comparison, we include in Table 1 the impact of two other calculations requested as undertakings: the correction of the errors described in U-2 (second row) and the inclusion of the cost of net parasitic loads described in U-6(a) (last row).

Finally, at the hearings we noted that correcting the two errors described in U-2 would have a small effect ($2 per MWh) on the 2012 biomass rate and that, given the small impact and the short time frame, we had decided not to file a corrected version of our 3/2/11 evidence for the hearings. In light of this, we had to decide whether to base these sensitivity analyses on the $156 rate proposed in our evidence or on the corrected rate of $158. We elected to do these sensitivities based on the corrected rate of $158. Thus, all of the results presented in Table 1 include the correction of the errors discussed in U-2 (except for the first row showing the rate we proposed on 3/2/11). If these sensitivities were run based on the rate we proposed on 3/2/11, the resulting tariff rates would all be roughly $2 per MWh lower.

Table 1. The Impacts of the Changes Analyzed in U-2, U-6 and U-6(a)

Change Analyzed	Fixed Component ($/MWh)	Variable Component ($/MWh)	Full 2012 Rate ($/MWh)
Rate Proposed by Synapse 3/2/11	$94	$62	$156
U-2: Offsetting Errors in Fuel Cost	$95	$64	$158
U-6.1: Allocating the Cost of Steam	$127	$90	$217
U-6.2: Capital Structure and Cost	$128	$64	$192
U-6.3: Installed Cost	$165	$64	$229
U-6.4: Labour Cost	$106	$64	$170
U-6.5: Capacity Factor	$89	$66	$155
U-6.6: Parasitic Loads at 14%	$107	$64	$171
U-6.7: Boiler Efficiency	$95	$74	$169
U-6.8: All ANSS Assumptions	$269	$105	$374
U-6(a): Parasitic Loads at 5.5%	$99	$64	$163

Figures may not sum due to rounding.

Nova Scotia COMFIT Model | **Biomass CHP (condensing turbine; new boiler in steam-only scenario in year 10)** | **Synapse U-6 Steam Cost Allocation**

Assumptions		Notes:
General Inflation Factor (revenue and expenses)	1.92%	From NSPI 2009 IRP Update
Capital Costs (Uses of Funds)		
Development	259,213	Net of steam-only scenario
Equipment & Installation	6,919,520	Net of steam-only scenario
Interconnection	199,000	Net of steam-only scenario
Reserves		
Up-Front Maintenance	53,993	Net of steam-only scenario
Working Capital	754,185	Net of steam-only scenario
Debt Service Reserve	571,211	Net of steam-only scenario
Financing		
Debt Closing Costs & Fees	293,355	Net of steam-only scenario
Equity Closing Costs & Fees	130,412	Net of steam-only scenario
Interest During Construction	244,462	Net of steam-only scenario
Total Project Cost	9,425,351	Net of steam-only scenario
Total Project Cost ($/kW)	4,598	Net of steam-only scenario
Initial Reserve Account Sizing		
Upfront Maintenance (months of Year 1 O&M)	6	
Working Capital (months of Year 1 OPEX)	6	
Debt Service Reserve (months of P&I)	6	
Capital Structure (Sources of Funds)		
Amount ($)		
Grants (net value)	0	
Debt	5,655,210	
Equity	3,770,140	
Total Sources of Funds	9,425,351	
Amount (%)		
Grants	0.0%	
Debt	60.0%	
Equity	40.0%	
Total Sources of Funds	100.0%	
Grants:		
State and Federal Incentives	0	
State/Provincial Tax 1	0	
State/Provincial Tax 2	0	
Federal tax	0	
Net Value of Grants	0	
Debt Terms		
Amount	5,655,210	(Based on target debt/equity ratio)
Loan Life	15	
Interest Rate	9.50%	
Up-Front Fee (%)	1.00%	
Up-Front Fee ($)	56,552	
Closing Costs	282,761	(5% of loan value)
Tax Depreciation Allocation		
% of Total Project Cost		
30% Double Declining	0.0%	
50% Double Declining	69.7%	95% of equipment and installation
20-yr SL	0.0%	
40-yr SL	0.0%	
Other	0.0%	
Non-Depreciable	30.26%	Interconnection, development, reserves and f
Total	100.0%	
Amount Allocated		
30% Double Declining	0	
50% Double Declining	6,573,544	
20-yr SL	0	
40-yr SL	0	
Other	0	
Non-Depreciable	2,851,806	
Total	9,425,351	
Year One Depreciation		
Year One Percent	25.0%	(Based on the "half year rule")
Year One Amount	1,643,386	

Assumptions:		Notes:
Operating Inputs		
Net Generator Capacity (MW)	2.05	1.55 MW at full extraction, 2.05 MW at full condensing
Energy Production:		
Net Capacity Factor		60% of time at full extraction, another 25% at full condensing
Net Output in MWhs	12,636	
Annual Operating Expenses		
Annual Fuel Cost		
Fuel Required per Year (mmBtu)	268,056	Net of steam-only scenario
Initial year Fuel Price ($/mmBtu)	$4.24	
Annual O&M (expensed)	311,825	Escalates at inflation.
Site Maintenance	0	Escalates at inflation.
General & Administrative	0	Escalates at inflation.
Insurance	34,598	Escalates at inflation.
Land Lease	0	Escalates at inflation.
Parasitic Loads	0	14% of generaton priced at $80 per MWh.
Property Tax		
Project Hard Costs	6,919,520	
Assessed Value (%)	1.45%	Machinery and equipment is not assessed.
Assessed Value ($)	100,000	
Annual Decline in Assessed Value	1.00%	
Assessed Value Minimum %	0.00%	
Property Tax Rate	3.50%	
Revenue Assumptions		
Levelized Energy Price ($/MWh)	227.90	
% of Levelized Rate Escalating @ Infl.	0.0%	
Other Revenues (increases with inflation)	0	
Return Metrics		
20-year Equity IRR		
Pre-Tax	13.93%	
After-Tax	12.99%	
Average Debt Service Coverage Ratio	1.63	
Minimum Debt Service Coverage Ratio	1.34	
Minimum Annual After-Tax Equity Net Benefits	62,287	Includes tax benefit/(liability)
Tax Rates:		
Federal Income Tax	15.0%	
State/Provincial Income Tax		
Tax Rate 1		
Applicable Income (less than X)	400,000	
Tax Rate 1	4.5%	
Tax Rate 2 (for income greater than X)	16.0%	
Major Maintenance		
Replacement Occurs Every X Years	11	
Cost of Replacement (Year 0 Dollars)	356,720	
Tax Depreciation Classification of Spending	50% Double Declining	
Book Depreciation Classification of Spending	30-yr SL	
Residual Value		
Residual Value (Net Book Value)	421	
Book Depreciation Classifications		
20-yr SL	100.0%	
30-yr SL	0.0%	
37-yr SL	0.0%	
40-yr SL	0.0%	
Non-Depreciable	0.00%	
Total	100.0%	
Amount Allocated		
20-yr SL	9,425,351	
30-yr SL	0	
37-yr SL	0	
40-yr SL	0	
Non-Depreciable	0	
Total	9,425,351	

Operating Year		0	1	2	3	4	5	6	7	8	9	10
Generation (MWh)			12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636
			(89.9)									
Partial Income Statement												
Revenue												
Standard Offer Price ($/MWh)												
Fixed Price Component	100%		227.90	227.90	227.90	227.90	227.90	227.90	227.90	227.90	227.90	227.90
Escalating Price Component	0%		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Standard Offer Price			227.90	227.90	227.90	227.90	227.90	227.90	227.90	227.90	227.90	227.90
Revenues From Energy Production			2,879,813	2,879,813	2,879,813	2,879,813	2,879,813	2,879,813	2,879,813	2,879,813	2,879,813	2,879,813
Other Revenues			0	0	0	0	0	0	0	0	0	0
Interest Revenue			26,484	27,237	27,990	28,743	29,496	30,250	31,003	31,756	32,509	33,262
Total Revenue			2,906,297	2,907,050	2,907,803	2,908,556	2,909,309	2,910,062	2,910,815	2,911,568	2,912,322	2,913,075
Expenses												
Fuel Cost			(1,136,557)	(1,158,379)	(1,180,620)	(1,203,288)	(1,226,391)	(1,249,938)	(1,273,937)	(1,298,396)	(1,323,326)	(1,348,733)
O&M			(311,825)	(317,812)	(323,914)	(330,133)	(336,472)	(342,932)	(349,517)	(356,227)	(363,067)	(370,038)
Site Maintenance			0	0	0	0	0	0	0	0	0	0
G&A			0	0	0	0	0	0	0	0	0	0
Insurance			(34,598)	(35,262)	(35,939)	(36,629)	(37,332)	(38,049)	(38,780)	(39,524)	(40,283)	(41,056)
Land Lease			0	0	0	0	0	0	0	0	0	0
Parasitic Loads			0	0	0	0	0	0	0	0	0	0
Property tax			(3,500)	(3,465)	(3,430)	(3,395)	(3,360)	(3,325)	(3,290)	(3,255)	(3,220)	(3,185)
Total			(1,486,480)	(1,514,919)	(1,543,903)	(1,573,446)	(1,603,556)	(1,634,244)	(1,665,523)	(1,697,403)	(1,729,895)	(1,763,013)
EBITDA			1,419,817	1,392,132	1,363,900	1,335,111	1,305,754	1,275,818	1,245,292	1,214,166	1,182,426	1,150,062
Equity Return												
Cash												
EBITDA			1,419,817	1,392,132	1,363,900	1,335,111	1,305,754	1,275,818	1,245,292	1,214,166	1,182,426	1,150,062
Plus: Release of Debt Service Reserve			0	0	0	0	0	0	0	0	0	0
Plus: Release of WC & Up-Front Maint Reserves			0	0	0	0	0	0	0	0	0	0
Plus: Release of Major Maintenance Reserves			0	0	0	0	0	0	0	0	0	0
Plus: Residual Value			0	0	0	0	0	0	0	0	0	0
Less: Major Maintenance Spending			0	0	0	0	0	0	0	0	0	0
Less: Major Maintenance Reserve Funding			(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)
Less: Principal			(185,172)	(202,764)	(222,026)	(243,119)	(266,215)	(291,506)	(319,199)	(349,523)	(382,727)	(419,086)
Less: Interest			(537,245)	(519,654)	(500,391)	(479,299)	(456,202)	(430,912)	(403,219)	(372,895)	(339,690)	(303,331)
Total Cash			658,177	630,492	602,260	573,471	544,114	514,179	483,653	452,526	420,787	388,423
Equity Investment		(3,770,140)										
Total Pre-Tax Equity Return		(3,770,140)	658,177	630,492	602,260	573,471	544,114	514,179	483,653	452,526	420,787	388,423
Pre-Tax Internal Rate of Return	13.93%											
Taxable Income Benefit/(Liability)												
EBITDA			1,419,817	1,392,132	1,363,900	1,335,111	1,305,754	1,275,818	1,245,292	1,214,166	1,182,426	1,150,062
Less: Interest			(537,245)	(519,654)	(500,391)	(479,299)	(456,202)	(430,912)	(403,219)	(372,895)	(339,690)	(303,331)
Less: Tax Depreciation			(1,643,386)	(2,465,079)	(1,232,540)	(616,270)	(308,135)	(154,067)	(77,034)	(38,517)	(19,258)	(9,629)
Taxable Income/(Loss)			(760,814)	(1,592,601)	(369,031)	239,542	541,417	690,839	765,040	802,754	823,477	837,102
Tax Benefit/(Liability)												
State/Provincial 1			18,000	18,000	16,606	(10,779)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)
State/Provincial 2			57,730	190,816	0	0	(22,627)	(46,534)	(58,406)	(64,441)	(67,756)	(69,936)
Federal			114,122	238,890	55,355	(35,931)	(81,212)	(103,626)	(114,756)	(120,413)	(123,522)	(125,565)
Total Tax Benefit/(Liability)			189,852	447,706	71,961	(46,711)	(121,839)	(168,160)	(191,162)	(202,854)	(209,278)	(213,502)
Equity Investment		(3,770,140)										
Total After-Tax Equity Return		(3,770,140)	848,030	1,078,199	674,221	526,761	422,275	346,019	292,491	249,673	211,509	174,921

Operating Year	11	12	13	14	15	16	17	18	19	20
Generation (MWh)	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636
Partial Income Statement										
Revenue										
Standard Offer Price ($/MWh)										
Fixed Price Component	227.90	227.90	227.90	227.90	227.90	227.90	227.90	227.90	227.90	227.90
Escalating Price Component	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Standard Offer Price	227.90	227.90	227.90	227.90	227.90	227.90	227.90	227.90	227.90	227.90
Revenues From Energy Production	2,879,813	2,879,813	2,879,813	2,879,813	2,879,813	2,879,813	2,879,813	2,879,813	2,879,813	2,879,813
Other Revenues	0	0	0	0	0	0	0	0	0	0
Interest Revenue	34,015	26,484	26,484	26,484	26,484	15,517	15,517	15,517	15,517	15,517
Total Revenue	2,913,828	2,906,297	2,906,297	2,906,297	2,906,297	2,895,330	2,895,330	2,895,330	2,895,330	2,895,330
Expenses										
Fuel Cost	(1,374,629)	(1,401,022)	(1,427,922)	(1,455,338)	(1,483,280)	(1,511,759)	(1,540,785)	(1,570,368)	(1,600,519)	(1,631,249)
O&M	(377,142)	(384,384)	(391,764)	(399,286)	(406,952)	(414,765)	(422,729)	(430,845)	(439,118)	(447,549)
Site Maintenance	0	0	0	0	0	0	0	0	0	0
G&A	0	0	0	0	0	0	0	0	0	0
Insurance	(41,845)	(42,648)	(43,467)	(44,301)	(45,152)	(46,019)	(46,903)	(47,803)	(48,721)	(49,656)
Land Lease	0	0	0	0	0	0	0	0	0	0
Parasitic Loads	0	0	0	0	0	0	0	0	0	0
Property tax	(3,150)	(3,115)	(3,080)	(3,045)	(3,010)	(2,975)	(2,940)	(2,905)	(2,870)	(2,835)
Total	(1,796,766)	(1,831,169)	(1,866,232)	(1,901,970)	(1,938,394)	(1,975,519)	(2,013,356)	(2,051,921)	(2,091,228)	(2,131,289)
EBITDA	1,117,061	1,075,128	1,040,065	1,004,327	967,903	919,811	881,973	843,408	804,102	764,041
Equity Return										
Cash										
EBITDA	1,117,061	1,075,128	1,040,065	1,004,327	967,903	919,811	881,973	843,408	804,102	764,041
Plus: Release of Debt Service Reserve	0	0	0	0	571,211	0	0	0	0	0
Plus: Release of WC & Up-Front Maint Reserves	0	0	0	0	0	0	0	0	0	808,177
Plus: Release of Major Maintenance Reserves	431,441	0	0	0	0	0	0	0	0	0
Plus: Residual Value	0	0	0	0	0	0	0	0	0	421
Less: Major Maintenance Spending	(431,441)	0	0	0	0	0	0	0	0	0
Less: Major Maintenance Reserve Funding	(39,222)	0	0	0	0	0	0	0	0	0
Less: Principal	(458,900)	(502,495)	(550,232)	(602,504)	(659,742)	(0)	(0)	(0)	(0)	(0)
Less: Interest	(263,518)	(219,922)	(172,185)	(119,913)	(62,675)	0	0	0	0	0
Total Cash	355,422	352,711	317,647	281,910	816,696	919,811	881,973	843,408	804,102	1,572,639
Equity Investment										
Total Pre-Tax Equity Return	355,422	352,711	317,647	281,910	816,696	919,811	881,973	843,408	804,102	1,572,639
Taxable Income Benefit/(Liability)										
EBITDA	1,117,061	1,075,128	1,040,065	1,004,327	967,903	919,811	881,973	843,408	804,102	764,041
Less: Interest	(263,518)	(219,922)	(172,185)	(119,913)	(62,675)	0	0	0	0	0
Less: Tax Depreciation	(220,535)	(110,268)	(55,134)	(27,567)	(13,783)	(6,892)	(3,446)	(1,723)	(861)	(431)
Taxable Income/(Loss)	633,008	744,938	812,745	856,847	891,444	912,919	878,527	841,685	803,241	763,610
Tax Benefit/(Liability)										
State/Provincial 1	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)
State/Provincial 2	(37,281)	(55,190)	(66,039)	(73,096)	(78,631)	(82,067)	(76,564)	(70,670)	(64,519)	(58,178)
Federal	(94,951)	(111,741)	(121,912)	(128,527)	(133,717)	(136,938)	(131,779)	(126,253)	(120,486)	(114,542)
Total Tax Benefit/(Liability)	(150,233)	(184,931)	(205,951)	(219,623)	(230,348)	(237,005)	(226,344)	(214,922)	(203,005)	(190,719)
Equity Investment										
Total After-Tax Equity Return	205,189	167,780	111,696	62,287	586,349	682,806	655,630	628,486	601,098	1,381,920

Operating Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Debt																						
Loan Balance		5,655,210	5,470,038	5,267,274	5,045,248	4,802,129	4,535,913	4,244,408	3,925,209	3,575,686	3,192,959	2,773,873	2,314,973	1,812,478	1,262,246	659,742	(0)	(0)	(0)	(0)	(0)	(0)
Interest	9.50%	(5,181,052)	(537,245)	(519,654)	(500,391)	(479,299)	(456,202)	(430,912)	(403,219)	(372,895)	(339,690)	(303,331)	(263,518)	(219,922)	(172,185)	(119,913)	(62,675)	0	0	0	0	0
Principal		(5,655,210)	(185,172)	(202,764)	(222,026)	(243,119)	(266,215)	(291,506)	(319,199)	(349,523)	(382,727)	(419,086)	(458,900)	(502,495)	(550,232)	(602,504)	(659,742)	(0)	(0)	(0)	(0)	(0)
Annual payment			(722,417)	(722,417)	(722,417)	(722,417)	(722,417)	(722,417)	(722,417)	(722,417)	(722,417)	(722,417)	(722,417)	(722,417)	(722,417)	(722,417)	(722,417)	0	0	0	0	0
Debt Service Coverage Ratio																						
EBITDA			1,419,817	1,392,132	1,363,900	1,335,111	1,305,754	1,275,818	1,245,292	1,214,166	1,182,426	1,150,062	1,117,061	1,075,128	1,040,065	1,004,327	967,903	0	0	0	0	0
Less: Major Maintenance Reserve Funding			(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	0	0	0	0	0	0	0	0	0
Cash Available for Debt Service			1,380,595	1,352,910	1,324,678	1,295,889	1,266,532	1,236,596	1,206,071	1,174,944	1,143,204	1,110,840	1,077,839	1,075,128	1,040,065	1,004,327	967,903	0	0	0	0	0
P&I			722,417	722,417	722,417	722,417	722,417	722,417	722,417	722,417	722,417	722,417	722,417	722,417	722,417	722,417	722,417	0	0	0	0	0
Debt Service Coverage Ratio			1.91	1.87	1.83	1.79	1.75	1.71	1.67	1.63	1.58	1.54	1.49	1.49	1.44	1.39	1.34					
Average		1.63																				
Minimum		1.34																				
Reserve Accounts																						
Reserves Funded As Part of Capital Cost																						
Beginning Balance		0	1,379,388	1,379,388	1,379,388	1,379,388	1,379,388	1,379,388	1,379,388	1,379,388	1,379,388	1,379,388	1,379,388	1,379,388	1,379,388	1,379,388	1,379,388	808,177	808,177	808,177	808,177	808,177
Up-Front Maintenance Reserve		53,993	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(53,993)
Working Capital		754,185	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(754,185)
Debt Service Reserve		571,211	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(571,211)	0	0	0	0	0
Total		1,379,388	1,379,388	1,379,388	1,379,388	1,379,388	1,379,388	1,379,388	1,379,388	1,379,388	1,379,388	1,379,388	1,379,388	1,379,388	1,379,388	1,379,388	808,177	808,177	808,177	808,177	808,177	0
Major Maintenance Reserve Funded Through Operations																						
Beginning Balance			0	39,222	78,444	117,666	156,888	196,110	235,332	274,553	313,775	352,997	392,219	0	0	0	0	0	0	0	0	0
Funding			39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	0	0	0	0	0	0	0	0	0
Release of Funds			0	0	0	0	0	0	0	0	0	0	(431,441)	0	0	0	0	0	0	0	0	0
Ending Balance			39,222	78,444	117,666	156,888	196,110	235,332	274,553	313,775	352,997	392,219	0	0	0	0	0	0	0	0	0	0
Major Maintenance Costs																						
Occurrence 1		431,441	0	0	0	0	0	0	0	0	0	0	431,441	0	0	0	0	0	0	0	0	0
Occurrence 2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major Maintenance Funding																						
Occurrence 1		431,441	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	0	0	0	0	0	0	0	0	0
Occurrence 2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Interest on Reserves			26,484	27,237	27,990	28,743	29,496	30,250	31,003	31,756	32,509	33,262	34,015	26,484	26,484	26,484	26,484	15,517	15,517	15,517	15,517	15,517
Property Tax Calculation																						
Original Assessed Value			100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
Annual Decline in Assessed Value			100.0%	99.0%	98.0%	97.0%	96.0%	95.0%	94.0%	93.0%	92.0%	91.0%	90.0%	89.0%	88.0%	87.0%	86.0%	85.0%	84.0%	83.0%	82.0%	81.0%
Annual Assessed Value			100,000	99,000	98,000	97,000	96,000	95,000	94,000	93,000	92,000	91,000	90,000	89,000	88,000	87,000	86,000	85,000	84,000	83,000	82,000	81,000
Property Tax Rate			3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
Property Tax Expense			3,500	3,465	3,430	3,395	3,360	3,325	3,290	3,255	3,220	3,185	3,150	3,115	3,080	3,045	3,010	2,975	2,940	2,905	2,870	2,835

Operating Year		**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
Calendar Year		**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
Tax Depreciation																						
Calendar Year Depreciation per Classification (%)																						
30% Double Declining			30.00%	21.00%	14.70%	10.29%	7.20%	5.04%	3.53%	2.47%	1.73%	1.21%	0.85%	0.59%	0.42%	0.29%	0.20%	0.14%	0.10%	0.07%	0.05%	0.03%
50% Double Declining			50.00%	25.00%	12.50%	6.25%	3.13%	1.56%	0.78%	0.39%	0.20%	0.10%	0.05%	0.02%	0.01%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
20-yr SL			2.50%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
40-yr SL			1.25%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Other			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Calendar Year Depreciation per Classification ($)																						
Year One Capital Cost Allocation	1,643,386		1,643,386	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30% Double Declining	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50% Double Declining	4,930,158		0	2,465,079	1,232,540	616,270	308,135	154,067	77,034	38,517	19,258	9,629	4,815	2,407	1,204	602	301	150	75	38	19	9
20-yr SL	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40-yr SL	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major Maintenance			0	0	0	0	0	0	0	0	0	0	215,721	107,860	53,930	26,965	13,483	6,741	3,371	1,685	843	421
Annual Depreciation	7,004,555		1,643,386	2,465,079	1,232,540	616,270	308,135	154,067	77,034	38,517	19,258	9,629	220,535	110,268	55,134	27,567	13,783	6,892	3,446	1,723	861	431
Major Maintenance																						
Timing of Spending																						
Occurrence 1			0	0	0	0	0	0	0	0	0	0	1	2	3	4	5	6	7	8	9	10
Occurrence 2			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Depreciation Classification	Declining																					
Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Depreciation Schedule		0.00%	50.00%	25.00%	12.50%	6.25%	3.13%	1.56%	0.78%	0.39%	0.20%	0.10%	0.05%	0.02%	0.01%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Depreciation Expense																						
	Expense	Amount																				
Occurrence 1	431,441	431,020	0	0	0	0	0	0	0	0	0	0	215,721	107,860	53,930	26,965	13,483	6,741	3,371	1,685	843	421
Occurrence 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Book Depreciation																						
Calendar Year Depreciation per Classification (%)																						
20-yr SL			5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
30-yr SL			3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%
37-yr SL			2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%
40-yr SL			2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Calendar Year Depreciation per Classification ($)																						
20-yr SL	9,425,351		471,268	471,268	471,268	471,268	471,268	471,268	471,268	471,268	471,268	471,268	471,268	471,268	471,268	471,268	471,268	471,268	471,268	471,268	471,268	471,268
30-yr SL	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37-yr SL	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40-yr SL	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major Maintenance			0	0	0	0	0	0	0	0	0	0	215,721	107,860	53,930	26,965	13,483	6,741	3,371	1,685	843	421
Annual Depreciation	9,856,370		471,268	471,268	471,268	471,268	471,268	471,268	471,268	471,268	471,268	471,268	686,988	579,128	525,198	498,233	484,750	478,009	474,638	472,953	472,110	471,689
Major Maintenance																						
Timing of Spending																						
Occurrence 1			0	0	0	0	0	0	0	0	0	0	1	2	3	4	5	6	7	8	9	10
Occurrence 2			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Depreciation Classification	30-yr SL																					
Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Depreciation Schedule		0.00%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%
Depreciation Expense																						
	Expense	Depreciation Amount																				
Occurrence 1	431,441	431,020	0	0	0	0	0	0	0	0	0	0	215,721	107,860	53,930	26,965	13,483	6,741	3,371	1,685	843	421
Occurrence 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Net Book Value																						
Beginning Balance			0	8,954,083	8,482,816	8,011,548	7,540,280	7,069,013	6,597,745	6,126,478	5,655,210	5,183,943	4,712,675	4,457,128	3,878,001	3,352,803	2,854,570	2,369,820	1,891,811	1,417,173	944,220	472,110
Original Book Value			9,425,351	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Plus: Major Maintenance			0	0	0	0	0	0	0	0	0	0	431,441	0	0	0	0	0	0	0	0	0
Less: Depreciation			(471,268)	(471,268)	(471,268)	(471,268)	(471,268)	(471,268)	(471,268)	(471,268)	(471,268)	(471,268)	(686,988)	(579,128)	(525,198)	(498,233)	(484,750)	(478,009)	(474,638)	(472,953)	(472,110)	(471,689)
Net Book Value			8,954,083	8,482,816	8,011,548	7,540,280	7,069,013	6,597,745	6,126,478	5,655,210	5,183,943	4,712,675	4,457,128	3,878,001	3,352,803	2,854,570	2,369,820	1,891,811	1,417,173	944,220	472,110	421

Operating Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Book Depreciation																						
Calendar Year Depreciation per Classification (%)																						
20-yr SL			5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
30-yr SL			3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%
37-yr SL			2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%
40-yr SL			2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Calendar Year Depreciation per Classification ($)																						
20-yr SL	9,425,351		471,268	471,268	471,268	471,268	471,268	471,268	471,268	471,268	471,268	471,268	471,268	471,268	471,268	471,268	471,268	471,268	471,268	471,268	471,268	471,268
30-yr SL	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37-yr SL	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40-yr SL	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major Maintenance			0	0	0	0	0	0	0	0	0	0	215,721	107,860	53,930	26,965	13,483	6,741	3,371	1,685	843	421
Annual Depreciation	9,856,370		471,268	471,268	471,268	471,268	471,268	471,268	471,268	471,268	471,268	471,268	686,988	579,128	525,198	498,233	484,750	478,009	474,638	472,953	472,110	471,689
Major Maintenance																						
Timing of Spending																						
Occurrence 1			0	0	0	0	0	0	0	0	0	0	1	2	3	4	5	6	7	8	9	10
Occurrence 2			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Depreciation Classification	30-yr SL																					
Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Depreciation Schedule		0.00%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%
Depreciation Expense																						
	Expense	Depreciation Amount																				
Occurrence 1	431,441	431,020	0	0	0	0	0	0	0	0	0	0	215,721	107,860	53,930	26,965	13,483	6,741	3,371	1,685	843	421
Occurrence 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Net Book Value																						
Beginning Balance			0	8,954,083	8,482,816	8,011,548	7,540,280	7,069,013	6,597,745	6,126,478	5,655,210	5,183,943	4,712,675	4,457,128	3,878,001	3,352,803	2,854,570	2,369,820	1,891,811	1,417,173	944,220	472,110
Original Book Value			9,425,351	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Plus: Major Maintenance			0	0	0	0	0	0	0	0	0	0	431,441	0	0	0	0	0	0	0	0	0
Less: Depreciation			(471,268)	(471,268)	(471,268)	(471,268)	(471,268)	(471,268)	(471,268)	(471,268)	(471,268)	(471,268)	(686,988)	(579,128)	(525,198)	(498,233)	(484,750)	(478,009)	(474,638)	(472,953)	(472,110)	(471,689)
Net Book Value			8,954,083	8,482,816	8,011,548	7,540,280	7,069,013	6,597,745	6,126,478	5,655,210	5,183,943	4,712,675	4,457,128	3,878,001	3,352,803	2,854,570	2,369,820	1,891,811	1,417,173	944,220	472,110	421

Biomass CHP Cost Scenarios

Synapse U-6 Steam Cost Allocation

Scenarios in $2012

Component	Value for Steam-Only Scenario	Gross Value for CHP Scenario	Net Value for CHP Scenario
Project developmen	$21,067	$280,280	$259,213
Boiler installed cost ($	$842,685	$3,057,600	$2,214,915
Turbine installed cost ($)	$0	$2,894,528	$2,894,528
Emission controls	$126,403	$305,760	$179,357
Condenser/Cooling Tower	$0	$1,630,720	$1,630,720
Equipment and Installation ($)	$969,088	$7,888,608	$6,919,520
Interconnection ($)	$0	$199,000	$199,000
Maintenance reserve ($)	$32,639	$86,632	$53,993
Working capital reserve ($)	$280,432	$1,034,617	$754,185
Debt service reserve ($)	$213,498	$784,709	$571,211
Debt Closing Costs & Fees	$109,646	$403,000	$293,355
Equity Closing Costs & Fees	$48,718	$179,130	$130,412
Interest During Constructior	$91,371	$335,834	$244,462
Routine Maintenance ($/yr	$65,279	$173,264	$107,985
Labour ($)	$152,880	$356,720	$203,840
General & Admin.	$0	$0	$0
Insurance	$4,845	$39,443	$34,598
Property taxes	$0	$3,567	
Year-10 Turbine overhaul ($)	$0	$152,880	$152,880
Year-10 Boiler overhaul ($	$0	$203,840	$203,840
Annual Fuel Use (mmBtu/yr	78,183	346,239	268,056
Annual Fuel Cost ($/yr)	$337,861	$1,496,240	$1,158,379
Plant capacity factor (%) - extract	60%	60%	60%
Plant capacity factor (%) - full condensing		25%	25%
NPV of new boiler($2M) in yr 10	$1,685,370		
Steam Load (mmBtu/hr)	23.8	22	22
Boiler size (lb/hr)	20,000	30,000	
Boiler rating (psi)	75-100	600	
Turbine type	N/A	Condensing	
Turbine size (MW)	N/A	2.05	
Total Project Costs ($)	$1,766,459	$11,191,810	$9,425,351
Total Project Costs ($/kW)		$5,459	$4,598

Actual Loan Value	$1,059,876	$6,715,086	$5,655,210
Actual Equity Amount	$706,584	$4,476,724	

Capacity Factor:	
Steam	60%
Condensing	25%

Calculation of fuel costs:	extraction	Condensing
turbine size (kW):	1550	2050
Boiler efficiency (%)	80%	80%
Adjusted turbine size (kW):		
Adjusted KWhs:		
Fuel Use (Btu):		
Fuel Use (mmBtu):	244,404	101,835

Calculation of heat input:	
5,256	hrs
125,093	process heat (mmBtu)
156,366	heat input (mmBtu)

Efficiency:	31%	15%
Steam energy	62546.4	
Electric Energy	43115	15318
Fuel Use	346239	101835

Nova Scotia COMFIT Model — **Biomass CHP (condensing turbine; new boiler in steam-only scenario in year 10)** — **Synapse U-6 Steam Cost Allocation -- No Fuel**

Assumptions		Notes:
General Inflation Factor (revenue and expenses)	1.92%	From NSPI 2009 IRP Update
Capital Costs (Uses of Funds)		
Development	259,213	Net of steam-only scenario
Equipment & Installation	6,919,520	Net of steam-only scenario
Interconnection	199,000	Net of steam-only scenario
Reserves		
Up-Front Maintenance	53,993	Net of steam-only scenario
Working Capital	754,185	Net of steam-only scenario
Debt Service Reserve	564,407	Net of steam-only scenario
Financing		
Debt Closing Costs & Fees	289,860	Net of steam-only scenario
Equity Closing Costs & Fees	128,868	Net of steam-only scenario
Interest During Construction	241,550	Net of steam-only scenario
Total Project Cost	9,410,596	Net of steam-only scenario
Total Project Cost ($/kW)	4,591	Net of steam-only scenario
Initial Reserve Account Sizing		
Upfront Maintenance (months of Year 1 O&M)	6	4590534.469
Working Capital (months of Year 1 OPEX)	6	
Debt Service Reserve (months of P&I)	6	
Capital Structure (Sources of Funds)		
Amount ($)		
Grants (net value)	0	
Debt	5,646,357	
Equity	3,764,238	
Total Sources of Funds	9,410,596	
Amount (%)		
Grants	0.0%	
Debt	60.0%	
Equity	40.0%	
Total Sources of Funds	100.0%	
Grants:		
State and Federal Incentives	0	
State/Provincial Tax 1	0	
State/Provincial Tax 2	0	
Federal tax	0	
Net Value of Grants	0	
Debt Terms		
Amount	5,646,357	(Based on target debt/equity ratio)
Loan Life	15	
Interest Rate	9.50%	
Up-Front Fee (%)	1.00%	
Up-Front Fee ($)	56,464	
Closing Costs	282,318	(5% of loan value)
Tax Depreciation Allocation		
% of Total Project Cost		
30% Double Declining	0.0%	
50% Double Declining	69.9%	95% of equipment and installation
20-yr SL	0.0%	
40-yr SL	0.0%	
Other	0.0%	
Non-Depreciable	30.15%	Interconnection, development, reserves and f
Total	100.0%	
Amount Allocated		
30% Double Declining	0	
50% Double Declining	6,573,544	
20-yr SL	0	
40-yr SL	0	
Other	0	
Non-Depreciable	2,837,051	
Total	9,410,596	
Year One Depreciation		
Year One Percent	25.0%	(Based on the "half year rule")
Year One Amount	1,643,386	

Assumptions:		Notes:
Operating Inputs		
Net Generator Capacity (MW)	2.05	1.55 MW at full extraction, 2.05 MW at full condensing
Energy Production:		
Net Capacity Factor		60% of time at full extraction, another 25% at full condensing
Net Output in MWhs	12,636	
Annual Operating Expenses		
Annual Fuel Cost		
Fuel Required per Year (mmBtu)	0	Net of steam-only scenario
Initial year Fuel Price ($/mmBtu)	$0.00	
Annual O&M (expensed)	311,825	Escalates at inflation.
Site Maintenance	0	Escalates at inflation.
General & Administrative	0	Escalates at inflation.
Insurance	34,598	Escalates at inflation.
Land Lease	0	Escalates at inflation.
Other	0	Escalates at inflation.
Property Tax		
Project Hard Costs	6,919,520	
Assessed Value (%)	1.45%	Machinery and equipment is not assessed.
Assessed Value ($)	100,000	
Annual Decline in Assessed Value	1.00%	
Assessed Value Minimum %	0.00%	
Property Tax Rate	3.50%	
Revenue Assumptions		
Levelized Energy Price ($/MWh)	127.00	
% of Levelized Rate Escalating @ Infl.	0.0%	
Other Revenues (increases with inflation)	0	
Return Metrics		
20-year Equity IRR		
Pre-Tax	13.84%	
After-Tax	13.00%	
Average Debt Service Coverage Ratio	1.67	
Minimum Debt Service Coverage Ratio	1.63	
Minimum Annual After-Tax Equity Net Benefits	187,701	Includes tax benefit/(liability)
Tax Rates:		
Federal Income Tax	15.0%	
State/Provincial Income Tax		
Tax Rate 1		
Applicable Income (less than X)	400,000	
Tax Rate 1	4.5%	
Tax Rate 2 (for income greater than X)	16.0%	
Major Maintenance		
Replacement Occurs Every X Years	11	
Cost of Replacement (Year 0 Dollars)	356,720	
Tax Depreciation Classification of Spending	50% Double Declining	
Book Depreciation Classification of Spending	30-yr SL	
Residual Value		
Residual Value (Net Book Value)	421	
Book Depreciation Classifications		
20-yr SL	100.0%	
30-yr SL	0.0%	
37-yr SL	0.0%	
40-yr SL	0.0%	
Non-Depreciable	0.00%	
Total	100.0%	
Amount Allocated		
20-yr SL	9,410,596	
30-yr SL	0	
37-yr SL	0	
40-yr SL	0	
Non-Depreciable	0	
Total	9,410,596	

Nova Scotia COMFIT Model **Synapse U-6 Capital Structure**

Assumptions		Notes:
General Inflation Factor (revenue and expenses)	1.92%	From NSPI 2009 IRP Update
Capital Costs (Uses of Funds)		
Development	238,146	Net of steam-only scenario
Equipment & Installation	5,950,432	Net of steam-only scenario
Interconnection	199,000	Net of steam-only scenario
Reserves		
Up-Front Maintenance	21,353	Net of steam-only scenario
Working Capital	473,752	Net of steam-only scenario
Debt Service Reserve	(213,379)	Net of steam-only scenario
Financing		
Debt Closing Costs & Fees	(109,584)	Net of steam-only scenario
Equity Closing Costs & Fees	343,470	Net of steam-only scenario
Interest During Construction	(91,320)	Net of steam-only scenario
Total Project Cost	6,811,870	Net of steam-only scenario
Total Project Cost ($/kW)	3,323	Net of steam-only scenario
Initial Reserve Account Sizing		
Upfront Maintenance (months of Year 1 O&M)	6	
Working Capital (months of Year 1 OPEX)	6	
Debt Service Reserve (months of P&I)	6	
Capital Structure (Sources of Funds)		
Amount ($)		
Grants (net value)	0	
Debt	0	
Equity	6,811,870	
Total Sources of Funds	6,811,870	
Amount (%)		
Grants	0.0%	
Debt	0.0%	
Equity	100.0%	
Total Sources of Funds	100.0%	
Grants:		
State and Federal Incentives	0	
State/Provincial Tax 1	0	
State/Provincial Tax 2	0	
Federal tax	0	
Net Value of Grants	0	
Debt Terms		
Amount	0	(Based on target debt/equity ratio)
Loan Life	15	
Interest Rate	9.50%	
Up-Front Fee (%)	1.00%	
Up-Front Fee ($)	0	
Closing Costs	0	(5% of loan value)
Tax Depreciation Allocation		
% of Total Project Cost		
30% Double Declining	0.0%	
50% Double Declining	83.0%	95% of equipment and installation
20-yr SL	0.0%	
40-yr SL	0.0%	
Other	0.0%	
Non-Depreciable	17.01%	Interconnection, development, reserves and f
Total	100.0%	
Amount Allocated		
30% Double Declining	0	
50% Double Declining	5,652,911	
20-yr SL	0	
40-yr SL	0	
Other	0	
Non-Depreciable	1,158,960	
Total	6,811,870	
Year One Depreciation		
Year One Percent	25.0%	(Based on the "half year rule")
Year One Amount	1,413,228	

Assumptions:		Notes:
Operating Inputs		
Net Generator Capacity (MW)	2.05	1.55 MW at full extraction, 2.05 MW at full condensing
Energy Production:		
Net Capacity Factor		60% of time at full extraction, another 25% at full condensing
Net Output in MWhs	12,636	
Annual Operating Expenses		
Annual Fuel Cost		
Fuel Required per Year (mmBtu)	0	Net of steam-only scenario
Initial year Fuel Price ($/mmBtu)	$0.00	
Annual O&M (expensed)	93,667	Escalates at inflation.
Site Maintenance	0	Escalates at inflation.
General & Administrative	0	Escalates at inflation.
Insurance	29,752	Escalates at inflation.
Land Lease	0	Escalates at inflation.
Other	0	Escalates at inflation.
Property Tax		
Project Hard Costs	5,950,432	
Assessed Value (%)	1.68%	Machinery and equipment is not assessed.
Assessed Value ($)	100,000	
Annual Decline in Assessed Value	1.00%	
Assessed Value Minimum %	0.00%	
Property Tax Rate	3.50%	
Revenue Assumptions		
Levelized Energy Price ($/MWh)	127.90	
% of Levelized Rate Escalating @ Infl.	0.0%	
Other Revenues (increases with inflation)	0	
Return Metrics		
20-year Equity IRR		
Pre-Tax	20.81%	
After-Tax	17.50%	
Average Debt Service Coverage Ratio	#DIV/0!	
Minimum Debt Service Coverage Ratio	#DIV/0!	
Minimum Annual After-Tax Equity Net Benefits	842,564	Includes tax benefit/(liability)
Tax Rates:		
Federal Income Tax	15.0%	
State/Provincial Income Tax		
Tax Rate 1		
Applicable Income (less than X)	400,000	
Tax Rate 1	4.5%	
Tax Rate 2 (for income greater than X)	16.0%	
Major Maintenance		
Replacement Occurs Every X Years	11	
Cost of Replacement (Year 0 Dollars)	356,720	
Tax Depreciation Classification of Spending	50% Double Declining	
Book Depreciation Classification of Spending	30-yr SL	
Residual Value		
Residual Value (Net Book Value)	421	
Book Depreciation Classifications		
20-yr SL	100.0%	
30-yr SL	0.0%	
37-yr SL	0.0%	
40-yr SL	0.0%	
Non-Depreciable	0.00%	
Total	100.0%	
Amount Allocated		
20-yr SL	6,811,870	
30-yr SL	0	
37-yr SL	0	
40-yr SL	0	
Non-Depreciable	0	
Total	6,811,870	

Operating Year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Generation (MWh)		12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636
		0.0																			
Partial Income Statement																					
Revenue																					
Standard Offer Price ($/MWh)																					
Fixed Price Component	100%	127.90	127.90	127.90	127.90	127.90	127.90	127.90	127.90	127.90	127.90	127.90	127.90	127.90	127.90	127.90	127.90	127.90	127.90	127.90	127.90
Escalating Price Component	0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Standard Offer Price		127.90	127.90	127.90	127.90	127.90	127.90	127.90	127.90	127.90	127.90	127.90	127.90	127.90	127.90	127.90	127.90	127.90	127.90	127.90	127.90
Revenues From Energy Production		1,616,183	1,616,183	1,616,183	1,616,183	1,616,183	1,616,183	1,616,183	1,616,183	1,616,183	1,616,183	1,616,183	1,616,183	1,616,183	1,616,183	1,616,183	1,616,183	1,616,183	1,616,183	1,616,183	1,616,183
Other Revenues		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Interest Revenue		5,409	6,162	6,915	7,668	8,421	9,174	9,928	10,681	11,434	12,187	12,940	5,409	5,409	5,409	5,409	9,506	9,506	9,506	9,506	9,506
Total Revenue		1,621,592	1,622,345	1,623,098	1,623,851	1,624,604	1,625,357	1,626,110	1,626,863	1,627,616	1,628,369	1,629,123	1,621,592	1,621,592	1,621,592	1,621,592	1,625,689	1,625,689	1,625,689	1,625,689	1,625,689
Expenses																					
Fuel Cost		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
O&M		(93,667)	(95,465)	(97,298)	(99,166)	(101,070)	(103,011)	(104,988)	(107,004)	(109,059)	(111,153)	(113,287)	(115,462)	(117,679)	(119,938)	(122,241)	(124,588)	(126,980)	(129,418)	(131,903)	(134,435)
Site Maintenance		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
G&A		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Insurance		(29,752)	(30,323)	(30,906)	(31,499)	(32,104)	(32,720)	(33,348)	(33,989)	(34,641)	(35,306)	(35,984)	(36,675)	(37,379)	(38,097)	(38,828)	(39,574)	(40,334)	(41,108)	(41,897)	(42,702)
Land Lease		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Property tax		(3,500)	(3,465)	(3,430)	(3,395)	(3,360)	(3,325)	(3,290)	(3,255)	(3,220)	(3,185)	(3,150)	(3,115)	(3,080)	(3,045)	(3,010)	(2,975)	(2,940)	(2,905)	(2,870)	(2,835)
Total		(126,919)	(129,253)	(131,633)	(134,060)	(136,534)	(139,056)	(141,627)	(144,248)	(146,920)	(149,644)	(152,421)	(155,252)	(158,138)	(161,080)	(164,079)	(167,137)	(170,254)	(173,431)	(176,670)	(179,972)
EBITDA		1,494,673	1,493,092	1,491,465	1,489,791	1,488,070	1,486,302	1,484,484	1,482,616	1,480,697	1,478,726	1,476,702	1,466,340	1,463,454	1,460,512	1,457,513	1,458,552	1,455,435	1,452,258	1,449,019	1,445,717
Equity Return																					
Cash																					
EBITDA		1,494,673	1,493,092	1,491,465	1,489,791	1,488,070	1,486,302	1,484,484	1,482,616	1,480,697	1,478,726	1,476,702	1,466,340	1,463,454	1,460,512	1,457,513	1,458,552	1,455,435	1,452,258	1,449,019	1,445,717
Plus: Release of Debt Service Reserve		0	0	0	0	0	0	0	0	0	0	0	0	0	0	(213,379)	0	0	0	0	0
Plus: Release of WC & Up-Front Maint Reserves		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	495,106
Plus: Release of Major Maintenance Reserves		0	0	0	0	0	0	0	0	0	0	431,441	0	0	0	0	0	0	0	0	0
Plus: Residual Value		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	421
Less: Major Maintenance Spending		0	0	0	0	0	0	0	0	0	0	(431,441)	0	0	0	0	0	0	0	0	0
Less: Major Maintenance Reserve Funding		(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	0	0	0	0	0	0	0	0	0
Less: Principal		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Less: Interest		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Cash		1,455,451	1,453,870	1,452,243	1,450,569	1,448,848	1,447,080	1,445,262	1,443,394	1,441,475	1,439,504	1,437,480	1,466,340	1,463,454	1,460,512	1,244,134	1,458,552	1,455,435	1,452,258	1,449,019	1,941,243
Equity Investment	(6,811,870)																				
Total Pre-Tax Equity Return	(6,811,870)	1,455,451	1,453,870	1,452,243	1,450,569	1,448,848	1,447,080	1,445,262	1,443,394	1,441,475	1,439,504	1,437,480	1,466,340	1,463,454	1,460,512	1,244,134	1,458,552	1,455,435	1,452,258	1,449,019	1,941,243
Pre-Tax Internal Rate of Return 20.81%																					
Taxable Income Benefit/(Liability)																					
EBITDA		1,494,673	1,493,092	1,491,465	1,489,791	1,488,070	1,486,302	1,484,484	1,482,616	1,480,697	1,478,726	1,476,702	1,466,340	1,463,454	1,460,512	1,457,513	1,458,552	1,455,435	1,452,258	1,449,019	1,445,717
Less: Interest		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Less: Tax Depreciation		(1,413,228)	(2,119,842)	(1,059,921)	(529,960)	(264,980)	(132,490)	(66,245)	(33,123)	(16,561)	(8,281)	(219,861)	(109,930)	(54,965)	(27,483)	(13,741)	(6,871)	(3,435)	(1,718)	(859)	(429)
Taxable Income/(Loss)		81,445	(626,750)	431,544	959,831	1,223,090	1,353,811	1,418,239	1,449,493	1,464,135	1,470,445	1,256,841	1,356,410	1,408,489	1,433,029	1,443,771	1,451,681	1,452,000	1,450,540	1,448,160	1,445,287
Tax Benefit/(Liability)																					
State/Provincial 1		(3,665)	18,000	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)
State/Provincial 2		0	36,280	(5,047)	(89,573)	(131,694)	(152,610)	(162,918)	(167,919)	(170,262)	(171,271)	(137,095)	(153,026)	(161,358)	(165,285)	(167,003)	(168,269)	(168,320)	(168,086)	(167,706)	(167,246)
Federal		(12,217)	94,012	(64,732)	(143,975)	(183,464)	(203,072)	(212,736)	(217,424)	(219,620)	(220,567)	(188,526)	(203,461)	(211,273)	(214,954)	(216,566)	(217,752)	(217,800)	(217,581)	(217,224)	(216,793)
Total Tax Benefit/(Liability)		(15,882)	148,292	(87,779)	(251,548)	(333,158)	(373,682)	(393,654)	(403,343)	(407,882)	(409,838)	(343,621)	(374,487)	(390,632)	(398,239)	(401,569)	(404,021)	(404,120)	(403,667)	(402,930)	(402,039)
Equity Investment	(6,811,870)																				
Total After-Tax Equity Return	(6,811,870)	1,439,569	1,602,162	1,364,464	1,199,022	1,115,691	1,073,398	1,051,608	1,040,051	1,033,593	1,029,666	1,093,859	1,091,853	1,072,822	1,062,273	842,564	1,054,531	1,051,315	1,048,590	1,046,089	1,539,204

Operating Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Debt																						
Loan Balance		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Interest	9.50%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Principal		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual payment			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Debt Service Coverage Ratio																						
EBITDA			1,494,673	1,493,092	1,491,465	1,489,791	1,488,070	1,486,302	1,484,484	1,482,616	1,480,697	1,478,726	1,476,702	1,466,340	1,463,454	1,460,512	1,457,513	0	0	0	0	0
Less: Major Maintenance Reserve Funding			(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	0	0	0	0	0	0	0	0	0
Cash Available for Debt Service			1,455,451	1,453,870	1,452,243	1,450,569	1,448,848	1,447,080	1,445,262	1,443,394	1,441,475	1,439,504	1,437,480	1,466,340	1,463,454	1,460,512	1,457,513	0	0	0	0	0
P&I			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Debt Service Coverage Ratio			#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!					
Average		#DIV/0!																				
Minimum		#DIV/0!																				
Reserve Accounts																						
Reserves Funded As Part of Capital Cost																						
Beginning Balance		0	281,727	281,727	281,727	281,727	281,727	281,727	281,727	281,727	281,727	281,727	281,727	281,727	281,727	281,727	281,727	495,106	495,106	495,106	495,106	495,106
Up-Front Maintenance Reserve		21,353	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(21,353)
Working Capital		473,752	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(473,752)
Debt Service Reserve		(213,379)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	213,379	0	0	0	0	0
Total		281,727	281,727	281,727	281,727	281,727	281,727	281,727	281,727	281,727	281,727	281,727	281,727	281,727	281,727	281,727	495,106	495,106	495,106	495,106	495,106	0
Major Maintenance Reserve Funded Through Operations																						
Beginning Balance			0	39,222	78,444	117,666	156,888	196,110	235,332	274,553	313,775	352,997	392,219	0	0	0	0	0	0	0	0	0
Funding			39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	0	0	0	0	0	0	0	0	0
Release of Funds			0	0	0	0	0	0	0	0	0	0	(431,441)	0	0	0	0	0	0	0	0	0
Ending Balance			39,222	78,444	117,666	156,888	196,110	235,332	274,553	313,775	352,997	392,219	0	0	0	0	0	0	0	0	0	0
Major Maintenance Costs																						
Occurrence 1		431,441	0	0	0	0	0	0	0	0	0	0	431,441	0	0	0	0	0	0	0	0	0
Occurrence 2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major Maintenance Funding																						
Occurrence 1		431,441	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	0	0	0	0	0	0	0	0	0
Occurrence 2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Interest on Reserves			5,409	6,162	6,915	7,668	8,421	9,174	9,928	10,681	11,434	12,187	12,940	5,409	5,409	5,409	5,409	9,506	9,506	9,506	9,506	9,506
Property Tax Calculation																						
Original Assessed Value			100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
Annual Decline in Assessed Value			100.0%	99.0%	98.0%	97.0%	96.0%	95.0%	94.0%	93.0%	92.0%	91.0%	90.0%	89.0%	88.0%	87.0%	86.0%	85.0%	84.0%	83.0%	82.0%	81.0%
Annual Assessed Value			100,000	99,000	98,000	97,000	96,000	95,000	94,000	93,000	92,000	91,000	90,000	89,000	88,000	87,000	86,000	85,000	84,000	83,000	82,000	81,000
Property Tax Rate			3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
Property Tax Expense			3,500	3,465	3,430	3,395	3,360	3,325	3,290	3,255	3,220	3,185	3,150	3,115	3,080	3,045	3,010	2,975	2,940	2,905	2,870	2,835

Operating Year		**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
Calendar Year		**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
Tax Depreciation																						
Calendar Year Depreciation per Classification (%)																						
30% Double Declining			30.00%	21.00%	14.70%	10.29%	7.20%	5.04%	3.53%	2.47%	1.73%	1.21%	0.85%	0.59%	0.42%	0.29%	0.20%	0.14%	0.10%	0.07%	0.05%	0.03%
50% Double Declining			50.00%	25.00%	12.50%	6.25%	3.13%	1.56%	0.78%	0.39%	0.20%	0.10%	0.05%	0.02%	0.01%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
20-yr SL			2.50%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
40-yr SL			1.25%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Other			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Calendar Year Depreciation per Classification ($)																						
Year One Capital Cost Allocation	1,413,228		1,413,228	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30% Double Declining	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50% Double Declining	4,239,683		0	2,119,842	1,059,921	529,960	264,980	132,490	66,245	33,123	16,561	8,281	4,140	2,070	1,035	518	259	129	65	32	16	8
20-yr SL	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40-yr SL	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major Maintenance			0	0	0	0	0	0	0	0	0	0	215,721	107,860	53,930	26,965	13,483	6,741	3,371	1,685	843	421
Annual Depreciation	6,083,923		1,413,228	2,119,842	1,059,921	529,960	264,980	132,490	66,245	33,123	16,561	8,281	219,861	109,930	54,965	27,483	13,741	6,871	3,435	1,718	859	429
Major Maintenance																						
Timing of Spending																						
Occurrence 1			0	0	0	0	0	0	0	0	0	0	1	2	3	4	5	6	7	8	9	10
Occurrence 2			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Depreciation Classification	50% Double Declining																					
Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Depreciation Schedule		0.00%	50.00%	25.00%	12.50%	6.25%	3.13%	1.56%	0.78%	0.39%	0.20%	0.10%	0.05%	0.02%	0.01%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Depreciation Expense																						
	Expense	Depreciation Amount																				
Occurrence 1	431,441	431,020	0	0	0	0	0	0	0	0	0	0	215,721	107,860	53,930	26,965	13,483	6,741	3,371	1,685	843	421
Occurrence 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Operating Year		**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
Calendar Year		**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
Tax Depreciation																						
Book Depreciation																						
Calendar Year Depreciation per Classification (%)																						
20-yr SL			5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
30-yr SL			3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%
37-yr SL			2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%
40-yr SL			2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Calendar Year Depreciation per Classification ($)																						
20-yr SL	6,811,870		340,594	340,594	340,594	340,594	340,594	340,594	340,594	340,594	340,594	340,594	340,594	340,594	340,594	340,594	340,594	340,594	340,594	340,594	340,594	340,594
30-yr SL	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37-yr SL	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40-yr SL	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major Maintenance			0	0	0	0	0	0	0	0	0	0	215,721	107,860	53,930	26,965	13,483	6,741	3,371	1,685	843	421
Annual Depreciation	7,242,890		340,594	340,594	340,594	340,594	340,594	340,594	340,594	340,594	340,594	340,594	556,314	448,454	394,524	367,559	354,076	347,335	343,964	342,279	341,436	341,015
Major Maintenance																						
Timing of Spending																						
Occurrence 1			0	0	0	0	0	0	0	0	0	0	1	2	3	4	5	6	7	8	9	10
Occurrence 2			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Depreciation Classification	30-yr SL																					
Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Depreciation Schedule		0.00%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%
Depreciation Expense																						
	Expense	Depreciation Amount																				
Occurrence 1	431,441	431,020	0	0	0	0	0	0	0	0	0	0	215,721	107,860	53,930	26,965	13,483	6,741	3,371	1,685	843	421
Occurrence 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Net Book Value																						
Beginning Balance			0	6,471,277	6,130,683	5,790,090	5,449,496	5,108,903	4,768,309	4,427,716	4,087,122	3,746,529	3,405,935	3,281,062	2,832,608	2,438,085	2,070,526	1,716,450	1,369,115	1,025,151	682,872	341,436
Original Book Value			6,811,870	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Plus: Major Maintenance			0	0	0	0	0	0	0	0	0	0	431,441	0	0	0	0	0	0	0	0	0
Less: Depreciation			(340,594)	(340,594)	(340,594)	(340,594)	(340,594)	(340,594)	(340,594)	(340,594)	(340,594)	(340,594)	(556,314)	(448,454)	(394,524)	(367,559)	(354,076)	(347,335)	(343,964)	(342,279)	(341,436)	(341,015)
Net Book Value			6,471,277	6,130,683	5,790,090	5,449,496	5,108,903	4,768,309	4,427,716	4,087,122	3,746,529	3,405,935	3,281,062	2,832,608	2,438,085	2,070,526	1,716,450	1,369,115	1,025,151	682,872	341,436	421

Biomass CHP Cost Scenarios

Synapse U-6 Capital Structure

Scenarios in $2012

Component	Value for Steam-Only Scenario	Gross Value for CHP Scenario	Net Value for CHP Scenario
Project development	$42,134	$280,280	$238,146
Boiler installed cost ($)	$1,685,370	$3,057,600	$1,372,230
Turbine installed cost ($)	$0	$2,894,528	$2,894,528
Emission controls	$252,806	$305,760	$52,954
Condenser/Cooling Tower	$0	$1,630,720	$1,630,720
Equipment and Installation ($)	$1,938,176	$7,888,608	$5,950,432
Interconnection ($)	$0	$199,000	$199,000
Maintenance reserve ($)	$65,279	$86,632	$21,353
Working capital reserve ($	$560,865	$1,034,617	$473,752
Debt service reserve ($	$213,379	$0	-$213,379
Debt Closing Costs & Fees	$109,584	$0	-$109,584
Equity Closing Costs & Fees	$48,718	$392,188	$343,470
Interest During Constructior	$91,320	$0	-$91,320
Routine Maintenance ($/yr)	$130,557	$173,264	$42,707
Labour ($)	$305,760	$356,720	$50,960
General & Admin.	$0	$0	$0
Insurance	$9,691	$39,443	$29,752
Property taxes	$0	$3,567	
Year-10 Turbine overhaul ($)	$0	$152,880	$152,880
Year-10 Boiler overhaul ($)	0	203,840	203,840
Annual Fuel Use (mmBtu/yr)	156,366	346,239	189,873
Annual Fuel Cost ($/yr)	$675,721	$1,496,240	$820,519
Plant capacity factor (%) - extract	60%	60%	60%
Plant capacity factor (%) - full condensing		25%	25%
NPV of new boiler($2M) in yr 10	$1,685,370		
Steam Load (mmBtu/hr)	23.8	22	22
Boiler size (lb/hr)	20,000	30,000	
Boiler rating (psi)	75-100	600	
Turbine type	N/A	Condensing	
Turbine size (MW)	N/A	2.05	
Total Project Costs ($)	$3,069,455	$9,881,325	$6,811,870
Total Project Costs ($/kW)		$4,820	$3,323

Actual Loan Value	$1,841,673	$0
Actual Equity Amount	$1,227,782	$9,881,325

Calculation of fuel costs:	extractior	Condensing
turbine size (kW):	1550	2050
Boiler efficiency (%)	80%	80%
Adjusted turbine size (kW):		
Adjusted KWhs:		
Fuel Use (Btu):		
Fuel Use (mmBtu):	244,404	101,835

Calculation of heat input:
5,256 hrs
125,093 process heat (mmBtu)
156,366 heat input (mmBtu)

Efficiency:	49%	15%
Steam energy	125092.8	
Electric Energy	43115	15318
Fuel Use	346239	101835

Nova Scotia COMFIT Model **Biomass CHP (condensing turbine; new boiler in steam-only scenario in year 10)** **Synapse U-6 Installed Cost**

Assumptions		Notes:
General Inflation Factor (revenue and expenses)	1.92%	From NSPI 2009 IRP Update
Capital Costs (Uses of Funds)		
Development	238,146	Net of steam-only scenario
Equipment & Installation	11,776,951	Net of steam-only scenario
Interconnection	199,000	Net of steam-only scenario
Reserves		
Up-Front Maintenance	21,353	Net of steam-only scenario
Working Capital	488,319	Net of steam-only scenario
Debt Service Reserve	1,054,166	Net of steam-only scenario
Financing		
Debt Closing Costs & Fees	541,384	Net of steam-only scenario
Equity Closing Costs & Fees	240,636	Net of steam-only scenario
Interest During Construction	451,154	Net of steam-only scenario
Total Project Cost	15,011,109	Net of steam-only scenario
Total Project Cost ($/kW)	7,322	Net of steam-only scenario
Initial Reserve Account Sizing		
Upfront Maintenance (months of Year 1 O&M)	6	
Working Capital (months of Year 1 OPEX)	6	
Debt Service Reserve (months of P&I)	6	
Capital Structure (Sources of Funds)		
Amount ($)		
Grants (net value)	0	
Debt	9,006,665	
Equity	6,004,443	
Total Sources of Funds	15,011,109	
Amount (%)		
Grants	0.0%	
Debt	60.0%	
Equity	40.0%	
Total Sources of Funds	100.0%	
Grants:		
State and Federal Incentives	0	
State/Provincial Tax 1	0	
State/Provincial Tax 2	0	
Federal tax	0	
Net Value of Grants	0	
Debt Terms		
Amount	9,006,665	(Based on target debt/equity ratio)
Loan Life	15	
Interest Rate	9.50%	
Up-Front Fee (%)	1.00%	
Up-Front Fee ($)	90,067	
Closing Costs	450,333	(5% of loan value)
Tax Depreciation Allocation		
% of Total Project Cost		
30% Double Declining	0.0%	
50% Double Declining	74.5%	95% of equipment and installation
20-yr SL	0.0%	
40-yr SL	0.0%	
Other	0.0%	
Non-Depreciable	25.47%	Interconnection, development, reserves and f
Total	100.0%	
Amount Allocated		
30% Double Declining	0	
50% Double Declining	11,188,104	
20-yr SL	0	
40-yr SL	0	
Other	0	
Non-Depreciable	3,823,005	
Total	15,011,109	
Year One Depreciation		
Year One Percent	25.0%	(Based on the "half year rule")
Year One Amount	2,797,026	

Assumptions:		Notes:
Operating Inputs		
Net Generator Capacity (MW)	2.05	1.55 MW at full extraction, 2.05 MW at full condensing
Energy Production:		
Net Capacity Factor		60% of time at full extraction, another 25% at full condensing
Net Output in MWhs	12,636	
Annual Operating Expenses		
Annual Fuel Cost		
Fuel Required per Year (mmBtu)	0	Net of steam-only scenario
Initial year Fuel Price ($/mmBtu)	$0.00	
Annual O&M (expensed)	93,667	Escalates at inflation.
Site Maintenance	0	Escalates at inflation.
General & Administrative	0	Escalates at inflation.
Insurance	58,885	Escalates at inflation.
Land Lease	0	Escalates at inflation.
Other	0	Escalates at inflation.
Property Tax		
Project Hard Costs	11,776,951	
Assessed Value (%)	0.85%	Machinery and equipment is not assessed.
Assessed Value ($)	100,000	
Annual Decline in Assessed Value	1.00%	
Assessed Value Minimum %	0.00%	
Property Tax Rate	3.50%	
Revenue Assumptions		
Levelized Energy Price ($/MWh)	165.10	
% of Levelized Rate Escalating @ Infl.	0.0%	
Other Revenues (increases with inflation)	0	
Return Metrics		
20-year Equity IRR		
Pre-Tax	13.45%	
After-Tax	13.00%	
Average Debt Service Coverage Ratio	1.66	
Minimum Debt Service Coverage Ratio	1.65	
Minimum Annual After-Tax Equity Net Benefits	286,683	Includes tax benefit/(liability)
Tax Rates:		
Federal Income Tax	15.0%	
State/Provincial Income Tax		
Tax Rate 1		
Applicable Income (less than X)	400,000	
Tax Rate 1	4.5%	
Tax Rate 2 (for income greater than X)	16.0%	
Major Maintenance		
Replacement Occurs Every X Years	11	
Cost of Replacement (Year 0 Dollars)	356,720	
Tax Depreciation Classification of Spending	50% Double Declining	
Book Depreciation Classification of Spending	30-yr SL	
Residual Value		
Residual Value (Net Book Value)	421	
Book Depreciation Classifications		
20-yr SL	100.0%	
30-yr SL	0.0%	
37-yr SL	0.0%	
40-yr SL	0.0%	
Non-Depreciable	0.00%	
Total	100.0%	
Amount Allocated		
20-yr SL	15,011,109	
30-yr SL	0	
37-yr SL	0	
40-yr SL	0	
Non-Depreciable	0	
Total	15,011,109	

Operating Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Generation (MWh)			12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636
Partial Income Statement																						
Revenue																						
Standard Offer Price ($/MWh)																						
Fixed Price Component		100%	165.10	165.10	165.10	165.10	165.10	165.10	165.10	165.10	165.10	165.10	165.10	165.10	165.10	165.10	165.10	165.10	165.10	165.10	165.10	165.10
Escalating Price Component		0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Standard Offer Price			165.10	165.10	165.10	165.10	165.10	165.10	165.10	165.10	165.10	165.10	165.10	165.10	165.10	165.10	165.10	165.10	165.10	165.10	165.10	165.10
Revenues From Energy Production			2,086,253	2,086,253	2,086,253	2,086,253	2,086,253	2,086,253	2,086,253	2,086,253	2,086,253	2,086,253	2,086,253	2,086,253	2,086,253	2,086,253	2,086,253	2,086,253	2,086,253	2,086,253	2,086,253	2,086,253
Other Revenues			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Interest Revenue			30,026	30,779	31,532	32,285	33,038	33,791	34,544	35,297	36,050	36,803	37,556	30,026	30,026	30,026	30,026	9,786	9,786	9,786	9,786	9,786
Total Revenue			2,116,279	2,117,032	2,117,785	2,118,538	2,119,291	2,120,044	2,120,797	2,121,550	2,122,303	2,123,056	2,123,809	2,116,279	2,116,279	2,116,279	2,116,279	2,096,039	2,096,039	2,096,039	2,096,039	2,096,039
Expenses																						
Fuel Cost			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
O&M			(93,667)	(95,465)	(97,298)	(99,166)	(101,070)	(103,011)	(104,988)	(107,004)	(109,059)	(111,153)	(113,287)	(115,462)	(117,679)	(119,938)	(122,241)	(124,588)	(126,980)	(129,418)	(131,903)	(134,435)
Site Maintenance			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
G&A			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Insurance			(58,885)	(60,015)	(61,168)	(62,342)	(63,539)	(64,759)	(66,002)	(67,270)	(68,561)	(69,878)	(71,219)	(72,587)	(73,980)	(75,401)	(76,848)	(78,324)	(79,828)	(81,360)	(82,922)	(84,515)
Land Lease			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Property tax			(3,500)	(3,465)	(3,430)	(3,395)	(3,360)	(3,325)	(3,290)	(3,255)	(3,220)	(3,185)	(3,150)	(3,115)	(3,080)	(3,045)	(3,010)	(2,975)	(2,940)	(2,905)	(2,870)	(2,835)
Total			(156,051)	(158,945)	(161,896)	(164,903)	(167,969)	(171,094)	(174,281)	(177,529)	(180,840)	(184,215)	(187,656)	(191,163)	(194,739)	(198,384)	(202,099)	(205,887)	(209,748)	(213,683)	(217,695)	(221,785)
EBITDA			1,960,228	1,958,087	1,955,889	1,953,635	1,951,322	1,948,950	1,946,517	1,944,022	1,941,464	1,938,841	1,936,154	1,925,115	1,921,540	1,917,895	1,914,180	1,890,152	1,886,291	1,882,355	1,878,344	1,874,254
Equity Return																						
Cash																						
EBITDA			1,960,228	1,958,087	1,955,889	1,953,635	1,951,322	1,948,950	1,946,517	1,944,022	1,941,464	1,938,841	1,936,154	1,925,115	1,921,540	1,917,895	1,914,180	1,890,152	1,886,291	1,882,355	1,878,344	1,874,254
Plus: Release of Debt Service Reserve			0	0	0	0	0	0	0	0	0	0	0	0	0	0	1,054,166	0	0	0	0	0
Plus: Release of WC & Up-Front Maint Reserves			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	509,672
Plus: Release of Major Maintenance Reserves			0	0	0	0	0	0	0	0	0	0	431,441	0	0	0	0	0	0	0	0	0
Plus: Residual Value			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	421
Less: Major Maintenance Spending			0	0	0	0	0	0	0	0	0	0	(431,441)	0	0	0	0	0	0	0	0	0
Less: Major Maintenance Reserve Funding			(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	0	0	0	0	0	0	0	0	0
Less: Principal			(294,911)	(322,928)	(353,606)	(387,199)	(423,983)	(464,261)	(508,366)	(556,661)	(609,543)	(667,450)	(730,858)	(800,289)	(876,317)	(959,567)	(1,050,726)	(0)	(0)	(0)	(0)	(0)
Less: Interest			(855,633)	(827,617)	(796,938)	(763,346)	(726,562)	(686,284)	(642,179)	(593,884)	(541,001)	(483,095)	(419,687)	(350,255)	(274,228)	(190,978)	(99,819)	0	0	0	0	0
Total Cash			770,461	768,320	766,123	763,868	761,555	759,183	756,750	754,255	751,697	749,075	746,387	774,571	770,995	767,350	1,817,801	1,890,152	1,886,291	1,882,355	1,878,344	2,384,347
Equity Investment		(6,004,443)																				
Total Pre-Tax Equity Return		(6,004,443)	770,461	768,320	766,123	763,868	761,555	759,183	756,750	754,255	751,697	749,075	746,387	774,571	770,995	767,350	1,817,801	1,890,152	1,886,291	1,882,355	1,878,344	2,384,347
Pre-Tax Internal Rate of Return	13.45%																					
Taxable Income Benefit/(Liability)																						
EBITDA			1,960,228	1,958,087	1,955,889	1,953,635	1,951,322	1,948,950	1,946,517	1,944,022	1,941,464	1,938,841	1,936,154	1,925,115	1,921,540	1,917,895	1,914,180	1,890,152	1,886,291	1,882,355	1,878,344	1,874,254
Less: Interest			(855,633)	(827,617)	(796,938)	(763,346)	(726,562)	(686,284)	(642,179)	(593,884)	(541,001)	(483,095)	(419,687)	(350,255)	(274,228)	(190,978)	(99,819)	0	0	0	0	0
Less: Tax Depreciation			########	########	########	########	(524,442)	(262,221)	(131,111)	(65,555)	(32,778)	(16,389)	(223,915)	(111,958)	(55,979)	(27,989)	(13,995)	(6,997)	(3,499)	(1,749)	(875)	(437)
Taxable Income/(Loss)			########	########	(938,818)	141,404	700,318	1,000,445	1,173,227	1,284,582	1,367,685	1,439,358	1,292,552	1,462,903	1,591,333	1,698,928	1,800,366	1,883,155	1,882,793	1,880,606	1,877,469	1,873,817
Tax Benefit/(Liability)																						
State/Provincial 1			18,000	18,000	18,000	(6,363)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)
State/Provincial 2			206,789	426,411	86,211	0	(48,051)	(96,071)	(123,716)	(141,533)	(154,830)	(166,297)	(142,808)	(170,064)	(190,613)	(207,828)	(224,059)	(237,305)	(237,247)	(236,897)	(236,395)	(235,811)
Federal			253,865	459,760	140,823	(21,211)	(105,048)	(150,067)	(175,984)	(192,687)	(205,153)	(215,904)	(193,883)	(219,435)	(238,700)	(254,839)	(270,055)	(282,473)	(282,419)	(282,091)	(281,620)	(281,072)
Total Tax Benefit/(Liability)			478,654	904,171	245,034	(27,574)	(171,099)	(264,138)	(317,700)	(352,220)	(377,982)	(400,201)	(354,691)	(407,500)	(447,313)	(480,668)	(512,113)	(537,778)	(537,666)	(536,988)	(536,015)	(534,883)
Equity Investment		(6,004,443)																				
Total After-Tax Equity Return		(6,004,443)	1,249,115	1,672,491	1,011,157	736,294	590,457	495,045	439,049	402,034	373,715	348,874	391,696	367,071	323,682	286,683	1,305,687	1,352,374	1,348,626	1,345,368	1,342,328	1,849,464

Operating Year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Debt																					
Loan Balance	9,006,665	8,711,754	8,388,826	8,035,219	7,648,020	7,224,038	6,759,777	6,251,411	5,694,750	5,085,207	4,417,757	3,686,899	2,886,609	2,010,293	1,050,726	(0)	(0)	(0)	(0)	(0)	(0)
Interest 9.50%	(8,251,505)	(855,633)	(827,617)	(796,938)	(763,346)	(726,562)	(686,284)	(642,179)	(593,884)	(541,001)	(483,095)	(419,687)	(350,255)	(274,228)	(190,978)	(99,819)	0	0	0	0	0
Principal	(9,006,665)	(294,911)	(322,928)	(353,606)	(387,199)	(423,983)	(464,261)	(508,366)	(556,661)	(609,543)	(667,450)	(730,858)	(800,289)	(876,317)	(959,567)	(1,050,726)	(0)	(0)	(0)	(0)	(0)
Annual payment		(1,150,545)	(1,150,545)	(1,150,545)	(1,150,545)	(1,150,545)	(1,150,545)	(1,150,545)	(1,150,545)	(1,150,545)	(1,150,545)	(1,150,545)	(1,150,545)	(1,150,545)	(1,150,545)	(1,150,545)	0	0	0	0	0
Debt Service Coverage Ratio																					
EBITDA		1,960,228	1,958,087	1,955,889	1,953,635	1,951,322	1,948,950	1,946,517	1,944,022	1,941,464	1,938,841	1,936,154	1,925,115	1,921,540	1,917,895	1,914,180	0	0	0	0	0
Less: Major Maintenance Reserve Funding		(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	0	0	0	0	0	0	0	0	0
Cash Available for Debt Service		1,921,006	1,918,865	1,916,667	1,914,413	1,912,100	1,909,728	1,907,295	1,904,800	1,902,242	1,899,619	1,896,932	1,925,115	1,921,540	1,917,895	1,914,180	0	0	0	0	0
P&I		1,150,545	1,150,545	1,150,545	1,150,545	1,150,545	1,150,545	1,150,545	1,150,545	1,150,545	1,150,545	1,150,545	1,150,545	1,150,545	1,150,545	1,150,545	0	0	0	0	0
Debt Service Coverage Ratio		1.67	1.67	1.67	1.66	1.66	1.66	1.66	1.66	1.65	1.65	1.65	1.67	1.67	1.67	1.66					
Average	1.66																				
Minimum	1.65																				
Reserve Accounts																					
Reserves Funded As Part of Capital Cost																					
Beginning Balance	0	1,563,838	1,563,838	1,563,838	1,563,838	1,563,838	1,563,838	1,563,838	1,563,838	1,563,838	1,563,838	1,563,838	1,563,838	1,563,838	1,563,838	1,563,838	509,672	509,672	509,672	509,672	509,672
Up-Front Maintenance Reserve	21,353	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(21,353)
Working Capital	488,319	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(488,319)
Debt Service Reserve	1,054,166	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(1,054,166)	0	0	0	0	0
Total	1,563,838	1,563,838	1,563,838	1,563,838	1,563,838	1,563,838	1,563,838	1,563,838	1,563,838	1,563,838	1,563,838	1,563,838	1,563,838	1,563,838	1,563,838	509,672	509,672	509,672	509,672	509,672	(0)
Major Maintenance Reserve Funded Through Operations																					
Beginning Balance		0	39,222	78,444	117,666	156,888	196,110	235,332	274,553	313,775	352,997	392,219	0	0	0	0	0	0	0	0	0
Funding		39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	0	0	0	0	0	0	0	0	0
Release of Funds		0	0	0	0	0	0	0	0	0	0	(431,441)	0	0	0	0	0	0	0	0	0
Ending Balance		39,222	78,444	117,666	156,888	196,110	235,332	274,553	313,775	352,997	392,219	0	0	0	0	0	0	0	0	0	0
Major Maintenance Costs																					
Occurrence 1	431,441	0	0	0	0	0	0	0	0	0	0	431,441	0	0	0	0	0	0	0	0	0
Occurrence 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major Maintenance Funding																					
Occurrence 1	431,441	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	0	0	0	0	0	0	0	0	0
Occurrence 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Interest on Reserves		30,026	30,779	31,532	32,285	33,038	33,791	34,544	35,297	36,050	36,803	37,556	30,026	30,026	30,026	30,026	9,786	9,786	9,786	9,786	9,786
Property Tax Calculation																					
Original Assessed Value		100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
Annual Decline in Assessed Value		100.0%	99.0%	98.0%	97.0%	96.0%	95.0%	94.0%	93.0%	92.0%	91.0%	90.0%	89.0%	88.0%	87.0%	86.0%	85.0%	84.0%	83.0%	82.0%	81.0%
Annual Assessed Value		100,000	99,000	98,000	97,000	96,000	95,000	94,000	93,000	92,000	91,000	90,000	89,000	88,000	87,000	86,000	85,000	84,000	83,000	82,000	81,000
Property Tax Rate		3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
Property Tax Expense		3,500	3,465	3,430	3,395	3,360	3,325	3,290	3,255	3,220	3,185	3,150	3,115	3,080	3,045	3,010	2,975	2,940	2,905	2,870	2,835

Nova Scotia COMFIT Model

Depreciation worksheet: Top

Operating Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Calendar Year		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Tax Depreciation																						
Calendar Year Depreciation per Classification (%)																						
30% Double Declining			30.00%	21.00%	14.70%	10.29%	7.20%	5.04%	3.53%	2.47%	1.73%	1.21%	0.85%	0.59%	0.42%	0.29%	0.20%	0.14%	0.10%	0.07%	0.05%	0.03%
50% Double Declining			50.00%	25.00%	12.50%	6.25%	3.13%	1.56%	0.78%	0.39%	0.20%	0.10%	0.05%	0.02%	0.01%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
20-yr SL			2.50%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
40-yr SL			1.25%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Other			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Calendar Year Depreciation per Classification ($)																						
Year One Capital Cost Allocation	2,797,026		2,797,026	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30% Double Declining	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50% Double Declining	8,391,078		0	4,195,539	2,097,769	1,048,885	524,442	262,221	131,111	65,555	32,778	16,389	8,194	4,097	2,049	1,024	512	256	128	64	32	16
20-yr SL	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40-yr SL	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major Maintenance			0	0	0	0	0	0	0	0	0	0	215,721	107,860	53,930	26,965	13,483	6,741	3,371	1,685	843	421
Annual Depreciation	11,619,108		2,797,026	4,195,539	2,097,769	1,048,885	524,442	262,221	131,111	65,555	32,778	16,389	223,915	111,958	55,979	27,989	13,995	6,997	3,499	1,749	875	437

Major Maintenance

Timing of Spending	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Occurrence 1	0	0	0	0	0	0	0	0	0	0	1	2	3	4	5	6	7	8	9	10
Occurrence 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Depreciation Classification	50% Double Declining																					
Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Depreciation Schedule		0.00%	50.00%	25.00%	12.50%	6.25%	3.13%	1.56%	0.78%	0.39%	0.20%	0.10%	0.05%	0.02%	0.01%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%

Depreciation Expense

	Expense	Depreciation Amount	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Occurrence 1	431,441	431,020	0	0	0	0	0	0	0	0	0	0	215,721	107,860	53,930	26,965	13,483	6,741	3,371	1,685	843	421
Occurrence 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Nova Scotia COMFIT Model **Depreciation worksheet: Bottom**

Operating Year		**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
Calendar Year		**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
Book Depreciation																						
Calendar Year Depreciation per Classification (%)																						
20-yr SL			5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
30-yr SL			3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%
37-yr SL			2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%
40-yr SL			2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Calendar Year Depreciation per Classification ($)																						
20-yr SL	15,011,109		750,555	750,555	750,555	750,555	750,555	750,555	750,555	750,555	750,555	750,555	750,555	750,555	750,555	750,555	750,555	750,555	750,555	750,555	750,555	750,555
30-yr SL	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37-yr SL	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40-yr SL	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major Maintenance			0	0	0	0	0	0	0	0	0	0	215,721	107,860	53,930	26,965	13,483	6,741	3,371	1,685	843	421
Annual Depreciation	15,442,128		750,555	750,555	750,555	750,555	750,555	750,555	750,555	750,555	750,555	750,555	966,276	858,416	804,486	777,521	764,038	757,297	753,926	752,241	751,398	750,977
Major Maintenance																						
Timing of Spending																						
Occurrence 1			0	0	0	0	0	0	0	0	0	0	1	2	3	4	5	6	7	8	9	10
Occurrence 2			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Depreciation Classification	30-yr SL																					
Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Depreciation Schedule		0.00%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%
Depreciation Expense																						
	Expense	Depreciation Amount																				
Occurrence 1	431,441	431,020	0	0	0	0	0	0	0	0	0	0	215,721	107,860	53,930	26,965	13,483	6,741	3,371	1,685	843	421
Occurrence 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Net Book Value																						
Beginning Balance			0	14,260,553	13,509,998	12,759,442	12,008,887	11,258,331	10,507,776	9,757,221	9,006,665	8,256,110	7,505,554	6,970,719	6,112,304	5,307,818	4,530,298	3,766,260	3,008,963	2,255,037	1,502,796	751,398
Original Book Value			15,011,109	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Plus: Major Maintenance			0	0	0	0	0	0	0	0	0	0	431,441	0	0	0	0	0	0	0	0	0
Less: Depreciation			(750,555)	(750,555)	(750,555)	(750,555)	(750,555)	(750,555)	(750,555)	(750,555)	(750,555)	(750,555)	(966,276)	(858,416)	(804,486)	(777,521)	(764,038)	(757,297)	(753,926)	(752,241)	(751,398)	(750,977)
Net Book Value			14,260,553	13,509,998	12,759,442	12,008,887	11,258,331	10,507,776	9,757,221	9,006,665	8,256,110	7,505,554	6,970,719	6,112,304	5,307,818	4,530,298	3,766,260	3,008,963	2,255,037	1,502,796	751,398	421

Biomass CHP Cost Scenarios

Synapse U-6 Installed Cost

Scenarios in $2012

Component	Value for Steam-Only Scenario	Gross Value for CHP Scenario	Net Value for CHP Scenario
Project development	$42,134	$280,280	$238,146
Boiler installed cost ($)	$1,685,370	$3,057,600	$1,372,230
Turbine installed cost ($)	$0	$2,894,528	$2,894,528
Emission controls	$252,806	$305,760	$52,954
Condenser/Cooling Towe	$0	$1,630,720	$1,630,720
Equipment and Installation ($	$1,938,176	$13,715,127	$11,776,951
Interconnection ($)	$0	$199,000	$199,000
Maintenance reserve ($)	$65,279	$86,632	$21,353
Working capital reserve ($)	$223,004	$301,063	$78,059
Debt service reserve ($)	$213,498	$1,267,664	$1,054,166
Debt Closing Costs & Fees	$109,646	$651,030	$541,384
Equity Closing Costs & Fees	$48,718	$289,354	$240,636
Interest During Construction	$91,371	$542,525	$451,154
Routine Maintenance ($/yr)	$130,557	$173,264	$42,707
Labour ($)	$305,760	$356,720	$50,960
General & Admin.	$0	$0	$0
Insurance	$9,691	$68,576	$58,885
Property taxes	$0	$3,567	
Year-10 Turbine overhaul ($)	$0	$152,880	$152,880
Year-10 Boiler overhaul ($)	$0	$203,840	$203,840
Annual Fuel Use (mmBtu/yr)	156,366	346,239	189,873
Annual Fuel Cost ($/yr)	$0	$0	$0
Plant capacity factor (%) - extract	60%	60%	60%
Plant capacity factor (%) - full condensing		25%	25%
NPV of new boiler($2M) in yr 10	$1,685,370		
Steam Load (mmBtu/hr)	23.8	22	22
Boiler size (lb/hr)	20,000	30,000	
Boiler rating (psi)	75-100	600	
Turbine type	N/A	Condensing	
Turbine size (MW)	N/A	2.05	
Total Project Costs ($)	$2,731,825	$17,332,675	$14,600,849
Total Project Costs ($/kW)		$8,455	$7,122

Actual Loan Value	$1,639,095	$10,399,605	$8,760,510
Actual Equity Amount	$1,092,730	$6,933,070	

Calculation of fuel costs:	extraction	Condensing
turbine size (kW):	1550	2050
Boiler efficiency (%)	80%	80%
Adjusted turbine size (kW):		
Adjusted KWhs:		
Fuel Use (Btu):		
Fuel Use (mmBtu):	244,404	101,835

Calculation of heat input:	
5,256	hrs
125,093	process heat (mmBtu)
156,366	heat input (mmBtu)

Efficiency:	49%	15%
Steam energy	125092.8	
Electric Energy	43115	15318
Fuel Use	346239	101835

Capacity Factors:	
Steam	60%
Condensing	25%

Nova Scotia COMFIT Model

Synapse U-6 Labour

Assumptions		Notes:
General Inflation Factor (revenue and expenses)	1.92%	From NSPI 2009 IRP Update
Capital Costs (Uses of Funds)		
Development	238,146	Net of steam-only scenario
Equipment & Installation	5,950,432	Net of steam-only scenario
Interconnection	199,000	Net of steam-only scenario
Reserves		
Up-Front Maintenance	21,353	Net of steam-only scenario
Working Capital	536,943	Net of steam-only scenario
Debt Service Reserve	569,646	Net of steam-only scenario
Financing		
Debt Closing Costs & Fees	292,551	Net of steam-only scenario
Equity Closing Costs & Fees	130,050	Net of steam-only scenario
Interest During Construction	243,793	Net of steam-only scenario
Total Project Cost	8,181,914	Net of steam-only scenario
Total Project Cost ($/kW)	3,991	Net of steam-only scenario
Initial Reserve Account Sizing		
Upfront Maintenance (months of Year 1 O&M)	6	
Working Capital (months of Year 1 OPEX)	6	
Debt Service Reserve (months of P&I)	6	
Capital Structure (Sources of Funds)		
Amount ($)		
Grants (net value)	0	
Debt	4,909,148	
Equity	3,272,766	
Total Sources of Funds	8,181,914	
Amount (%)		
Grants	0.0%	
Debt	60.0%	
Equity	40.0%	
Total Sources of Funds	100.0%	
Grants:		
State and Federal Incentives	0	
State/Provincial Tax 1	0	
State/Provincial Tax 2	0	
Federal tax	0	
Net Value of Grants	0	
Debt Terms		
Amount	4,909,148	(Based on target debt/equity ratio)
Loan Life	15	
Interest Rate	9.50%	
Up-Front Fee (%)	1.00%	
Up-Front Fee ($)	49,091	
Closing Costs	245,457	(5% of loan value)
Tax Depreciation Allocation		
% of Total Project Cost		
30% Double Declining	0.0%	
50% Double Declining	69.1%	95% of equipment and installation
20-yr SL	0.0%	
40-yr SL	0.0%	
Other	0.0%	
Non-Depreciable	30.91%	Interconnection, development, reserves and f
Total	100.0%	
Amount Allocated		
30% Double Declining	0	
50% Double Declining	5,652,911	
20-yr SL	0	
40-yr SL	0	
Other	0	
Non-Depreciable	2,529,003	
Total	8,181,914	
Year One Depreciation		
Year One Percent	25.0%	(Based on the "half year rule")
Year One Amount	1,413,228	

Assumptions:		Notes:
Operating Inputs		
Net Generator Capacity (MW)	2.05	1.55 MW at full extraction, 2.05 MW at full condensing
Energy Production:		
Net Capacity Factor		60% of time at full extraction, another 25% at full condensing
Net Output in MWhs	12,636	
Annual Operating Expenses		
Annual Fuel Cost		
Fuel Required per Year (mmBtu)	0	Net of steam-only scenario
Initial year Fuel Price ($/mmBtu)	$0.00	
Annual O&M (expensed)	220,047	Escalates at inflation.
Site Maintenance	0	Escalates at inflation.
General & Administrative	0	Escalates at inflation.
Insurance	29,752	Escalates at inflation.
Land Lease	0	Escalates at inflation.
Other	0	Escalates at inflation.
Property Tax		
Project Hard Costs	5,950,432	
Assessed Value (%)	1.68%	Machinery and equipment is not assessed.
Assessed Value ($)	100,000	
Annual Decline in Assessed Value	1.00%	
Assessed Value Minimum %	0.00%	
Property Tax Rate	3.50%	
Revenue Assumptions		
Levelized Energy Price ($/MWh)	106.43	
% of Levelized Rate Escalating @ Infl.	0.0%	
Other Revenues (increases with inflation)	0	
Return Metrics		
20-year Equity IRR		
Pre-Tax	13.88%	
After-Tax	13.00%	
Average Debt Service Coverage Ratio	1.68	
Minimum Debt Service Coverage Ratio	1.64	
Minimum Annual After-Tax Equity Net Benefits	179,781	Includes tax benefit/(liability)
Tax Rates:		
Federal Income Tax	15.0%	
State/Provincial Income Tax		
Tax Rate 1		
Applicable Income (less than X)	400,000	
Tax Rate 1	4.5%	
Tax Rate 2 (for income greater than X)	16.0%	
Major Maintenance		
Replacement Occurs Every X Years	11	
Cost of Replacement (Year 0 Dollars)	356,720	
Tax Depreciation Classification of Spending	50% Double Declining	
Book Depreciation Classification of Spending	30-yr SL	
Residual Value		
Residual Value (Net Book Value)	421	
Book Depreciation Classifications		
20-yr SL	100.0%	
30-yr SL	0.0%	
37-yr SL	0.0%	
40-yr SL	0.0%	
Non-Depreciable	0.00%	
Total	100.0%	
Amount Allocated		
20-yr SL	8,181,914	
30-yr SL	0	
37-yr SL	0	
40-yr SL	0	
Non-Depreciable	0	
Total	8,181,914	

Operating Year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Generation (MWh)		12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636
		0																			
Partial Income Statement																					
Revenue																					
Standard Offer Price ($/MWh)																					
Fixed Price Component	100%	106.43	106.43	106.43	106.43	106.43	106.43	106.43	106.43	106.43	106.43	106.43	106.43	106.43	106.43	106.43	106.43	106.43	106.43	106.43	106.43
Escalating Price Component	0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Standard Offer Price		106.43	106.43	106.43	106.43	106.43	106.43	106.43	106.43	106.43	106.43	106.43	106.43	106.43	106.43	106.43	106.43	106.43	106.43	106.43	106.43
Revenues From Energy Production		1,344,881	1,344,881	1,344,881	1,344,881	1,344,881	1,344,881	1,344,881	1,344,881	1,344,881	1,344,881	1,344,881	1,344,881	1,344,881	1,344,881	1,344,881	1,344,881	1,344,881	1,344,881	1,344,881	1,344,881
Other Revenues		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Interest Revenue		21,656	22,410	23,163	23,916	24,669	25,422	26,175	26,928	27,681	28,434	29,187	21,656	21,656	21,656	21,656	10,719	10,719	10,719	10,719	10,719
Total Revenue		1,366,538	1,367,291	1,368,044	1,368,797	1,369,550	1,370,303	1,371,056	1,371,809	1,372,562	1,373,315	1,374,069	1,366,538	1,366,538	1,366,538	1,366,538	1,355,601	1,355,601	1,355,601	1,355,601	1,355,601
Expenses																					
Fuel Cost		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
O&M		(220,047)	(224,272)	(228,578)	(232,967)	(237,440)	(241,999)	(246,645)	(251,381)	(256,207)	(261,126)	(266,140)	(271,250)	(276,458)	(281,766)	(287,176)	(292,690)	(298,309)	(304,037)	(309,874)	(315,824)
Site Maintenance		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
G&A		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Insurance		(29,752)	(30,323)	(30,906)	(31,499)	(32,104)	(32,720)	(33,348)	(33,989)	(34,641)	(35,306)	(35,984)	(36,675)	(37,379)	(38,097)	(38,828)	(39,574)	(40,334)	(41,108)	(41,897)	(42,702)
Land Lease		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Property tax		(3,500)	(3,465)	(3,430)	(3,395)	(3,360)	(3,325)	(3,290)	(3,255)	(3,220)	(3,185)	(3,150)	(3,115)	(3,080)	(3,045)	(3,010)	(2,975)	(2,940)	(2,905)	(2,870)	(2,835)
Total		(253,300)	(258,061)	(262,914)	(267,861)	(272,904)	(278,044)	(283,284)	(288,624)	(294,069)	(299,618)	(305,274)	(311,040)	(316,917)	(322,908)	(329,014)	(335,239)	(341,583)	(348,050)	(354,642)	(361,361)
EBITDA		1,113,238	1,109,230	1,105,130	1,100,936	1,096,646	1,092,259	1,087,773	1,083,185	1,078,494	1,073,698	1,068,794	1,055,498	1,049,621	1,043,630	1,037,524	1,020,362	1,014,018	1,007,551	1,000,959	994,240
Equity Return																					
Cash																					
EBITDA		1,113,238	1,109,230	1,105,130	1,100,936	1,096,646	1,092,259	1,087,773	1,083,185	1,078,494	1,073,698	1,068,794	1,055,498	1,049,621	1,043,630	1,037,524	1,020,362	1,014,018	1,007,551	1,000,959	994,240
Plus: Release of Debt Service Reserve		0	0	0	0	0	0	0	0	0	0	0	0	0	0	569,646	0	0	0	0	0
Plus: Release of WC & Up-Front Maint Reserves		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	558,296
Plus: Release of Major Maintenance Reserves		0	0	0	0	0	0	0	0	0	0	431,441	0	0	0	0	0	0	0	0	0
Plus: Residual Value		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	421
Less: Major Maintenance Spending		0	0	0	0	0	0	0	0	0	0	(431,441)	0	0	0	0	0	0	0	0	0
Less: Major Maintenance Reserve Funding		(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	0	0	0	0	0	0	0	0	0
Less: Principal		(160,744)	(176,014)	(192,736)	(211,046)	(231,095)	(253,049)	(277,089)	(303,412)	(332,236)	(363,799)	(398,359)	(436,204)	(477,643)	(523,019)	(572,706)	(0)	(0)	(0)	(0)	(0)
Less: Interest		(466,369)	(451,098)	(434,377)	(416,067)	(396,018)	(374,064)	(350,024)	(323,701)	(294,877)	(263,314)	(228,753)	(190,909)	(149,470)	(104,094)	(54,407)	0	0	0	0	0
Total Cash		446,904	442,896	438,795	434,601	430,312	425,925	421,438	416,850	412,159	407,363	402,459	428,385	422,508	416,517	980,057	1,020,362	1,014,018	1,007,551	1,000,959	1,552,957
Equity Investment	(3,272,766)																				
Total Pre-Tax Equity Return	(3,272,766)	446,904	442,896	438,795	434,601	430,312	425,925	421,438	416,850	412,159	407,363	402,459	428,385	422,508	416,517	980,057	1,020,362	1,014,018	1,007,551	1,000,959	1,552,957
Pre-Tax Internal Rate of Return	13.88%																				
Taxable Income Benefit/(Liability)																					
EBITDA		1,113,238	1,109,230	1,105,130	1,100,936	1,096,646	1,092,259	1,087,773	1,083,185	1,078,494	1,073,698	1,068,794	1,055,498	1,049,621	1,043,630	1,037,524	1,020,362	1,014,018	1,007,551	1,000,959	994,240
Less: Interest		(466,369)	(451,098)	(434,377)	(416,067)	(396,018)	(374,064)	(350,024)	(323,701)	(294,877)	(263,314)	(228,753)	(190,909)	(149,470)	(104,094)	(54,407)	0	0	0	0	0
Less: Tax Depreciation		(1,413,228)	(2,119,842)	(1,059,921)	(529,960)	(264,980)	(132,490)	(66,245)	(33,123)	(16,561)	(8,281)	(219,861)	(109,930)	(54,965)	(27,483)	(13,741)	(6,871)	(3,435)	(1,718)	(859)	(429)
Taxable Income/(Loss)		(766,358)	(1,461,710)	(389,168)	154,908	435,648	585,705	671,503	726,362	767,056	802,103	620,180	754,658	845,185	912,053	969,375	1,013,491	1,010,582	1,005,833	1,000,100	993,810
Tax Benefit/(Liability)																					
State/Provincial 1		18,000	18,000	17,513	(6,971)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)
State/Provincial 2		58,617	169,874	0	0	(5,704)	(29,713)	(43,441)	(52,218)	(58,729)	(64,336)	(35,229)	(56,745)	(71,230)	(81,929)	(91,100)	(98,159)	(97,693)	(96,933)	(96,016)	(95,010)
Federal		114,954	219,256	58,375	(23,236)	(65,347)	(87,856)	(100,726)	(108,954)	(115,058)	(120,315)	(93,027)	(113,199)	(126,778)	(136,808)	(145,406)	(152,024)	(151,587)	(150,875)	(150,015)	(149,072)
Total Tax Benefit/(Liability)		191,571	407,130	75,888	(30,207)	(89,051)	(135,569)	(162,166)	(179,172)	(191,787)	(202,652)	(146,256)	(187,944)	(216,007)	(236,737)	(254,506)	(268,182)	(267,281)	(265,808)	(264,031)	(262,081)
Equity Investment	(3,272,766)																				
Total After-Tax Equity Return	(3,272,766)	638,475	850,026	514,683	404,394	341,261	290,356	259,272	237,678	220,372	204,711	256,204	240,441	206,500	179,781	725,550	752,180	746,737	741,742	736,928	1,290,876

Operating Year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Debt																					
Loan Balance	4,909,148	4,748,405	4,572,390	4,379,655	4,168,609	3,937,514	3,684,465	3,407,377	3,103,965	2,771,729	2,407,930	2,009,571	1,573,367	1,095,725	572,706	(0)	(0)	(0)	(0)	(0)	(0)
Interest 9.50%	(4,497,543)	(466,369)	(451,098)	(434,377)	(416,067)	(396,018)	(374,064)	(350,024)	(323,701)	(294,877)	(263,314)	(228,753)	(190,909)	(149,470)	(104,094)	(54,407)	0	0	0	0	0
Principal	(4,909,148)	(160,744)	(176,014)	(192,736)	(211,046)	(231,095)	(253,049)	(277,089)	(303,412)	(332,236)	(363,799)	(398,359)	(436,204)	(477,643)	(523,019)	(572,706)	(0)	(0)	(0)	(0)	(0)
Annual payment		(627,113)	(627,113)	(627,113)	(627,113)	(627,113)	(627,113)	(627,113)	(627,113)	(627,113)	(627,113)	(627,113)	(627,113)	(627,113)	(627,113)	(627,113)	0	0	0	0	0
Debt Service Coverage Ratio																					
EBITDA		1,113,238	1,109,230	1,105,130	1,100,936	1,096,646	1,092,259	1,087,773	1,083,185	1,078,494	1,073,698	1,068,794	1,055,498	1,049,621	1,043,630	1,037,524	0	0	0	0	0
Less: Major Maintenance Reserve Funding		(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	0	0	0	0	0	0	0	0	0
Cash Available for Debt Service		1,074,016	1,070,008	1,065,908	1,061,714	1,057,424	1,053,037	1,048,551	1,043,963	1,039,272	1,034,476	1,029,572	1,055,498	1,049,621	1,043,630	1,037,524	0	0	0	0	0
P&I		627,113	627,113	627,113	627,113	627,113	627,113	627,113	627,113	627,113	627,113	627,113	627,113	627,113	627,113	627,113	0	0	0	0	0
Debt Service Coverage Ratio		1.71	1.71	1.70	1.69	1.69	1.68	1.67	1.66	1.66	1.65	1.64	1.68	1.67	1.66	1.65					
Average	1.68																				
Minimum	1.64																				
Reserve Accounts																					
Reserves Funded As Part of Capital Cost																					
Beginning Balance	0	1,127,942	1,127,942	1,127,942	1,127,942	1,127,942	1,127,942	1,127,942	1,127,942	1,127,942	1,127,942	1,127,942	1,127,942	1,127,942	1,127,942	1,127,942	558,296	558,296	558,296	558,296	558,296
Up-Front Maintenance Reserve	21,353	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(21,353)
Working Capital	536,943	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(536,943)
Debt Service Reserve	569,646	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(569,646)	0	0	0	0	0
Total	1,127,942	1,127,942	1,127,942	1,127,942	1,127,942	1,127,942	1,127,942	1,127,942	1,127,942	1,127,942	1,127,942	1,127,942	1,127,942	1,127,942	1,127,942	558,296	558,296	558,296	558,296	558,296	0
Major Maintenance Reserve Funded Through Operations																					
Beginning Balance		0	39,222	78,444	117,666	156,888	196,110	235,332	274,553	313,775	352,997	392,219	0	0	0	0	0	0	0	0	0
Funding		39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	0	0	0	0	0	0	0	0	0
Release of Funds		0	0	0	0	0	0	0	0	0	0	(431,441)	0	0	0	0	0	0	0	0	0
Ending Balance		39,222	78,444	117,666	156,888	196,110	235,332	274,553	313,775	352,997	392,219	0	0	0	0	0	0	0	0	0	0
Major Maintenance Costs																					
Occurrence 1	431,441	0	0	0	0	0	0	0	0	0	0	431,441	0	0	0	0	0	0	0	0	0
Occurrence 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major Maintenance Funding																					
Occurrence 1	431,441	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	0	0	0	0	0	0	0	0	0
Occurrence 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Interest on Reserves		21,656	22,410	23,163	23,916	24,669	25,422	26,175	26,928	27,681	28,434	29,187	21,656	21,656	21,656	21,656	10,719	10,719	10,719	10,719	10,719
Property Tax Calculation																					
Original Assessed Value		100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
Annual Decline in Assessed Value		100.0%	99.0%	98.0%	97.0%	96.0%	95.0%	94.0%	93.0%	92.0%	91.0%	90.0%	89.0%	88.0%	87.0%	86.0%	85.0%	84.0%	83.0%	82.0%	81.0%
Annual Assessed Value		100,000	99,000	98,000	97,000	96,000	95,000	94,000	93,000	92,000	91,000	90,000	89,000	88,000	87,000	86,000	85,000	84,000	83,000	82,000	81,000
Property Tax Rate		3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
Property Tax Expense		3,500	3,465	3,430	3,395	3,360	3,325	3,290	3,255	3,220	3,185	3,150	3,115	3,080	3,045	3,010	2,975	2,940	2,905	2,870	2,835

Operating Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Calendar Year		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Tax Depreciation																						
Calendar Year Depreciation per Classification (%)																						
30% Double Declining			30.00%	21.00%	14.70%	10.29%	7.20%	5.04%	3.53%	2.47%	1.73%	1.21%	0.85%	0.59%	0.42%	0.29%	0.20%	0.14%	0.10%	0.07%	0.05%	0.03%
50% Double Declining			50.00%	25.00%	12.50%	6.25%	3.13%	1.56%	0.78%	0.39%	0.20%	0.10%	0.05%	0.02%	0.01%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
20-yr SL			2.50%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
40-yr SL			1.25%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Other			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Calendar Year Depreciation per Classification ($)																						
Year One Capital Cost Allocation	1,413,228		1,413,228	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30% Double Declining	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50% Double Declining	4,239,683		0	2,119,842	1,059,921	529,960	264,980	132,490	66,245	33,123	16,561	8,281	4,140	2,070	1,035	518	259	129	65	32	16	8
20-yr SL	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40-yr SL	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major Maintenance			0	0	0	0	0	0	0	0	0	0	215,721	107,860	53,930	26,965	13,483	6,741	3,371	1,685	843	421
Annual Depreciation	6,083,923		1,413,228	2,119,842	1,059,921	529,960	264,980	132,490	66,245	33,123	16,561	8,281	219,861	109,930	54,965	27,483	13,741	6,871	3,435	1,718	859	429
Major Maintenance																						
Timing of Spending																						
Occurrence 1			0	0	0	0	0	0	0	0	0	0	1	2	3	4	5	6	7	8	9	10
Occurrence 2			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Depreciation Classification	50% Double Declining																					
Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Depreciation Schedule		0.00%	50.00%	25.00%	12.50%	6.25%	3.13%	1.56%	0.78%	0.39%	0.20%	0.10%	0.05%	0.02%	0.01%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Depreciation Expense																						
	Expense	Depreciation Amount																				
Occurrence 1	431,441	431,020	0	0	0	0	0	0	0	0	0	0	215,721	107,860	53,930	26,965	13,483	6,741	3,371	1,685	843	421
Occurrence 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Operating Year		**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
Calendar Year		**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
Tax Depreciation																						
Book Depreciation																						
Calendar Year Depreciation per Classification (%)																						
20-yr SL			5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
30-yr SL			3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%
37-yr SL			2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%
40-yr SL			2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Calendar Year Depreciation per Classification ($)																						
20-yr SL	8,181,914		409,096	409,096	409,096	409,096	409,096	409,096	409,096	409,096	409,096	409,096	409,096	409,096	409,096	409,096	409,096	409,096	409,096	409,096	409,096	409,096
30-yr SL	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37-yr SL	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40-yr SL	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major Maintenance			0	0	0	0	0	0	0	0	0	0	215,721	107,860	53,930	26,965	13,483	6,741	3,371	1,685	843	421
Annual Depreciation	8,612,934		409,096	409,096	409,096	409,096	409,096	409,096	409,096	409,096	409,096	409,096	624,816	516,956	463,026	436,061	422,578	415,837	412,466	410,781	409,938	409,517
Major Maintenance																						
Timing of Spending																						
Occurrence 1			0	0	0	0	0	0	0	0	0	0	1	2	3	4	5	6	7	8	9	10
Occurrence 2			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Depreciation Classification	30-yr SL																					
Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Depreciation Schedule		0.00%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%
Depreciation Expense																						
	Expense	Depreciation Amount																				
Occurrence 1	431,441	431,020	0	0	0	0	0	0	0	0	0	0	215,721	107,860	53,930	26,965	13,483	6,741	3,371	1,685	843	421
Occurrence 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Net Book Value																						
Beginning Balance			0	7,772,818	7,363,722	6,954,627	6,545,531	6,136,435	5,727,340	5,318,244	4,909,148	4,500,053	4,090,957	3,897,582	3,380,626	2,917,600	2,481,539	2,058,961	1,643,124	1,230,658	819,877	409,938
Original Book Value			8,181,914	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Plus: Major Maintenance			0	0	0	0	0	0	0	0	0	0	431,441	0	0	0	0	0	0	0	0	0
Less: Depreciation			(409,096)	(409,096)	(409,096)	(409,096)	(409,096)	(409,096)	(409,096)	(409,096)	(409,096)	(409,096)	(624,816)	(516,956)	(463,026)	(436,061)	(422,578)	(415,837)	(412,466)	(410,781)	(409,938)	(409,517)
Net Book Value			7,772,818	7,363,722	6,954,627	6,545,531	6,136,435	5,727,340	5,318,244	4,909,148	4,500,053	4,090,957	3,897,582	3,380,626	2,917,600	2,481,539	2,058,961	1,643,124	1,230,658	819,877	409,938	421

Biomass CHP Cost Scenarios (ANSS Labor Cost Sensitivity)

Scenarios in $2012

Component	Value for Steam-Only Scenario	Gross Value for CHP Scenario	Net Value for CHP Scenario
Project development	$42,134	$280,280	$238,146
Boiler installed cost ($)	$1,685,370	$3,057,600	$1,372,230
Turbine installed cost ($)	$0	$2,894,528	$2,894,528
Emission controls	$252,806	$305,760	$52,954
Condenser/Cooling Tower	$0	$1,630,720	$1,630,720
Equipment and Installation ($)	$1,938,176	$7,888,608	$5,950,432
Interconnection ($)	$0	$199,000	$199,000
Maintenance reserve ($)	$65,279	$86,632	$21,353
Working capital reserve ($)	$90,508	$217,192	$126,683
Debt service reserve ($)	$202,424	$772,070	$569,646
Debt Closing Costs & Fees	$103,958	$396,510	$292,551
Equity Closing Costs & Fees	$46,190	$176,240	$130,050
Interest During Construction	$86,632	$330,425	$243,793
Routine Maintenance ($/yr	$130,557	$173,264	$42,707
Labour ($)	$40,768	$218,109	$177,341
General & Admin.	$0	$0	$0
Insurance	$9,691	$39,443	$29,752
Property taxes	$0	$3,567	
Year-10 Turbine overhaul ($)	$0	$152,880	$152,880
Year-10 Boiler overhaul ($)	$0	$203,840	$203,840
Annual Fuel Use (mmBtu/yr)	156,366	346,239	189,873
Annual Fuel Cost ($/yr)	$0	$0	$0
Plant capacity factor (%) - extract	60%	60%	60%
Plant capacity factor (%) - full condensing		25%	25%
NPV of new boiler($2M) in yr 10	$1,685,370		
Steam Load (mmBtu/hr)	23.8	22	22
Boiler size (lb/hr)	20,000	30,000	
Boiler rating (psi)	75-100	600	
Turbine type	N/A	Condensing	
Turbine size (MW)	N/A	2.05	
Total Project Costs ($)	$2,575,302	$10,346,956	$7,771,654
Total Project Costs ($/kW)		$5,047	$3,791

Actual Loan Value	$1,545,181	$6,208,174	$4,662,993
Actual Equity Amount	$1,030,121	$4,138,782	

Calculation of fuel costs:	extraction	Condensing
turbine size (kW):	1550	2050
Boiler efficiency (%)	80%	80%
Adjusted turbine size (kW):		
Adjusted KWhs:		
Fuel Use (Btu):		
Fuel Use (mmBtu):	244,404	101,835

Calculation of heat input:
5,256 hrs
125,093 process heat (mmBtu)
156,366 heat input (mmBtu)

Efficiency:	49%	15%
Steam energy	125092.8	
Electric Energy	43115	15318
Fuel Use	346239	101835

Nova Scotia COMFIT Model **Biomass CHP (condensing turbine; new boiler in steam-only scenario in year 10)** **Synapse U-6 Capacity Factor**

Assumptions		Notes:
General Inflation Factor (revenue and expenses)	1.92%	From NSPI 2009 IRP Update
Capital Costs (Uses of Funds)		
Development	238,146	Net of steam-only scenario
Equipment & Installation	5,950,432	Net of steam-only scenario
Interconnection	199,000	Net of steam-only scenario
Reserves		
Up-Front Maintenance	21,353	Net of steam-only scenario
Working Capital	517,759	Net of steam-only scenario
Debt Service Reserve	569,289	Net of steam-only scenario
Financing		
Debt Closing Costs & Fees	292,368	Net of steam-only scenario
Equity Closing Costs & Fees	129,968	Net of steam-only scenario
Interest During Construction	243,640	Net of steam-only scenario
Total Project Cost	8,161,955	Net of steam-only scenario
Total Project Cost ($/kW)	3,981	Net of steam-only scenario
Initial Reserve Account Sizing		
Upfront Maintenance (months of Year 1 O&M)	6	
Working Capital (months of Year 1 OPEX)	6	
Debt Service Reserve (months of P&I)	6	
Capital Structure (Sources of Funds)		
Amount ($)		
Grants (net value)	0	
Debt	4,897,173	
Equity	3,264,782	
Total Sources of Funds	8,161,955	
Amount (%)		
Grants	0.0%	
Debt	60.0%	
Equity	40.0%	
Total Sources of Funds	100.0%	
Grants:		
State and Federal Incentives	0	
State/Provincial Tax 1	0	
State/Provincial Tax 2	0	
Federal tax	0	
Net Value of Grants	0	
Debt Terms		
Amount	4,897,173	(Based on target debt/equity ratio)
Loan Life	15	
Interest Rate	9.50%	
Up-Front Fee (%)	1.00%	
Up-Front Fee ($)	48,972	
Closing Costs	244,859	(5% of loan value)
Tax Depreciation Allocation		
% of Total Project Cost		
30% Double Declining	0.0%	
50% Double Declining	69.3%	95% of equipment and installation
20-yr SL	0.0%	
40-yr SL	0.0%	
Other	0.0%	
Non-Depreciable	30.74%	Interconnection, development, reserves and financing fees
Total	100.0%	
Amount Allocated		
30% Double Declining	0	
50% Double Declining	5,652,911	
20-yr SL	0	
40-yr SL	0	
Other	0	
Non-Depreciable	2,509,045	
Total	8,161,955	
Year One Depreciation		
Year One Percent	25.0%	(Based on the "half year rule")
Year One Amount	1,413,228	

Assumptions:		Notes:
Operating Inputs		
Net Generator Capacity (MW)	2.05	1.55 MW at full extraction, 2.05 MW at full condensing
Energy Production:		
Net Capacity Factor		60% of time at full extraction, another 25% at full condensing
Net Output in MWhs	13,534	
Annual Operating Expenses		
Annual Fuel Cost		
Fuel Required per Year (mmBtu)	210,240	Net of steam-only scenario
Initial year Fuel Price ($/mmBtu)	$4.24	
Annual O&M (expensed)	93,667	Escalates at inflation.
Site Maintenance	0	Escalates at inflation.
General & Administrative	0	Escalates at inflation.
Insurance	29,752	Escalates at inflation.
Land Lease	0	Escalates at inflation.
Other	0	Escalates at inflation.
Property Tax		
Project Hard Costs	5,950,432	Includes hard costs only (equipment and interconnection)
Assessed Value (%)	1.68%	Machinery and equipment is not assessed.
Assessed Value ($)	100,000	
Annual Decline in Assessed Value	1.00%	
Assessed Value Minimum %	0.00%	
Property Tax Rate	3.50%	
Revenue Assumptions		
Levelized Energy Price ($/MWh)	162.45	
% of Levelized Rate Escalating @ Infl.	0.0%	
Other Revenues (increases with inflation)	0	
Return Metrics		
20-year Equity IRR		
Pre-Tax	13.91%	
After-Tax	13.00%	
Average Debt Service Coverage Ratio	1.64	
Minimum Debt Service Coverage Ratio	1.43	
Minimum Annual After-Tax Equity Net Benefits	94,127	Includes tax benefit/(liability)
Tax Rates:		
Federal Income Tax	15.0%	
State/Provincial Income Tax		
Tax Rate 1		
Applicable Income (less than X)	400,000	
Tax Rate 1	4.5%	
Tax Rate 2 (for income greater than X)	16.0%	
Major Maintenance		Major Maintenance is funded through operations.
Replacement Occurs Every X Years	11	Major Maintenance can not occur more frequently than every five year
Cost of Replacement (Year 0 Dollars)	356,720	Escalates at inflation.
Tax Depreciation Classification of Spending	50% Double Declining	
Book Depreciation Classification of Spending	30-yr SL	
Residual Value		
Residual Value (Net Book Value)	421	
Book Depreciation Classifications		
20-yr SL	100.0%	
30-yr SL	0.0%	
37-yr SL	0.0%	
40-yr SL	0.0%	
Non-Depreciable	0.00%	
Total	100.0%	
Amount Allocated		
20-yr SL	8,161,955	
30-yr SL	0	
37-yr SL	0	
40-yr SL	0	
Non-Depreciable	0	
Total	8,161,955	

Nova Scotia COMFIT Model **Cash Flow worksheet: Top** **Synapse U-6 Capacity Factor**

Operating Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Generation (MWh)			13,534	13,534	13,534	13,534	13,534	13,534	13,534	13,534	13,534	13,534	13,534	13,534	13,534	13,534	13,534	13,534	13,534	13,534	13,534	13,534
Partial Income Statement																						
Revenue																						
Standard Offer Price ($/MWh)																						
Fixed Price Component	100%		162.45	162.45	162.45	162.45	162.45	162.45	162.45	162.45	162.45	162.45	162.45	162.45	162.45	162.45	162.45	162.45	162.45	162.45	162.45	162.45
Escalating Price Component	0%		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Standard Offer Price			162.45	162.45	162.45	162.45	162.45	162.45	162.45	162.45	162.45	162.45	162.45	162.45	162.45	162.45	162.45	162.45	162.45	162.45	162.45	162.45
Revenues From Energy Production			2,198,631	2,198,631	2,198,631	2,198,631	2,198,631	2,198,631	2,198,631	2,198,631	2,198,631	2,198,631	2,198,631	2,198,631	2,198,631	2,198,631	2,198,631	2,198,631	2,198,631	2,198,631	2,198,631	2,198,631
Other Revenues			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Interest Revenue			21,281	22,034	22,787	23,540	24,294	25,047	25,800	26,553	27,306	28,059	28,812	21,281	21,281	21,281	21,281	10,351	10,351	10,351	10,351	10,351
Total Revenue			2,219,912	2,220,665	2,221,418	2,222,171	2,222,924	2,223,677	2,224,430	2,225,184	2,225,937	2,226,690	2,227,443	2,219,912	2,219,912	2,219,912	2,219,912	2,208,982	2,208,982	2,208,982	2,208,982	2,208,982
Expenses																						
Fuel Cost			(891,418)	(908,533)	(925,977)	(943,755)	(961,876)	(980,344)	(999,166)	(1,018,350)	(1,037,902)	(1,057,830)	(1,078,140)	(1,098,841)	(1,119,939)	(1,141,441)	(1,163,357)	(1,185,693)	(1,208,459)	(1,231,661)	(1,255,309)	(1,279,411)
O&M			(93,667)	(95,465)	(97,298)	(99,166)	(101,070)	(103,011)	(104,988)	(107,004)	(109,059)	(111,153)	(113,287)	(115,462)	(117,679)	(119,938)	(122,241)	(124,588)	(126,980)	(129,418)	(131,903)	(134,435)
Site Maintenance			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
G&A			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Insurance			(29,752)	(30,323)	(30,906)	(31,499)	(32,104)	(32,720)	(33,348)	(33,989)	(34,641)	(35,306)	(35,984)	(36,675)	(37,379)	(38,097)	(38,828)	(39,574)	(40,334)	(41,108)	(41,897)	(42,702)
Land Lease			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Property tax			(3,500)	(3,465)	(3,430)	(3,395)	(3,360)	(3,325)	(3,290)	(3,255)	(3,220)	(3,185)	(3,150)	(3,115)	(3,080)	(3,045)	(3,010)	(2,975)	(2,940)	(2,905)	(2,870)	(2,835)
Total			(1,018,336)	(1,037,786)	(1,057,610)	(1,077,815)	(1,098,409)	(1,119,399)	(1,140,793)	(1,162,598)	(1,184,822)	(1,207,474)	(1,230,561)	(1,254,093)	(1,278,076)	(1,302,521)	(1,327,436)	(1,352,830)	(1,378,713)	(1,405,092)	(1,431,979)	(1,459,383)
EBITDA			1,201,576	1,182,879	1,163,808	1,144,356	1,124,515	1,104,278	1,083,638	1,062,586	1,041,114	1,019,216	996,881	965,819	941,836	917,391	892,476	856,151	830,269	803,889	777,002	749,598
Equity Return																						
Cash																						
EBITDA			1,201,576	1,182,879	1,163,808	1,144,356	1,124,515	1,104,278	1,083,638	1,062,586	1,041,114	1,019,216	996,881	965,819	941,836	917,391	892,476	856,151	830,269	803,889	777,002	749,598
Plus: Release of Debt Service Reserve			0	0	0	0	0	0	0	0	0	0	0	0	0	0	569,289	0	0	0	0	0
Plus: Release of WC & Up-Front Maint Reserves			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	539,113
Plus: Release of Major Maintenance Reserves			0	0	0	0	0	0	0	0	0	0	431,441	0	0	0	0	0	0	0	0	0
Plus: Residual Value			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	421
Less: Major Maintenance Spending			0	0	0	0	0	0	0	0	0	0	(431,441)	0	0	0	0	0	0	0	0	0
Less: Major Maintenance Reserve Funding			(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	0	0	0	0	0	0	0	0	0
Less: Principal			(160,352)	(175,585)	(192,266)	(210,531)	(230,531)	(252,432)	(276,413)	(302,672)	(331,426)	(362,911)	(397,388)	(435,139)	(476,478)	(521,743)	(571,309)	0	0	0	0	0
Less: Interest			(465,231)	(449,998)	(433,317)	(415,052)	(395,052)	(373,151)	(349,170)	(322,911)	(294,157)	(262,672)	(228,195)	(190,444)	(149,105)	(103,840)	(54,274)	(0)	(0)	(0)	(0)	(0)
Total Cash			536,771	518,074	499,003	479,551	459,710	439,473	418,833	397,781	376,309	354,411	332,076	340,236	316,253	291,808	836,181	856,151	830,269	803,889	777,002	1,289,132
Equity Investment		(3,264,782)																				
Total Pre-Tax Equity Return		(3,264,782)	536,771	518,074	499,003	479,551	459,710	439,473	418,833	397,781	376,309	354,411	332,076	340,236	316,253	291,808	836,181	856,151	830,269	803,889	777,002	1,289,132
Pre-Tax Internal Rate of Return	13.91%																					
Taxable Income Benefit/(Liability)																						
EBITDA			1,201,576	1,182,879	1,163,808	1,144,356	1,124,515	1,104,278	1,083,638	1,062,586	1,041,114	1,019,216	996,881	965,819	941,836	917,391	892,476	856,151	830,269	803,889	777,002	749,598
Less: Interest			(465,231)	(449,998)	(433,317)	(415,052)	(395,052)	(373,151)	(349,170)	(322,911)	(294,157)	(262,672)	(228,195)	(190,444)	(149,105)	(103,840)	(54,274)	(0)	(0)	(0)	(0)	(0)
Less: Tax Depreciation			(1,413,228)	(2,119,842)	(1,059,921)	(529,960)	(264,980)	(132,490)	(66,245)	(33,123)	(16,561)	(8,281)	(219,861)	(109,930)	(54,965)	(27,483)	(13,741)	(6,871)	(3,435)	(1,718)	(859)	(429)
Taxable Income/(Loss)			(676,883)	(1,386,961)	(329,430)	199,343	464,483	598,637	668,222	706,552	730,396	748,263	548,825	665,445	737,765	786,068	824,460	849,281	826,834	802,172	776,144	749,169
Tax Benefit/(Liability)																						
State/Provincial 1			18,000	18,000	14,824	(8,970)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)
State/Provincial 2			44,301	157,914	0	0	(10,317)	(31,782)	(42,916)	(49,048)	(52,863)	(55,722)	(23,812)	(42,471)	(54,042)	(61,771)	(67,914)	(71,885)	(68,293)	(64,347)	(60,183)	(55,867)
Federal			101,533	208,044	49,415	(29,901)	(69,672)	(89,796)	(100,233)	(105,983)	(109,559)	(112,239)	(82,324)	(99,817)	(110,665)	(117,910)	(123,669)	(127,392)	(124,025)	(120,326)	(116,422)	(112,375)
Total Tax Benefit/(Liability)			163,834	383,958	64,239	(38,872)	(97,990)	(139,577)	(161,149)	(173,031)	(180,423)	(185,962)	(124,136)	(160,288)	(182,707)	(197,681)	(209,583)	(217,277)	(210,319)	(202,673)	(194,604)	(186,242)
Equity Investment		(3,264,782)																				
Total After-Tax Equity Return		(3,264,782)	700,605	902,032	563,242	440,679	361,720	299,896	257,684	224,750	195,887	168,449	207,941	179,948	133,545	94,127	626,599	638,874	619,951	601,216	582,398	1,102,890

Operating Year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Debt																					
Loan Balance	4,897,173	4,736,822	4,561,237	4,368,971	4,158,440	3,927,909	3,675,478	3,399,065	3,096,393	2,764,968	2,402,057	2,004,669	1,569,529	1,093,052	571,309	0	0	0	0	0	0
Interest 9.50%	(4,486,572)	(465,231)	(449,998)	(433,317)	(415,052)	(395,052)	(373,151)	(349,170)	(322,911)	(294,157)	(262,672)	(228,195)	(190,444)	(149,105)	(103,840)	(54,274)	(0)	(0)	(0)	(0)	(0)
Principal	(4,897,173)	(160,352)	(175,585)	(192,266)	(210,531)	(230,531)	(252,432)	(276,413)	(302,672)	(331,426)	(362,911)	(397,388)	(435,139)	(476,478)	(521,743)	(571,309)	0	0	0	0	0
Annual payment		(625,583)	(625,583)	(625,583)	(625,583)	(625,583)	(625,583)	(625,583)	(625,583)	(625,583)	(625,583)	(625,583)	(625,583)	(625,583)	(625,583)	(625,583)	0	0	0	0	0
Debt Service Coverage Ratio																					
EBITDA		1,201,576	1,182,879	1,163,808	1,144,356	1,124,515	1,104,278	1,083,638	1,062,586	1,041,114	1,019,216	996,881	965,819	941,836	917,391	892,476	0	0	0	0	0
Less: Major Maintenance Reserve Funding		(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	0	0	0	0	0	0	0	0	0
Cash Available for Debt Service		1,162,354	1,143,657	1,124,586	1,105,134	1,085,293	1,065,056	1,044,416	1,023,364	1,001,892	979,994	957,659	965,819	941,836	917,391	892,476	0	0	0	0	0
P&I		625,583	625,583	625,583	625,583	625,583	625,583	625,583	625,583	625,583	625,583	625,583	625,583	625,583	625,583	625,583	0	0	0	0	0
Debt Service Coverage Ratio		1.86	1.83	1.80	1.77	1.73	1.70	1.67	1.64	1.60	1.57	1.53	1.54	1.51	1.47	1.43					
Average	1.64																				
Minimum	1.43																				
Reserve Accounts																					
Reserves Funded As Part of Capital Cost																					
Beginning Balance	0	1,108,401	1,108,401	1,108,401	1,108,401	1,108,401	1,108,401	1,108,401	1,108,401	1,108,401	1,108,401	1,108,401	1,108,401	1,108,401	1,108,401	1,108,401	539,113	539,113	539,113	539,113	539,113
Up-Front Maintenance Reserve	21,353	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(21,353)
Working Capital	517,759	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(517,759)
Debt Service Reserve	569,289	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(569,289)	0	0	0	0	0
Total	1,108,401	1,108,401	1,108,401	1,108,401	1,108,401	1,108,401	1,108,401	1,108,401	1,108,401	1,108,401	1,108,401	1,108,401	1,108,401	1,108,401	1,108,401	539,113	539,113	539,113	539,113	539,113	(0)
Major Maintenance Reserve Funded Through Operations																					
Beginning Balance		0	39,222	78,444	117,666	156,888	196,110	235,332	274,553	313,775	352,997	392,219	0	0	0	0	0	0	0	0	0
Funding		39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	0	0	0	0	0	0	0	0	0
Release of Funds		0	0	0	0	0	0	0	0	0	0	(431,441)	0	0	0	0	0	0	0	0	0
Ending Balance		39,222	78,444	117,666	156,888	196,110	235,332	274,553	313,775	352,997	392,219	0	0	0	0	0	0	0	0	0	0
Major Maintenance Costs																					
Occurrence 1	431,441	0	0	0	0	0	0	0	0	0	0	431,441	0	0	0	0	0	0	0	0	0
Occurrence 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major Maintenance Funding																					
Occurrence 1	431,441	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	0	0	0	0	0	0	0	0	0
Occurrence 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Interest on Reserves		21,281	22,034	22,787	23,540	24,294	25,047	25,800	26,553	27,306	28,059	28,812	21,281	21,281	21,281	21,281	10,351	10,351	10,351	10,351	10,351
Property Tax Calculation																					
Original Assessed Value		100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
Annual Decline in Assessed Value		100.0%	99.0%	98.0%	97.0%	96.0%	95.0%	94.0%	93.0%	92.0%	91.0%	90.0%	89.0%	88.0%	87.0%	86.0%	85.0%	84.0%	83.0%	82.0%	81.0%
Annual Assessed Value		100,000	99,000	98,000	97,000	96,000	95,000	94,000	93,000	92,000	91,000	90,000	89,000	88,000	87,000	86,000	85,000	84,000	83,000	82,000	81,000
Property Tax Rate		3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
Property Tax Expense		3,500	3,465	3,430	3,395	3,360	3,325	3,290	3,255	3,220	3,185	3,150	3,115	3,080	3,045	3,010	2,975	2,940	2,905	2,870	2,835

Nova Scotia COMFIT Model **Depreciation worksheet: Top** **Synapse U-6 Capacity Factor**

Operating Year		**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
Calendar Year		**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
Tax Depreciation																						
Calendar Year Depreciation per Classification (%)																						
30% Double Declining			30.00%	21.00%	14.70%	10.29%	7.20%	5.04%	3.53%	2.47%	1.73%	1.21%	0.85%	0.59%	0.42%	0.29%	0.20%	0.14%	0.10%	0.07%	0.05%	0.03%
50% Double Declining			50.00%	25.00%	12.50%	6.25%	3.13%	1.56%	0.78%	0.39%	0.20%	0.10%	0.05%	0.02%	0.01%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
20-yr SL			2.50%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
40-yr SL			1.25%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Other			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Calendar Year Depreciation per Classification ($)																						
Year One Capital Cost Allocation	1,413,228		1,413,228	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30% Double Declining	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50% Double Declining	4,239,683		0	2,119,842	1,059,921	529,960	264,980	132,490	66,245	33,123	16,561	8,281	4,140	2,070	1,035	518	259	129	65	32	16	8
20-yr SL	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40-yr SL	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major Maintenance			0	0	0	0	0	0	0	0	0	0	215,721	107,860	53,930	26,965	13,483	6,741	3,371	1,685	843	421
Annual Depreciation	6,083,923		1,413,228	2,119,842	1,059,921	529,960	264,980	132,490	66,245	33,123	16,561	8,281	219,861	109,930	54,965	27,483	13,741	6,871	3,435	1,718	859	429
Major Maintenance																						
Timing of Spending																						
Occurrence 1			0	0	0	0	0	0	0	0	0	0	1	2	3	4	5	6	7	8	9	10
Occurrence 2			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Depreciation Classification	50% Double Declining																					
Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Depreciation Schedule		0.00%	50.00%	25.00%	12.50%	6.25%	3.13%	1.56%	0.78%	0.39%	0.20%	0.10%	0.05%	0.02%	0.01%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Depreciation Expense																						
	Expense	Depreciation Amount																				
Occurrence 1	431,441	431,020	0	0	0	0	0	0	0	0	0	0	215,721	107,860	53,930	26,965	13,483	6,741	3,371	1,685	843	421
Occurrence 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Operating Year		**0**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**
Calendar Year		**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**	**2025**	**2026**	**2027**	**2028**	**2029**	**2030**
Book Depreciation																						
Calendar Year Depreciation per Classification (%)																						
20-yr SL			5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
30-yr SL			3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%
37-yr SL			2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%
40-yr SL			2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Calendar Year Depreciation per Classification ($)																						
20-yr SL	8,161,955		408,098	408,098	408,098	408,098	408,098	408,098	408,098	408,098	408,098	408,098	408,098	408,098	408,098	408,098	408,098	408,098	408,098	408,098	408,098	408,098
30-yr SL	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37-yr SL	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40-yr SL	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major Maintenance			0	0	0	0	0	0	0	0	0	0	215,721	107,860	53,930	26,965	13,483	6,741	3,371	1,685	843	421
Annual Depreciation	8,592,975		408,098	408,098	408,098	408,098	408,098	408,098	408,098	408,098	408,098	408,098	623,818	515,958	462,028	435,063	421,580	414,839	411,468	409,783	408,940	408,519
Major Maintenance																						
Timing of Spending																						
Occurrence 1			0	0	0	0	0	0	0	0	0	0	1	2	3	4	5	6	7	8	9	10
Occurrence 2			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Depreciation Classification	30-yr SL																					
Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Depreciation Schedule		0.00%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%
Depreciation Expense																						
	Expense	Depreciation Amount																				
Occurrence 1	431,441	431,020	0	0	0	0	0	0	0	0	0	0	215,721	107,860	53,930	26,965	13,483	6,741	3,371	1,685	843	421
Occurrence 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Net Book Value																						
Beginning Balance			0	7,753,858	7,345,760	6,937,662	6,529,564	6,121,467	5,713,369	5,305,271	4,897,173	4,489,075	4,080,978	3,888,601	3,372,642	2,910,615	2,475,552	2,053,971	1,639,132	1,227,664	817,881	408,940
Original Book Value			8,161,955	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Plus: Major Maintenance			0	0	0	0	0	0	0	0	0	0	431,441	0	0	0	0	0	0	0	0	0
Less: Depreciation			(408,098)	(408,098)	(408,098)	(408,098)	(408,098)	(408,098)	(408,098)	(408,098)	(408,098)	(408,098)	(623,818)	(515,958)	(462,028)	(435,063)	(421,580)	(414,839)	(411,468)	(409,783)	(408,940)	(408,519)
Net Book Value			7,753,858	7,345,760	6,937,662	6,529,564	6,121,467	5,713,369	5,305,271	4,897,173	4,489,075	4,080,978	3,888,601	3,372,642	2,910,615	2,475,552	2,053,971	1,639,132	1,227,664	817,881	408,940	421

Scenarios in $2012

Component	Value for Steam-Only Scenario	Gross Value for CHP Scenario	Net Value for CHP Scenario
Project development	$42,134	$280,280	$238,146
Boiler installed cost ($)	$1,685,370	$3,057,600	$1,372,230
Turbine installed cost ($)	$0	$2,894,528	$2,894,528
Emission controls	$252,806	$305,760	$52,954
Condenser/Cooling Tower	$0	$1,630,720	$1,630,720
Equipment and Installation ($)	$1,938,176	$7,888,608	$5,950,432
Interconnection ($)	$0	$199,000	$199,000
Maintenance reserve ($)	$65,279	$86,632	$21,353
Working capital reserve ($)	$560,865	$1,078,624	$517,759
Debt service reserve ($)	$215,522	$784,811	$569,289
Debt Closing Costs & Fees	$110,685	$403,053	$292,368
Equity Closing Costs & Fees	$49,166	$179,135	$129,968
Interest During Construction	$92,238	$335,877	$243,640
Routine Maintenance ($/yr)	$130,557	$173,264	$42,707
Labour ($)	$305,760	$356,720	$50,960
General & Admin.	$0	$0	$0
Insurance	$9,691	$39,443	$29,752
Property taxes	$0	$3,567	
Year-10 Turbine overhaul ($)	$0	$152,880	$152,880
Year-10 Boiler overhaul ($)	$0	$203,840	$203,840
Annual Fuel Use (mmBtu/yr)	156,366	366,606	210,240
Annual Fuel Cost ($/yr)	$675,721	$1,584,254	$908,533
Plant capacity factor (%) - extracti	60%	60%	60%
Plant capacity factor (%) - full condensing		25%	25%
NPV of new boiler($2M) in yr 10	$1,685,370		
Steam Load (mmBtu/hr)	23.8		
Boiler size (lb/hr)	20,000	30,000	
Boiler rating (psi)	75-100	600	
Turbine type	N/A	Condensing	
Turbine size (MW)	N/A	2.05	
Total Project Costs ($)			
Total Project Costs ($/kW)			

Actual Loan Value:	$1,844,439	$6,741,612	$4,897,173
Actual Equity Amount:	$1,229,626	$4,494,408	

Capacity Factor:	
Steam	60%
Condensing	30%

Calculation of fuel costs:	extraction	Condensing
turbine size (kW):	1550	2050
Boiler efficiency (%)	80%	80%
Adjusted turbine size (kW):		
Adjusted KWhs:		
Fuel Use (Btu):		
Fuel Use (mmBtu):	244,404	122,202

Calculation of heat input:

5,256	hrs
125,093	process heat (mmBtu)
156,366	heat input (mmBtu)

Efficiency:	47%	15%
Steam energy	125092.8	
Electric Energy	46179	18382
Fuel Use	366606	122202

Nova Scotia COMFIT Model | **Biomass CHP (condensing turbine; new boiler in steam-only scenario in year 10)** | **Synapse U-6 capacity Factor--No Fuel**

Assumptions		Notes:
General Inflation Factor (revenue and expenses)	1.92%	From NSPI 2009 IRP Update
Capital Costs (Uses of Funds)		
Development	238,146	Net of steam-only scenario
Equipment & Installation	5,950,432	Net of steam-only scenario
Interconnection	199,000	Net of steam-only scenario
Reserves		
Up-Front Maintenance	21,353	Net of steam-only scenario
Working Capital	517,759	Net of steam-only scenario
Debt Service Reserve	569,289	Net of steam-only scenario
Financing		
Debt Closing Costs & Fees	292,368	Net of steam-only scenario
Equity Closing Costs & Fees	129,968	Net of steam-only scenario
Interest During Construction	243,640	Net of steam-only scenario
Total Project Cost	8,161,955	Net of steam-only scenario
Total Project Cost ($/kW)	3,981	Net of steam-only scenario
Initial Reserve Account Sizing		
Upfront Maintenance (months of Year 1 O&M)	6	
Working Capital (months of Year 1 OPEX)	6	
Debt Service Reserve (months of P&I)	6	
Capital Structure (Sources of Funds)		
Amount ($)		
Grants (net value)	0	
Debt	4,897,173	
Equity	3,264,782	
Total Sources of Funds	8,161,955	
Amount (%)		
Grants	0.0%	
Debt	60.0%	
Equity	40.0%	
Total Sources of Funds	100.0%	
Grants:		
State and Federal Incentives	0	
State/Provincial Tax 1	0	
State/Provincial Tax 2	0	
Federal tax	0	
Net Value of Grants	0	
Debt Terms		
Amount	4,897,173	(Based on target debt/equity ratio)
Loan Life	15	
Interest Rate	9.50%	
Up-Front Fee (%)	1.00%	
Up-Front Fee ($)	48,972	
Closing Costs	244,859	(5% of loan value)
Tax Depreciation Allocation		
% of Total Project Cost		
30% Double Declining	0.0%	
50% Double Declining	69.3%	95% of equipment and installation
20-yr SL	0.0%	
40-yr SL	0.0%	
Other	0.0%	
Non-Depreciable	30.74%	Interconnection, development, reserves and financing fees
Total	100.0%	
Amount Allocated		
30% Double Declining	0	
50% Double Declining	5,652,911	
20-yr SL	0	
40-yr SL	0	
Other	0	
Non-Depreciable	2,509,045	
Total	8,161,955	
Year One Depreciation		
Year One Percent	25.0%	(Based on the "half year rule")
Year One Amount	1,413,228	

Assumptions:		Notes:
Operating Inputs		
Net Generator Capacity (MW)	2.05	1.55 MW at full extraction, 2.05 MW at full condensing
Energy Production:		
Net Capacity Factor		60% of time at full extraction, another 25% at full condensing
Net Output in MWhs	13,534	
Annual Operating Expenses		
Annual Fuel Cost		
Fuel Required per Year (mmBtu)	0	Net of steam-only scenario
Initial year Fuel Price ($/mmBtu)	$0.00	
Annual O&M (expensed)	93,667	Escalates at inflation.
Site Maintenance	0	Escalates at inflation.
General & Administrative	0	Escalates at inflation.
Insurance	29,752	Escalates at inflation.
Land Lease	0	Escalates at inflation.
Other	0	Escalates at inflation.
Property Tax		
Project Hard Costs	5,950,432	Includes hard costs only (equipment and interconnection)
Assessed Value (%)	1.68%	Machinery and equipment is not assessed.
Assessed Value ($)	100,000	
Annual Decline in Assessed Value	1.00%	
Assessed Value Minimum %	0.00%	
Property Tax Rate	3.50%	
Revenue Assumptions		
Levelized Energy Price ($/MWh)	89.00	
% of Levelized Rate Escalating @ Infl.	0.0%	
Other Revenues (increases with inflation)	0	
Return Metrics		
20-year Equity IRR		
Pre-Tax	13.96%	
After-Tax	13.10%	
Average Debt Service Coverage Ratio	1.69	
Minimum Debt Service Coverage Ratio	1.67	
Minimum Annual After-Tax Equity Net Benefits	195,801	Includes tax benefit/(liability)
Tax Rates:		
Federal Income Tax	15.0%	
State/Provincial Income Tax		
Tax Rate 1		
Applicable Income (less than X)	400,000	
Tax Rate 1	4.5%	
Tax Rate 2 (for income greater than X)	16.0%	
Major Maintenance		Major Maintenance is funded through operations.
Replacement Occurs Every X Years	11	Major Maintenance can not occur more frequently than every five year
Cost of Replacement (Year 0 Dollars)	356,720	Escalates at inflation.
Tax Depreciation Classification of Spending	50% Double Declining	
Book Depreciation Classification of Spending	30-yr SL	
Residual Value		
Residual Value (Net Book Value)	421	
Book Depreciation Classifications		
20-yr SL	100.0%	
30-yr SL	0.0%	
37-yr SL	0.0%	
40-yr SL	0.0%	
Non-Depreciable	0.00%	
Total	100.0%	
Amount Allocated		
20-yr SL	8,161,955	
30-yr SL	0	
37-yr SL	0	
40-yr SL	0	
Non-Depreciable	0	
Total	8,161,955	

Nova Scotia COMFIT Model | **Biomass CHP (condensing turbine; new boiler in steam-only scenario in year 10)** | **Synapse U-6 Parasitic Loads at 14%**

Assumptions		**Notes:**
General Inflation Factor (revenue and expenses)	1.92%	From NSPI 2009 IRP Update
Capital Costs (Uses of Funds)		
Development	238,146	Net of steam-only scenario
Equipment & Installation	5,950,432	Net of steam-only scenario
Interconnection	199,000	Net of steam-only scenario
Reserves		
Up-Front Maintenance	21,353	Net of steam-only scenario
Working Capital	473,752	Net of steam-only scenario
Debt Service Reserve	564,407	Net of steam-only scenario
Financing		
Debt Closing Costs & Fees	289,860	Net of steam-only scenario
Equity Closing Costs & Fees	128,868	Net of steam-only scenario
Interest During Construction	241,550	Net of steam-only scenario
Total Project Cost	8,107,369	Net of steam-only scenario
Total Project Cost ($/kW)	3,955	Net of steam-only scenario
Initial Reserve Account Sizing		
Upfront Maintenance (months of Year 1 O&M)	6	
Working Capital (months of Year 1 OPEX)	6	
Debt Service Reserve (months of P&I)	6	
Capital Structure (Sources of Funds)		
Amount ($)		
Grants (net value)	0	
Debt	4,864,421	
Equity	3,242,948	
Total Sources of Funds	8,107,369	
Amount (%)		
Grants	0.0%	
Debt	60.0%	
Equity	40.0%	
Total Sources of Funds	100.0%	
Grants:		
State and Federal Incentives	0	
State/Provincial Tax 1	0	
State/Provincial Tax 2	0	
Federal tax	0	
Net Value of Grants	0	
Debt Terms		
Amount	4,864,421	(Based on target debt/equity ratio)
Loan Life	15	
Interest Rate	9.50%	
Up-Front Fee (%)	1.00%	
Up-Front Fee ($)	48,644	
Closing Costs	243,221	(5% of loan value)
Tax Depreciation Allocation		
% of Total Project Cost		
30% Double Declining	0.0%	
50% Double Declining	69.7%	95% of equipment and installation
20-yr SL	0.0%	
40-yr SL	0.0%	
Other	0.0%	
Non-Depreciable	30.27%	Interconnection, development, reserves and f
Total	100.0%	
Amount Allocated		
30% Double Declining	0	
50% Double Declining	5,652,911	
20-yr SL	0	
40-yr SL	0	
Other	0	
Non-Depreciable	2,454,458	
Total	8,107,369	
Year One Depreciation		
Year One Percent	25.0%	(Based on the "half year rule")
Year One Amount	1,413,228	

Assumptions:		**Notes:**
Operating Inputs		
Net Generator Capacity (MW)	2.05	1.55 MW at full extraction, 2.05 MW at full condensing
Energy Production:		
Net Capacity Factor		60% of time at full extraction, another 25% at full condensing
Net Output in MWhs	12,636	
Annual Operating Expenses		
Annual Fuel Cost		
Fuel Required per Year (mmBtu)	0	Net of steam-only scenario
Initial year Fuel Price ($/mmBtu)	$0.00	
Annual O&M (expensed)	$93,667	Escalates at inflation.
Site Maintenance	$0	Escalates at inflation.
General & Administrative	$0	Escalates at inflation.
Insurance	$29,752	Escalates at inflation.
Land Lease	$0	Escalates at inflation.
Station Use (parasitic load)	$141,527	14% of plant output purchased at $80/MWh
Property Tax		
Project Hard Costs	5,950,432	
Assessed Value (%)	1.68%	Machinery and equipment is not assessed.
Assessed Value ($)	100,000	
Annual Decline in Assessed Value	1.00%	
Assessed Value Minimum %	0.00%	
Property Tax Rate	3.50%	
Revenue Assumptions		
Levelized Energy Price ($/MWh)	107.00	
% of Levelized Rate Escalating @ Infl.	0.0%	
Other Revenues (increases with inflation)	0	
Return Metrics		
20-year Equity IRR		
Pre-Tax	13.82%	
After-Tax	13.00%	
Average Debt Service Coverage Ratio	1.67	
Minimum Debt Service Coverage Ratio	1.64	
Minimum Annual After-Tax Equity Net Benefits	175,882	Includes tax benefit/(liability)
Tax Rates:		
Federal Income Tax	15.0%	
State/Provincial Income Tax		
Tax Rate 1		
Applicable Income (less than X)	400,000	
Tax Rate 1	4.5%	
Tax Rate 2 (for income greater than X)	16.0%	
Major Maintenance		
Replacement Occurs Every X Years	11	
Cost of Replacement (Year 0 Dollars)	356,720	
Tax Depreciation Classification of Spending	50% Double Declining	
Book Depreciation Classification of Spending	30-yr SL	
Residual Value		
Residual Value (Net Book Value)	421	
Book Depreciation Classifications		
20-yr SL	100.0%	
30-yr SL	0.0%	
37-yr SL	0.0%	
40-yr SL	0.0%	
Non-Depreciable	0.00%	
Total	100.0%	
Amount Allocated		
20-yr SL	8,107,369	
30-yr SL	0	
37-yr SL	0	
40-yr SL	0	
Non-Depreciable	0	
Total	8,107,369	

Nova Scotia COMFIT Model **Cash Flow worksheet: Top** **Synapse U-6 Parasitic Loads at 14%**

Operating Year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Generation (MWh)		12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636
Partial Income Statement																					
Revenue																					
Standard Offer Price ($/MWh)																					
Fixed Price Component	100%	107.00	107.00	107.00	107.00	107.00	107.00	107.00	107.00	107.00	107.00	107.00	107.00	107.00	107.00	107.00	107.00	107.00	107.00	107.00	107.00
Escalating Price Component	0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Standard Offer Price		107.00	107.00	107.00	107.00	107.00	107.00	107.00	107.00	107.00	107.00	107.00	107.00	107.00	107.00	107.00	107.00	107.00	107.00	107.00	107.00
Revenues From Energy Production		1,352,084	1,352,084	1,352,084	1,352,084	1,352,084	1,352,084	1,352,084	1,352,084	1,352,084	1,352,084	1,352,084	1,352,084	1,352,084	1,352,084	1,352,084	1,352,084	1,352,084	1,352,084	1,352,084	1,352,084
Other Revenues		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Interest Revenue		20,343	21,096	21,849	22,602	23,355	24,108	24,861	25,614	26,367	27,120	27,873	20,343	20,343	20,343	20,343	9,506	9,506	9,506	9,506	9,506
Total Revenue		1,372,427	1,373,180	1,373,933	1,374,686	1,375,439	1,376,192	1,376,945	1,377,698	1,378,451	1,379,204	1,379,957	1,372,427	1,372,427	1,372,427	1,372,427	1,361,590	1,361,590	1,361,590	1,361,590	1,361,590
Expenses																					
Fuel Cost		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
O&M		(93,667)	(95,465)	(97,298)	(99,166)	(101,070)	(103,011)	(104,988)	(107,004)	(109,059)	(111,153)	(113,287)	(115,462)	(117,679)	(119,938)	(122,241)	(124,588)	(126,980)	(129,418)	(131,903)	(134,435)
Site Maintenance		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
G&A		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Insurance		(29,752)	(30,323)	(30,906)	(31,499)	(32,104)	(32,720)	(33,348)	(33,989)	(34,641)	(35,306)	(35,984)	(36,675)	(37,379)	(38,097)	(38,828)	(39,574)	(40,334)	(41,108)	(41,897)	(42,702)
Land Lease		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Station Use (parasitic load)		(141,527)	(144,244)	(147,013)	(149,836)	(152,713)	(155,645)	(158,633)	(161,679)	(164,783)	(167,947)	(171,172)	(174,458)	(177,808)	(181,222)	(184,701)	(188,247)	(191,862)	(195,546)	(199,300)	(203,127)
Property tax		(3,500)	(3,465)	(3,430)	(3,395)	(3,360)	(3,325)	(3,290)	(3,255)	(3,220)	(3,185)	(3,150)	(3,115)	(3,080)	(3,045)	(3,010)	(2,975)	(2,940)	(2,905)	(2,870)	(2,835)
Total		(268,445)	(273,497)	(278,647)	(283,896)	(289,247)	(294,701)	(300,260)	(305,927)	(311,703)	(317,591)	(323,593)	(329,710)	(335,946)	(342,302)	(348,781)	(355,384)	(362,116)	(368,977)	(375,970)	(383,099)
EBITDA		1,103,981	1,099,683	1,095,286	1,090,790	1,086,192	1,081,491	1,076,685	1,071,771	1,066,748	1,061,613	1,056,365	1,042,717	1,036,481	1,030,125	1,023,646	1,006,206	999,475	992,613	985,620	978,491
Equity Return																					
Cash																					
EBITDA		1,103,981	1,099,683	1,095,286	1,090,790	1,086,192	1,081,491	1,076,685	1,071,771	1,066,748	1,061,613	1,056,365	1,042,717	1,036,481	1,030,125	1,023,646	1,006,206	999,475	992,613	985,620	978,491
Plus: Release of Debt Service Reserve		0	0	0	0	0	0	0	0	0	0	0	0	0	0	564,407	0	0	0	0	0
Plus: Release of WC & Up-Front Maint Reserves		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	495,106
Plus: Release of Major Maintenance Reserves		0	0	0	0	0	0	0	0	0	0	431,441	0	0	0	0	0	0	0	0	0
Plus: Residual Value		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	421
Less: Major Maintenance Spending		0	0	0	0	0	0	0	0	0	0	(431,441)	0	0	0	0	0	0	0	0	0
Less: Major Maintenance Reserve Funding		(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	0	0	0	0	0	0	0	0	0
Less: Principal		(159,279)	(174,411)	(190,980)	(209,123)	(228,989)	(250,743)	(274,564)	(300,648)	(329,209)	(360,484)	(394,730)	(432,229)	(473,291)	(518,254)	(567,488)	(0)	(0)	(0)	(0)	(0)
Less: Interest		(462,120)	(446,989)	(430,420)	(412,276)	(392,410)	(370,656)	(346,835)	(320,752)	(292,190)	(260,915)	(226,669)	(189,170)	(148,108)	(103,145)	(53,911)	0	0	0	0	0
Total Cash		443,360	439,061	434,665	430,169	425,571	420,870	416,064	411,150	406,127	400,992	395,744	421,317	415,082	408,726	966,654	1,006,206	999,475	992,613	985,620	1,474,018
Equity Investment	(3,242,948)																				
Total Pre-Tax Equity Return	(3,242,948)	443,360	439,061	434,665	430,169	425,571	420,870	416,064	411,150	406,127	400,992	395,744	421,317	415,082	408,726	966,654	1,006,206	999,475	992,613	985,620	1,474,018
Pre-Tax Internal Rate of Return	13.82%																				
Taxable Income Benefit/(Liability)																					
EBITDA		1,103,981	1,099,683	1,095,286	1,090,790	1,086,192	1,081,491	1,076,685	1,071,771	1,066,748	1,061,613	1,056,365	1,042,717	1,036,481	1,030,125	1,023,646	1,006,206	999,475	992,613	985,620	978,491
Less: Interest		(462,120)	(446,989)	(430,420)	(412,276)	(392,410)	(370,656)	(346,835)	(320,752)	(292,190)	(260,915)	(226,669)	(189,170)	(148,108)	(103,145)	(53,911)	0	0	0	0	0
Less: Tax Depreciation		(1,413,228)	(2,119,842)	(1,059,921)	(529,960)	(264,980)	(132,490)	(66,245)	(33,123)	(16,561)	(8,281)	(219,861)	(109,930)	(54,965)	(27,483)	(13,741)	(6,871)	(3,435)	(1,718)	(859)	(429)
Taxable Income/(Loss)		(771,366)	(1,467,148)	(395,054)	148,553	428,802	578,346	663,605	717,897	757,997	792,417	609,835	743,616	833,408	899,497	955,994	999,335	996,039	990,896	984,761	978,062
Tax Benefit/(Liability)																					
State/Provincial 1		18,000	18,000	17,777	(6,685)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)
State/Provincial 2		59,419	170,744	0	0	(4,608)	(28,535)	(42,177)	(50,864)	(57,279)	(62,787)	(33,574)	(54,979)	(69,345)	(79,919)	(88,959)	(95,894)	(95,366)	(94,543)	(93,562)	(92,490)
Federal		115,705	220,072	59,258	(22,283)	(64,320)	(86,752)	(99,541)	(107,685)	(113,700)	(118,863)	(91,475)	(111,542)	(125,011)	(134,925)	(143,399)	(149,900)	(149,406)	(148,634)	(147,714)	(146,709)
Total Tax Benefit/(Liability)		193,124	408,816	77,036	(28,968)	(86,929)	(133,287)	(159,717)	(176,548)	(188,979)	(199,649)	(143,049)	(184,521)	(212,356)	(232,844)	(250,358)	(263,794)	(262,772)	(261,178)	(259,276)	(257,199)
Equity Investment	(3,242,948)																				
Total After-Tax Equity Return	(3,242,948)	636,484	847,877	511,701	401,201	338,643	287,583	256,346	234,602	217,148	201,343	252,695	236,796	202,725	175,882	716,296	742,412	736,702	731,436	726,344	1,216,819

Operating Year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Debt																					
Loan Balance	4,864,421	4,705,142	4,530,732	4,339,752	4,130,629	3,901,640	3,650,896	3,376,332	3,075,685	2,746,476	2,385,992	1,991,262	1,559,033	1,085,742	567,488	(0)	(0)	(0)	(0)	(0)	(0)
Interest 9.50%	(4,456,566)	(462,120)	(446,989)	(430,420)	(412,276)	(392,410)	(370,656)	(346,835)	(320,752)	(292,190)	(260,915)	(226,669)	(189,170)	(148,108)	(103,145)	(53,911)	0	0	0	0	0
Principal	(4,864,421)	(159,279)	(174,411)	(190,980)	(209,123)	(228,989)	(250,743)	(274,564)	(300,648)	(329,209)	(360,484)	(394,730)	(432,229)	(473,291)	(518,254)	(567,488)	(0)	(0)	(0)	(0)	(0)
Annual payment		(621,399)	(621,399)	(621,399)	(621,399)	(621,399)	(621,399)	(621,399)	(621,399)	(621,399)	(621,399)	(621,399)	(621,399)	(621,399)	(621,399)	(621,399)	0	0	0	0	0
Debt Service Coverage Ratio																					
EBITDA		1,103,981	1,099,683	1,095,286	1,090,790	1,086,192	1,081,491	1,076,685	1,071,771	1,066,748	1,061,613	1,056,365	1,042,717	1,036,481	1,030,125	1,023,646	0	0	0	0	0
Less: Major Maintenance Reserve Funding		(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	0	0	0	0	0	0	0	0	0
Cash Available for Debt Service		1,064,760	1,060,461	1,056,064	1,051,568	1,046,970	1,042,269	1,037,463	1,032,549	1,027,526	1,022,391	1,017,143	1,042,717	1,036,481	1,030,125	1,023,646	0	0	0	0	0
P&I		621,399	621,399	621,399	621,399	621,399	621,399	621,399	621,399	621,399	621,399	621,399	621,399	621,399	621,399	621,399	0	0	0	0	0
Debt Service Coverage Ratio		1.71	1.71	1.70	1.69	1.68	1.68	1.67	1.66	1.65	1.65	1.64	1.68	1.67	1.66	1.65					
Average	1.67																				
Minimum	1.64																				
Reserve Accounts																					
Reserves Funded As Part of Capital Cost																					
Beginning Balance	0	1,059,512	1,059,512	1,059,512	1,059,512	1,059,512	1,059,512	1,059,512	1,059,512	1,059,512	1,059,512	1,059,512	1,059,512	1,059,512	1,059,512	1,059,512	495,106	495,106	495,106	495,106	495,106
Up-Front Maintenance Reserve	21,353	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(21,353)
Working Capital	473,752	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(473,752)
Debt Service Reserve	564,407	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(564,407)	0	0	0	0	0
Total	1,059,512	1,059,512	1,059,512	1,059,512	1,059,512	1,059,512	1,059,512	1,059,512	1,059,512	1,059,512	1,059,512	1,059,512	1,059,512	1,059,512	1,059,512	495,106	495,106	495,106	495,106	495,106	0
Major Maintenance Reserve Funded Through Operations																					
Beginning Balance		0	39,222	78,444	117,666	156,888	196,110	235,332	274,553	313,775	352,997	392,219	0	0	0	0	0	0	0	0	0
Funding		39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	0	0	0	0	0	0	0	0	0
Release of Funds		0	0	0	0	0	0	0	0	0	0	(431,441)	0	0	0	0	0	0	0	0	0
Ending Balance		39,222	78,444	117,666	156,888	196,110	235,332	274,553	313,775	352,997	392,219	0	0	0	0	0	0	0	0	0	0
Major Maintenance Costs																					
Occurrence 1	431,441	0	0	0	0	0	0	0	0	0	0	431,441	0	0	0	0	0	0	0	0	0
Occurrence 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major Maintenance Funding																					
Occurrence 1	431,441	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	0	0	0	0	0	0	0	0	0
Occurrence 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Interest on Reserves		20,343	21,096	21,849	22,602	23,355	24,108	24,861	25,614	26,367	27,120	27,873	20,343	20,343	20,343	20,343	9,506	9,506	9,506	9,506	9,506
Property Tax Calculation																					
Original Assessed Value		100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
Annual Decline in Assessed Value		100.0%	99.0%	98.0%	97.0%	96.0%	95.0%	94.0%	93.0%	92.0%	91.0%	90.0%	89.0%	88.0%	87.0%	86.0%	85.0%	84.0%	83.0%	82.0%	81.0%
Annual Assessed Value		100,000	99,000	98,000	97,000	96,000	95,000	94,000	93,000	92,000	91,000	90,000	89,000	88,000	87,000	86,000	85,000	84,000	83,000	82,000	81,000
Property Tax Rate		3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
Property Tax Expense		3,500	3,465	3,430	3,395	3,360	3,325	3,290	3,255	3,220	3,185	3,150	3,115	3,080	3,045	3,010	2,975	2,940	2,905	2,870	2,835

Operating Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Calendar Year		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Tax Depreciation																						
Calendar Year Depreciation per Classification (%)																						
30% Double Declining			30.00%	21.00%	14.70%	10.29%	7.20%	5.04%	3.53%	2.47%	1.73%	1.21%	0.85%	0.59%	0.42%	0.29%	0.20%	0.14%	0.10%	0.07%	0.05%	0.03%
50% Double Declining			50.00%	25.00%	12.50%	6.25%	3.13%	1.56%	0.78%	0.39%	0.20%	0.10%	0.05%	0.02%	0.01%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
20-yr SL			2.50%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
40-yr SL			1.25%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Other			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Calendar Year Depreciation per Classification ($)																						
Year One Capital Cost Allocation	1,413,228		1,413,228	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30% Double Declining	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50% Double Declining	4,239,683		0	2,119,842	1,059,921	529,960	264,980	132,490	66,245	33,123	16,561	8,281	4,140	2,070	1,035	518	259	129	65	32	16	8
20-yr SL	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40-yr SL	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major Maintenance			0	0	0	0	0	0	0	0	0	0	215,721	107,860	53,930	26,965	13,483	6,741	3,371	1,685	843	421
Annual Depreciation	6,083,923		1,413,228	2,119,842	1,059,921	529,960	264,980	132,490	66,245	33,123	16,561	8,281	219,861	109,930	54,965	27,483	13,741	6,871	3,435	1,718	859	429
Major Maintenance																						
Timing of Spending																						
Occurrence 1			0	0	0	0	0	0	0	0	0	0	1	2	3	4	5	6	7	8	9	10
Occurrence 2			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Depreciation Classification	Declining																					
Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Depreciation Schedule		0.00%	50.00%	25.00%	12.50%	6.25%	3.13%	1.56%	0.78%	0.39%	0.20%	0.10%	0.05%	0.02%	0.01%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Depreciation Expense																						
	Expense	Amount																				
Occurrence 1	431,441	431,020	0	0	0	0	0	0	0	0	0	0	215,721	107,860	53,930	26,965	13,483	6,741	3,371	1,685	843	421
Occurrence 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Operating Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Calendar Year		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Book Depreciation																						
Calendar Year Depreciation per Classification (%)																						
20-yr SL			5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
30-yr SL			3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%
37-yr SL			2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%
40-yr SL			2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Calendar Year Depreciation per Classification ($)																						
20-yr SL	8,107,369		405,368	405,368	405,368	405,368	405,368	405,368	405,368	405,368	405,368	405,368	405,368	405,368	405,368	405,368	405,368	405,368	405,368	405,368	405,368	405,368
30-yr SL	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37-yr SL	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40-yr SL	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major Maintenance			0	0	0	0	0	0	0	0	0	0	215,721	107,860	53,930	26,965	13,483	6,741	3,371	1,685	843	421
Annual Depreciation	8,538,389		405,368	405,368	405,368	405,368	405,368	405,368	405,368	405,368	405,368	405,368	621,089	513,229	459,299	432,334	418,851	412,110	408,739	407,054	406,211	405,790
Major Maintenance																						
Timing of Spending																						
Occurrence 1			0	0	0	0	0	0	0	0	0	0	1	2	3	4	5	6	7	8	9	10
Occurrence 2			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Depreciation Classification	30-yr SL																					
Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Depreciation Schedule		0.00%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%
Depreciation Expense																						
	Expense	Depreciation Amount																				
Occurrence 1	431,441	431,020	0	0	0	0	0	0	0	0	0	0	215,721	107,860	53,930	26,965	13,483	6,741	3,371	1,685	843	421
Occurrence 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Net Book Value																						
Beginning Balance			0	7,702,001	7,296,632	6,891,264	6,485,895	6,080,527	5,675,158	5,269,790	4,864,421	4,459,053	4,053,685	3,864,037	3,350,808	2,891,509	2,459,176	2,040,325	1,628,215	1,219,476	812,422	406,211
Original Book Value			8,107,369	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Plus: Major Maintenance			0	0	0	0	0	0	0	0	0	0	431,441	0	0	0	0	0	0	0	0	0
Less: Depreciation			(405,368)	(405,368)	(405,368)	(405,368)	(405,368)	(405,368)	(405,368)	(405,368)	(405,368)	(405,368)	(621,089)	(513,229)	(459,299)	(432,334)	(418,851)	(412,110)	(408,739)	(407,054)	(406,211)	(405,790)
Net Book Value			7,702,001	7,296,632	6,891,264	6,485,895	6,080,527	5,675,158	5,269,790	4,864,421	4,459,053	4,053,685	3,864,037	3,350,808	2,891,509	2,459,176	2,040,325	1,628,215	1,219,476	812,422	406,211	421

Biomass CHP Cost Scenarios

Synapse U-6 Parasitic Loads at 14%

Scenarios in $2012

Component	Value for Steam-Only Scenario	Gross Value for CHP Scenario	Net Value for CHP Scenario
Project development	$42,134	$280,280	$238,146
Boiler installed cost ($)	$1,685,370	$3,057,600	$1,372,230
Turbine installed cost ($)	$0	$2,894,528	$2,894,528
Emission controls	$252,806	$305,760	$52,954
Condenser/Cooling Tower	$0	$1,630,720	$1,630,720
Equipment and Installation ($)	$1,938,176	$7,888,608	$5,950,432
Interconnection ($)	$0	$199,000	$199,000
Maintenance reserve ($)	$65,279	$86,632	$21,353
Working capital reserve ($)	$223,004	$286,497	$63,493
Debt service reserve ($)	$213,498	$777,905	$564,407
Debt Closing Costs & Fees	$109,646	$399,506	$289,860
Equity Closing Costs & Fees	$48,718	$177,585	$128,868
Interest During Construction	$91,371	$332,922	$241,550
Routine Maintenance ($/yr)	$130,557	$173,264	$42,707
Labour ($)	$305,760	$356,720	$50,960
General & Admin.	$0	$0	$0
Insurance	$9,691	$39,443	$29,752
Property taxes	$0	$3,567	
Year-10 Turbine overhaul ($)	$0	$152,880	$152,880
Year-10 Boiler overhaul ($)	$0	$203,840	$203,840
Annual Fuel Use (mmBtu/yr)	$159,368	$352,887	$193,519
Annual Fuel Cost ($/yr)	$0	$0	$0
Plant capacity factor (%) - extract	60%	60%	60%
Plant capacity factor (%) - full condensing		25%	25%
NPV of new boiler($2M) in yr 10	$1,685,370		
Steam Load (mmBtu/hr)	23.8	22	22
Boiler size (lb/hr)	20,000	30,000	
Boiler rating (psi)	75-100	600	
Turbine type	N/A	Condensing	
Turbine size (MW)	N/A	2.05	
Total Project Costs ($)	$2,731,825	$10,428,935	$7,697,110
Total Project Costs ($/kW)		$5,087	$3,755

Actual Loan Value:	$1,639,095	$6,257,361	$4,618,266
Actual Equity Amount:	$1,092,730	$4,171,574	

Calculation of fuel costs:	extraction	Condensing
turbine size (kW):	1550	2050
Boiler efficiency (%)	80%	80%
Adjusted turbine size (kW):		
Adjusted KWhs:		
Fuel Use (Btu):		
Fuel Use (mmBtu):	244,404	101,835

Calculation of heat input:	
5,256	hrs
125,093	process heat (mmBtu)
156,366	heat input (mmBtu)

Efficiency:	48%	15%
Steam energy	127494.5818	
Electric Energy	43115	15318
Fuel Use	352887	101835

Nova Scotia COMFIT Model | **Biomass CHP (condensing turbine; new boiler in steam-only scenario in year 10)** | **Synapse U-6 Bioler Efficiency**

Assumptions		Notes:
General Inflation Factor (revenue and expenses)	1.92%	From NSPI 2009 IRP Update
Capital Costs (Uses of Funds)		
Development	238,146	Net of steam-only scenario
Equipment & Installation	5,950,432	Net of steam-only scenario
Interconnection	199,000	Net of steam-only scenario
Reserves		
Up-Front Maintenance	21,353	Net of steam-only scenario
Working Capital	539,156	Net of steam-only scenario
Debt Service Reserve	569,289	Net of steam-only scenario
Financing		
Debt Closing Costs & Fees	292,368	Net of steam-only scenario
Equity Closing Costs & Fees	129,968	Net of steam-only scenario
Interest During Construction	243,640	Net of steam-only scenario
Total Project Cost	8,183,352	Net of steam-only scenario
Total Project Cost ($/kW)	3,992	Net of steam-only scenario
Initial Reserve Account Sizing		
Upfront Maintenance (months of Year 1 O&M)	6	
Working Capital (months of Year 1 OPEX)	6	
Debt Service Reserve (months of P&I)	6	
Capital Structure (Sources of Funds)		
Amount ($)		
Grants (net value)	0	
Debt	4,910,011	
Equity	3,273,341	
Total Sources of Funds	8,183,352	
Amount (%)		
Grants	0.0%	
Debt	60.0%	
Equity	40.0%	
Total Sources of Funds	100.0%	
Grants:		
State and Federal Incentives	0	
State/Provincial Tax 1	0	
State/Provincial Tax 2	0	
Federal tax	0	
Net Value of Grants	0	
Debt Terms		
Amount	4,910,011	(Based on target debt/equity ratio)
Loan Life	15	
Interest Rate	9.50%	
Up-Front Fee (%)	1.00%	
Up-Front Fee ($)	49,100	
Closing Costs	245,501	(5% of loan value)
Tax Depreciation Allocation		
% of Total Project Cost		
30% Double Declining	0.0%	
50% Double Declining	69.1%	95% of equipment and installation
20-yr SL	0.0%	
40-yr SL	0.0%	
Other	0.0%	
Non-Depreciable	30.92%	Interconnection, development, reserves and financing fees
Total	100.0%	
Amount Allocated		
30% Double Declining	0	
50% Double Declining	5,652,911	
20-yr SL	0	
40-yr SL	0	
Other	0	
Non-Depreciable	2,530,441	
Total	8,183,352	
Year One Depreciation		
Year One Percent	25.0%	(Based on the "half year rule")
Year One Amount	1,413,228	

Assumptions:		Notes:
Operating Inputs		
Net Generator Capacity (MW)	2.05	1.55 MW at full extraction, 2.05 MW at full condensing
Energy Production:		
Net Capacity Factor		60% of time at full extraction, another 25% at full condensing
Net Output in MWhs	12,636	
Annual Operating Expenses		
Annual Fuel Cost		
Fuel Required per Year (mmBtu)	220,143	Net of steam-only scenario
Initial year Fuel Price ($/mmBtu)	$4.24	
Annual O&M (expensed)	93,667	Escalates at inflation.
Site Maintenance	0	Escalates at inflation.
General & Administrative	0	Escalates at inflation.
Insurance	29,752	Escalates at inflation.
Land Lease	0	Escalates at inflation.
Other	0	Escalates at inflation.
Property Tax		
Project Hard Costs	5,950,432	Includes hard costs only (equipment and interconnection)
Assessed Value (%)	1.68%	Machinery and equipment is not assessed.
Assessed Value ($)	100,000	
Annual Decline in Assessed Value	1.00%	
Assessed Value Minimum %	0.00%	
Property Tax Rate	3.50%	
Revenue Assumptions		
Levelized Energy Price ($/MWh)	178.00	
% of Levelized Rate Escalating @ Infl.	0.0%	
Other Revenues (increases with inflation)	0	
Return Metrics		
20-year Equity IRR		
Pre-Tax	13.96%	
After-Tax	13.02%	
Average Debt Service Coverage Ratio	1.64	
Minimum Debt Service Coverage Ratio	1.42	
Minimum Annual After-Tax Equity Net Benefits	90,693	Includes tax benefit/(liability)
Tax Rates:		
Federal Income Tax	15.0%	
State/Provincial Income Tax		
Tax Rate 1		
Applicable Income (less than X)	400,000	
Tax Rate 1	4.5%	
Tax Rate 2 (for income greater than X)	16.0%	
Major Maintenance		Major Maintenance is funded through operations.
Replacement Occurs Every X Years	11	Major Maintenance can not occur more frequently than every five year
Cost of Replacement (Year 0 Dollars)	356,720	Escalates at inflation.
Tax Depreciation Classification of Spending	50% Double Declining	
Book Depreciation Classification of Spending	30-yr SL	
Residual Value		
Residual Value (Net Book Value)	421	
Book Depreciation Classifications		
20-yr SL	100.0%	
30-yr SL	0.0%	
37-yr SL	0.0%	
40-yr SL	0.0%	
Non-Depreciable	0.00%	
Total	100.0%	
Amount Allocated		
20-yr SL	8,183,352	
30-yr SL	0	
37-yr SL	0	
40-yr SL	0	
Non-Depreciable	0	
Total	8,183,352	

Operating Year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Generation (MWh)		12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636	12,636
		(73.9)																			
Partial Income Statement																					
Revenue																					
Standard Offer Price ($/MWh)																					
Fixed Price Component	100%	178.00	178.00	178.00	178.00	178.00	178.00	178.00	178.00	178.00	178.00	178.00	178.00	178.00	178.00	178.00	178.00	178.00	178.00	178.00	178.00
Escalating Price Component	0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Standard Offer Price		178.00	178.00	178.00	178.00	178.00	178.00	178.00	178.00	178.00	178.00	178.00	178.00	178.00	178.00	178.00	178.00	178.00	178.00	178.00	178.00
Revenues From Energy Production		2,249,261	2,249,261	2,249,261	2,249,261	2,249,261	2,249,261	2,249,261	2,249,261	2,249,261	2,249,261	2,249,261	2,249,261	2,249,261	2,249,261	2,249,261	2,249,261	2,249,261	2,249,261	2,249,261	2,249,261
Other Revenues		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Interest Revenue		21,692	22,445	23,198	23,951	24,704	25,457	26,210	26,964	27,717	28,470	29,223	21,692	21,692	21,692	21,692	10,762	10,762	10,762	10,762	10,762
Total Revenue		2,270,954	2,271,707	2,272,460	2,273,213	2,273,966	2,274,719	2,275,472	2,276,225	2,276,978	2,277,731	2,278,484	2,270,954	2,270,954	2,270,954	2,270,954	2,260,023	2,260,023	2,260,023	2,260,023	2,260,023
Expenses																					
Fuel Cost		(933,405)	(951,326)	(969,591)	(988,208)	(1,007,181)	(1,026,519)	(1,046,228)	(1,066,316)	(1,086,789)	(1,107,655)	(1,128,922)	(1,150,598)	(1,172,689)	(1,195,205)	(1,218,153)	(1,241,541)	(1,265,379)	(1,289,674)	(1,314,436)	(1,339,673)
O&M		(93,667)	(95,465)	(97,298)	(99,166)	(101,070)	(103,011)	(104,988)	(107,004)	(109,059)	(111,153)	(113,287)	(115,462)	(117,679)	(119,938)	(122,241)	(124,588)	(126,980)	(129,418)	(131,903)	(134,435)
Site Maintenance		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
G&A		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Insurance		(29,752)	(30,323)	(30,906)	(31,499)	(32,104)	(32,720)	(33,348)	(33,989)	(34,641)	(35,306)	(35,984)	(36,675)	(37,379)	(38,097)	(38,828)	(39,574)	(40,334)	(41,108)	(41,897)	(42,702)
Land Lease		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Property tax		(3,500)	(3,465)	(3,430)	(3,395)	(3,360)	(3,325)	(3,290)	(3,255)	(3,220)	(3,185)	(3,150)	(3,115)	(3,080)	(3,045)	(3,010)	(2,975)	(2,940)	(2,905)	(2,870)	(2,835)
Total		(1,060,323)	(1,080,579)	(1,101,225)	(1,122,268)	(1,143,715)	(1,165,575)	(1,187,855)	(1,210,564)	(1,233,709)	(1,257,299)	(1,281,343)	(1,305,850)	(1,330,827)	(1,356,285)	(1,382,232)	(1,408,678)	(1,435,633)	(1,463,105)	(1,491,106)	(1,519,645)
EBITDA		1,210,630	1,191,127	1,171,235	1,150,945	1,130,251	1,109,144	1,087,617	1,065,661	1,043,269	1,020,432	997,141	965,104	940,126	914,669	888,721	851,345	824,390	796,918	768,917	740,378
Equity Return																					
Cash																					
EBITDA		1,210,630	1,191,127	1,171,235	1,150,945	1,130,251	1,109,144	1,087,617	1,065,661	1,043,269	1,020,432	997,141	965,104	940,126	914,669	888,721	851,345	824,390	796,918	768,917	740,378
Plus: Release of Debt Service Reserve		0	0	0	0	0	0	0	0	0	0	0	0	0	0	569,289	0	0	0	0	0
Plus: Release of WC & Up-Front Maint Reserves		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	560,509
Plus: Release of Major Maintenance Reserves		0	0	0	0	0	0	0	0	0	0	431,441	0	0	0	0	0	0	0	0	0
Plus: Residual Value		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	421
Less: Major Maintenance Spending		0	0	0	0	0	0	0	0	0	0	(431,441)	0	0	0	0	0	0	0	0	0
Less: Major Maintenance Reserve Funding		(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	0	0	0	0	0	0	0	0	0
Less: Principal		(160,772)	(176,045)	(192,770)	(211,083)	(231,135)	(253,093)	(277,137)	(303,465)	(332,294)	(363,862)	(398,429)	(436,280)	(477,727)	(523,111)	(572,806)	(0)	(0)	(0)	(0)	(0)
Less: Interest		(466,451)	(451,178)	(434,453)	(416,140)	(396,087)	(374,130)	(350,086)	(323,758)	(294,928)	(263,361)	(228,794)	(190,943)	(149,496)	(104,112)	(54,417)	0	0	0	0	0
Total Cash		544,185	524,682	504,790	484,500	463,806	442,699	421,172	399,216	376,824	353,987	330,696	337,881	312,903	287,446	830,787	851,345	824,390	796,918	768,917	1,301,308
Equity Investment	(3,273,341)																				
Total Pre-Tax Equity Return	(3,273,341)	544,185	524,682	504,790	484,500	463,806	442,699	421,172	399,216	376,824	353,987	330,696	337,881	312,903	287,446	830,787	851,345	824,390	796,918	768,917	1,301,308
Pre-Tax Internal Rate of Return	13.96%																				
Taxable Income Benefit/(Liability)																					
EBITDA		1,210,630	1,191,127	1,171,235	1,150,945	1,130,251	1,109,144	1,087,617	1,065,661	1,043,269	1,020,432	997,141	965,104	940,126	914,669	888,721	851,345	824,390	796,918	768,917	740,378
Less: Interest		(466,451)	(451,178)	(434,453)	(416,140)	(396,087)	(374,130)	(350,086)	(323,758)	(294,928)	(263,361)	(228,794)	(190,943)	(149,496)	(104,112)	(54,417)	0	0	0	0	0
Less: Tax Depreciation		(1,413,228)	(2,119,842)	(1,059,921)	(529,960)	(264,980)	(132,490)	(66,245)	(33,123)	(16,561)	(8,281)	(219,861)	(109,930)	(54,965)	(27,483)	(13,741)	(6,871)	(3,435)	(1,718)	(859)	(429)
Taxable Income/(Loss)		(669,049)	(1,379,892)	(323,140)	204,844	469,183	602,524	671,286	708,781	731,779	748,791	548,486	664,231	735,665	783,074	820,563	844,474	820,955	795,200	768,058	739,948
Tax Benefit/(Liability)																					
State/Provincial 1		18,000	18,000	14,541	(9,218)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)
State/Provincial 2		43,048	156,783	0	0	(11,069)	(32,404)	(43,406)	(49,405)	(53,085)	(55,806)	(23,758)	(42,277)	(53,706)	(61,292)	(67,290)	(71,116)	(67,353)	(63,232)	(58,889)	(54,392)
Federal		100,357	206,984	48,471	(30,727)	(70,377)	(90,379)	(100,693)	(106,317)	(109,767)	(112,319)	(82,273)	(99,635)	(110,350)	(117,461)	(123,085)	(126,671)	(123,143)	(119,280)	(115,209)	(110,992)
Total Tax Benefit/(Liability)		161,405	381,767	63,012	(39,945)	(99,447)	(140,783)	(162,099)	(173,722)	(180,852)	(186,125)	(124,031)	(159,911)	(182,056)	(196,753)	(208,375)	(215,787)	(208,496)	(200,512)	(192,098)	(183,384)
Equity Investment	(3,273,341)																				
Total After-Tax Equity Return	(3,273,341)	705,590	906,449	567,802	444,556	364,359	301,917	259,073	225,494	195,973	167,862	206,665	177,969	130,847	90,693	622,412	635,558	615,894	596,406	576,819	1,117,924

Operating Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Debt																						
Loan Balance		4,910,011	4,749,239	4,573,194	4,380,425	4,169,342	3,938,206	3,685,113	3,407,976	3,104,510	2,772,216	2,408,354	2,009,924	1,573,644	1,095,917	572,806	(0)	(0)	(0)	(0)	(0)	(0)
Interest	9.50%	(4,498,333)	(466,451)	(451,178)	(434,453)	(416,140)	(396,087)	(374,130)	(350,086)	(323,758)	(294,928)	(263,361)	(228,794)	(190,943)	(149,496)	(104,112)	(54,417)	0	0	0	0	0
Principal		(4,910,011)	(160,772)	(176,045)	(192,770)	(211,083)	(231,135)	(253,093)	(277,137)	(303,465)	(332,294)	(363,862)	(398,429)	(436,280)	(477,727)	(523,111)	(572,806)	(0)	(0)	(0)	(0)	(0)
Annual payment			(627,223)	(627,223)	(627,223)	(627,223)	(627,223)	(627,223)	(627,223)	(627,223)	(627,223)	(627,223)	(627,223)	(627,223)	(627,223)	(627,223)	(627,223)	0	0	0	0	0
Debt Service Coverage Ratio																						
EBITDA			1,210,630	1,191,127	1,171,235	1,150,945	1,130,251	1,109,144	1,087,617	1,065,661	1,043,269	1,020,432	997,141	965,104	940,126	914,669	888,721	0	0	0	0	0
Less: Major Maintenance Reserve Funding			(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	0	0	0	0	0	0	0	0	0
Cash Available for Debt Service			1,171,408	1,151,905	1,132,013	1,111,723	1,091,029	1,069,922	1,048,395	1,026,439	1,004,047	981,210	957,919	965,104	940,126	914,669	888,721	0	0	0	0	0
P&I			627,223	627,223	627,223	627,223	627,223	627,223	627,223	627,223	627,223	627,223	627,223	627,223	627,223	627,223	627,223	0	0	0	0	0
Debt Service Coverage Ratio			1.87	1.84	1.80	1.77	1.74	1.71	1.67	1.64	1.60	1.56	1.53	1.54	1.50	1.46	1.42					
Average		1.64																				
Minimum		1.42																				
Reserve Accounts																						
Reserves Funded As Part of Capital Cost																						
Beginning Balance		0	1,129,798	1,129,798	1,129,798	1,129,798	1,129,798	1,129,798	1,129,798	1,129,798	1,129,798	1,129,798	1,129,798	1,129,798	1,129,798	1,129,798	1,129,798	560,509	560,509	560,509	560,509	560,509
Up-Front Maintenance Reserve		21,353	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(21,353)
Working Capital		539,156	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(539,156)
Debt Service Reserve		569,289	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(569,289)	0	0	0	0	0
Total		1,129,798	1,129,798	1,129,798	1,129,798	1,129,798	1,129,798	1,129,798	1,129,798	1,129,798	1,129,798	1,129,798	1,129,798	1,129,798	1,129,798	1,129,798	560,509	560,509	560,509	560,509	560,509	0
Major Maintenance Reserve Funded Through Operations																						
Beginning Balance			0	39,222	78,444	117,666	156,888	196,110	235,332	274,553	313,775	352,997	392,219	0	0	0	0	0	0	0	0	0
Funding			39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	0	0	0	0	0	0	0	0	0
Release of Funds			0	0	0	0	0	0	0	0	0	0	(431,441)	0	0	0	0	0	0	0	0	0
Ending Balance			39,222	78,444	117,666	156,888	196,110	235,332	274,553	313,775	352,997	392,219	0	0	0	0	0	0	0	0	0	0
Major Maintenance Costs																						
Occurrence 1		431,441	0	0	0	0	0	0	0	0	0	0	431,441	0	0	0	0	0	0	0	0	0
Occurrence 2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major Maintenance Funding																						
Occurrence 1		431,441	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	0	0	0	0	0	0	0	0	0
Occurrence 2		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Interest on Reserves			21,692	22,445	23,198	23,951	24,704	25,457	26,210	26,964	27,717	28,470	29,223	21,692	21,692	21,692	21,692	10,762	10,762	10,762	10,762	10,762
Property Tax Calculation																						
Original Assessed Value			100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
Annual Decline in Assessed Value			100.0%	99.0%	98.0%	97.0%	96.0%	95.0%	94.0%	93.0%	92.0%	91.0%	90.0%	89.0%	88.0%	87.0%	86.0%	85.0%	84.0%	83.0%	82.0%	81.0%
Annual Assessed Value			100,000	99,000	98,000	97,000	96,000	95,000	94,000	93,000	92,000	91,000	90,000	89,000	88,000	87,000	86,000	85,000	84,000	83,000	82,000	81,000
Property Tax Rate			3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
Property Tax Expense			3,500	3,465	3,430	3,395	3,360	3,325	3,290	3,255	3,220	3,185	3,150	3,115	3,080	3,045	3,010	2,975	2,940	2,905	2,870	2,835

Operating Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Calendar Year		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Tax Depreciation																						
Calendar Year Depreciation per Classification (%)																						
30% Double Declining			30.00%	21.00%	14.70%	10.29%	7.20%	5.04%	3.53%	2.47%	1.73%	1.21%	0.85%	0.59%	0.42%	0.29%	0.20%	0.14%	0.10%	0.07%	0.05%	0.03%
50% Double Declining			50.00%	25.00%	12.50%	6.25%	3.13%	1.56%	0.78%	0.39%	0.20%	0.10%	0.05%	0.02%	0.01%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
20-yr SL			2.50%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
40-yr SL			1.25%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Other			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Calendar Year Depreciation per Classification ($)																						
Year One Capital Cost Allocation	1,413,228		1,413,228	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30% Double Declining	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50% Double Declining	4,239,683		0	2,119,842	1,059,921	529,960	264,980	132,490	66,245	33,123	16,561	8,281	4,140	2,070	1,035	518	259	129	65	32	16	8
20-yr SL	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40-yr SL	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major Maintenance			0	0	0	0	0	0	0	0	0	0	215,721	107,860	53,930	26,965	13,483	6,741	3,371	1,685	843	421
Annual Depreciation	6,083,923		1,413,228	2,119,842	1,059,921	529,960	264,980	132,490	66,245	33,123	16,561	8,281	219,861	109,930	54,965	27,483	13,741	6,871	3,435	1,718	859	429
Major Maintenance																						
Timing of Spending																						
Occurrence 1			0	0	0	0	0	0	0	0	0	0	1	2	3	4	5	6	7	8	9	10
Occurrence 2			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Depreciation Classification	50% Double Declining																					
Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Depreciation Schedule		0.00%	50.00%	25.00%	12.50%	6.25%	3.13%	1.56%	0.78%	0.39%	0.20%	0.10%	0.05%	0.02%	0.01%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Depreciation Expense																						
	Expense	Depreciation Amount																				
Occurrence 1	431,441	431,020	0	0	0	0	0	0	0	0	0	0	215,721	107,860	53,930	26,965	13,483	6,741	3,371	1,685	843	421
Occurrence 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Operating Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Calendar Year		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Book Depreciation																						
Calendar Year Depreciation per Classification (%)																						
20-yr SL			5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
30-yr SL			3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%
37-yr SL			2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%
40-yr SL			2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Calendar Year Depreciation per Classification ($)																						
20-yr SL	8,183,352		409,168	409,168	409,168	409,168	409,168	409,168	409,168	409,168	409,168	409,168	409,168	409,168	409,168	409,168	409,168	409,168	409,168	409,168	409,168	409,168
30-yr SL	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37-yr SL	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40-yr SL	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major Maintenance			0	0	0	0	0	0	0	0	0	0	215,721	107,860	53,930	26,965	13,483	6,741	3,371	1,685	843	421
Annual Depreciation	8,614,372		409,168	409,168	409,168	409,168	409,168	409,168	409,168	409,168	409,168	409,168	624,888	517,028	463,098	436,133	422,650	415,909	412,538	410,853	410,010	409,589
Major Maintenance																						
Timing of Spending																						
Occurrence 1			0	0	0	0	0	0	0	0	0	0	1	2	3	4	5	6	7	8	9	10
Occurrence 2			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Depreciation Classification	30-yr SL																					
Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Depreciation Schedule		0.00%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%
Depreciation Expense																						
	Expense	Depreciation Amount																				
Occurrence 1	431,441	431,020	0	0	0	0	0	0	0	0	0	0	215,721	107,860	53,930	26,965	13,483	6,741	3,371	1,685	843	421
Occurrence 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Net Book Value																						
Beginning Balance			0	7,774,184	7,365,017	6,955,849	6,546,682	6,137,514	5,728,346	5,319,179	4,910,011	4,500,844	4,091,676	3,898,229	3,381,201	2,918,103	2,481,971	2,059,321	1,643,412	1,230,873	820,021	410,010
Original Book Value			8,183,352	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Plus: Major Maintenance			0	0	0	0	0	0	0	0	0	0	431,441	0	0	0	0	0	0	0	0	0
Less: Depreciation			(409,168)	(409,168)	(409,168)	(409,168)	(409,168)	(409,168)	(409,168)	(409,168)	(409,168)	(409,168)	(624,888)	(517,028)	(463,098)	(436,133)	(422,650)	(415,909)	(412,538)	(410,853)	(410,010)	(409,589)
Net Book Value			7,774,184	7,365,017	6,955,849	6,546,682	6,137,514	5,728,346	5,319,179	4,910,011	4,500,844	4,091,676	3,898,229	3,381,201	2,918,103	2,481,971	2,059,321	1,643,412	1,230,873	820,021	410,010	421

Scenarios in $2012

Component	Value for Steam-Only Scenario	Gross Value for CHP Scenario	Net Value for CHP Scenario
Project development	$42,134	$280,280	$238,146
Boiler installed cost ($)	$1,685,370	$3,057,600	$1,372,230
Turbine installed cost ($)	$0	$2,894,528	$2,894,528
Emission controls	$252,806	$305,760	$52,954
Condenser/Cooling Tower	$0	$1,630,720	$1,630,720
Equipment and Installation ($)	$1,938,176	$7,888,608	$5,950,432
Interconnection ($)	$0	$199,000	$199,000
Maintenance reserve ($)	$65,279	$86,632	$21,353
Working capital reserve ($)	$614,727	$1,153,883	$539,156
Debt service reserve ($)	$215,522	$784,811	$569,289
Debt Closing Costs & Fees	$110,685	$403,053	$292,368
Equity Closing Costs & Fees	$49,166	$179,135	$129,968
Interest During Construction	$92,238	$335,877	$243,640
Routine Maintenance ($/yr)	$130,557	$173,264	$42,707
Labour ($)	$305,760	$356,720	$50,960
General & Admin.	$0	$0	$0
Insurance	$9,691	$39,443	$29,752
Property taxes	$0	$3,567	
Year-10 Turbine overhaul ($)	$0	$152,880	$152,880
Year-10 Boiler overhaul ($)	$0	$203,840	$203,840
Annual Fuel Use (mmBtu/yr)	181,294	401,437	220,143
Annual Fuel Cost ($/yr)	$783,445	$1,734,771	$951,326
Plant capacity factor (%) - extract	60%	60%	60%
Plant capacity factor (%) - full condensing		25%	25%
NPV of new boiler($2M) in yr 10	$1,685,370		
Steam Load (mmBtu/hr)	23.8		
Boiler size (lb/hr)	20,000	30,000	
Boiler rating (psi)	75-100	600	
Turbine type	N/A	Condensing	
Turbine size (MW)	N/A	2.05	
Total Project Costs ($)			
Total Project Costs ($/kW)			

Actual Loan Value:	$1,876,756	$6,786,767	$4,910,011
Actual Equity Amount:	$1,251,171	$4,524,511	

Calculation of fuel costs:	Extraction	Condensing
Turbine size (kW):	1550	2050
Boiler efficiency (%)	69%	69%
Adjusted turbine size (kW):		
Adjusted KWhs:		
Fuel Use (Btu):		
Fuel Use (mmBtu):	283,367	118,070

Calculation of heat input:	
5,256	hrs
125,093	process heat (mmBtu)
181,294	heat input (mmBtu)

Efficiency:	42%	13%
Steam energy	125092.8	
Electric Energy	43115	15318
Fuel Use	401437	118070

Nova Scotia COMFIT Model — **Biomass CHP (condensing turbine; new boiler in steam-only scenario in year 10)** — **Synapse U-6 All**

Assumptions		**Notes:**
General Inflation Factor (revenue and expenses)	1.92%	From NSPI 2009 IRP Update
Capital Costs (Uses of Funds)		
Development	259,213	Net of steam-only scenario
Equipment & Installation	12,746,039	Net of steam-only scenario
Interconnection	199,000	Net of steam-only scenario
Reserves		
Up-Front Maintenance	53,993	Net of steam-only scenario
Working Capital	898,859	Net of steam-only scenario
Debt Service Reserve	(213,498)	Net of steam-only scenario
Financing		
Debt Closing Costs & Fees	(109,646)	Net of steam-only scenario
Equity Closing Costs & Fees	590,200	Net of steam-only scenario
Interest During Construction	(91,371)	Net of steam-only scenario
Total Project Cost	14,332,788	Net of steam-only scenario
Total Project Cost ($/kW)	6,992	Net of steam-only scenario
Initial Reserve Account Sizing		
Upfront Maintenance (months of Year 1 O&M)	6	6991603.771
Working Capital (months of Year 1 OPEX)	6	
Debt Service Reserve (months of P&I)	6	
Capital Structure (Sources of Funds)		
Amount ($)		
Grants (net value)	0	
Debt	0	
Equity	14,332,788	
Total Sources of Funds	14,332,788	
Amount (%)		
Grants	0.0%	
Debt	0.0%	
Equity	100.0%	
Total Sources of Funds	100.0%	
Grants:		
State and Federal Incentives	0	
State/Provincial Tax 1	0	
State/Provincial Tax 2	0	
Federal tax	0	
Net Value of Grants	0	
Debt Terms		
Amount	0	(Based on target debt/equity ratio)
Loan Life	15	
Interest Rate	9.50%	
Up-Front Fee (%)	1.00%	
Up-Front Fee ($)	0	
Closing Costs	0	(5% of loan value)
Tax Depreciation Allocation		
% of Total Project Cost		
30% Double Declining	0.0%	
50% Double Declining	84.5%	95% of equipment and installation
20-yr SL	0.0%	
40-yr SL	0.0%	
Other	0.0%	
Non-Depreciable	15.52%	Interconnection, development, reserves and f
Total	100.0%	
Amount Allocated		
30% Double Declining	0	
50% Double Declining	12,108,737	
20-yr SL	0	
40-yr SL	0	
Other	0	
Non-Depreciable	2,224,051	
Total	14,332,788	
Year One Depreciation		
Year One Percent	25.0%	(Based on the "half year rule")
Year One Amount	3,027,184	

Assumptions:		**Notes:**
Operating Inputs		
Net Generator Capacity (MW)	2.05	1.55 MW at full extraction, 2.05 MW at full condensing
Energy Production:		
Net Capacity Factor		60% of time at full extraction, another 25% at full condensing
Net Output in MWhs	13,534	
Annual Operating Expenses		
Annual Fuel Cost		
Fuel Required per Year (mmBtu)	334,403	Net of steam-only scenario
Initial year Fuel Price ($/mmBtu)	$4.24	
Annual O&M (expensed)	285,326	Escalates at inflation.
Site Maintenance	0	Escalates at inflation.
General & Administrative	0	Escalates at inflation.
Insurance	63,730	Escalates at inflation.
Land Lease	0	Escalates at inflation.
Parasitic Loads	151,583	14% of generaton priced at $80 per MWh.
Property Tax		
Project Hard Costs	12,746,039	
Assessed Value (%)	0.78%	Machinery and equipment is not assessed.
Assessed Value ($)	100,000	
Annual Decline in Assessed Value	1.00%	
Assessed Value Minimum %	0.00%	
Property Tax Rate	3.50%	
Revenue Assumptions		
Levelized Energy Price ($/MWh)	384.20	
% of Levelized Rate Escalating @ Infl.	0.0%	
Other Revenues (increases with inflation)	0	
Return Metrics		
20-year Equity IRR		
Pre-Tax	21.10%	
After-Tax	17.50%	
Average Debt Service Coverage Ratio	#DIV/0!	
Minimum Debt Service Coverage Ratio	#DIV/0!	
Minimum Annual After-Tax Equity Net Benefits	1,704,854	Includes tax benefit/(liability)
Tax Rates:		
Federal Income Tax	15.0%	
State/Provincial Income Tax		
Tax Rate 1		
Applicable Income (less than X)	400,000	
Tax Rate 1	4.5%	
Tax Rate 2 (for income greater than X)	16.0%	
Major Maintenance		
Replacement Occurs Every X Years	11	
Cost of Replacement (Year 0 Dollars)	356,720	
Tax Depreciation Classification of Spending	50% Double Declining	
Book Depreciation Classification of Spending	30-yr SL	
Residual Value		
Residual Value (Net Book Value)	421	
Book Depreciation Classifications		
20-yr SL	100.0%	
30-yr SL	0.0%	
37-yr SL	0.0%	
40-yr SL	0.0%	
Non-Depreciable	0.00%	
Total	100.0%	
Amount Allocated		
20-yr SL	14,332,788	
30-yr SL	0	
37-yr SL	0	
40-yr SL	0	
Non-Depreciable	0	
Total	14,332,788	

Operating Year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Generation (MWh)		13,534	13,534	13,534	13,534	13,534	13,534	13,534	13,534	13,534	13,534	13,534	13,534	13,534	13,534	13,534	13,534	13,534	13,534	13,534	13,534
		(104.8)																			
Partial Income Statement																					
Revenue																					
Standard Offer Price ($/MWh)																					
Fixed Price Component	100%	384.20	384.20	384.20	384.20	384.20	384.20	384.20	384.20	384.20	384.20	384.20	384.20	384.20	384.20	384.20	384.20	384.20	384.20	384.20	384.20
Escalating Price Component	0%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Standard Offer Price		384.20	384.20	384.20	384.20	384.20	384.20	384.20	384.20	384.20	384.20	384.20	384.20	384.20	384.20	384.20	384.20	384.20	384.20	384.20	384.20
Revenues From Energy Production		5,199,840	5,199,840	5,199,840	5,199,840	5,199,840	5,199,840	5,199,840	5,199,840	5,199,840	5,199,840	5,199,840	5,199,840	5,199,840	5,199,840	5,199,840	5,199,840	5,199,840	5,199,840	5,199,840	5,199,840
Other Revenues		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Interest Revenue		14,196	14,949	15,702	16,455	17,208	17,961	18,714	19,467	20,220	20,973	21,726	14,196	14,196	14,196	14,196	18,295	18,295	18,295	18,295	18,295
Total Revenue		5,214,035	5,214,788	5,215,541	5,216,294	5,217,047	5,217,801	5,218,554	5,219,307	5,220,060	5,220,813	5,221,566	5,214,035	5,214,035	5,214,035	5,214,035	5,218,134	5,218,134	5,218,134	5,218,134	5,218,134
Expenses																					
Fuel Cost		(1,417,871)	(1,445,094)	(1,472,840)	(1,501,118)	(1,529,940)	(1,559,315)	(1,589,253)	(1,619,767)	(1,650,867)	(1,682,563)	(1,714,868)	(1,747,794)	(1,781,351)	(1,815,553)	(1,850,412)	(1,885,940)	(1,922,150)	(1,959,055)	(1,996,669)	(2,035,005)
O&M		(285,326)	(290,804)	(296,388)	(302,078)	(307,878)	(313,790)	(319,814)	(325,955)	(332,213)	(338,592)	(345,093)	(351,718)	(358,471)	(365,354)	(372,369)	(379,518)	(386,805)	(394,232)	(401,801)	(409,516)
Site Maintenance		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
G&A		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Insurance		(63,730)	(64,954)	(66,201)	(67,472)	(68,767)	(70,088)	(71,433)	(72,805)	(74,203)	(75,628)	(77,080)	(78,560)	(80,068)	(81,605)	(83,172)	(84,769)	(86,396)	(88,055)	(89,746)	(91,469)
Land Lease		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Parasitic Loads		(151,583)	(154,493)	(157,460)	(160,483)	(163,564)	(166,705)	(169,905)	(173,168)	(176,492)	(179,881)	(183,335)	(186,855)	(190,442)	(194,099)	(197,826)	(201,624)	(205,495)	(209,441)	(213,462)	(217,560)
Property tax		(3,500)	(3,465)	(3,430)	(3,395)	(3,360)	(3,325)	(3,290)	(3,255)	(3,220)	(3,185)	(3,150)	(3,115)	(3,080)	(3,045)	(3,010)	(2,975)	(2,940)	(2,905)	(2,870)	(2,835)
Total		(1,922,010)	(1,958,810)	(1,996,318)	(2,034,547)	(2,073,510)	(2,113,222)	(2,153,697)	(2,194,949)	(2,236,995)	(2,279,848)	(2,323,525)	(2,368,041)	(2,413,413)	(2,459,656)	(2,506,788)	(2,554,826)	(2,603,786)	(2,653,688)	(2,704,548)	(2,756,385)
EBITDA		3,292,025	3,255,978	3,219,223	3,181,748	3,143,538	3,104,579	3,064,857	3,024,357	2,983,065	2,940,964	2,898,041	2,845,994	2,800,622	2,754,379	2,707,247	2,663,308	2,614,348	2,564,447	2,513,587	2,461,749
Equity Return																					
Cash																					
EBITDA		3,292,025	3,255,978	3,219,223	3,181,748	3,143,538	3,104,579	3,064,857	3,024,357	2,983,065	2,940,964	2,898,041	2,845,994	2,800,622	2,754,379	2,707,247	2,663,308	2,614,348	2,564,447	2,513,587	2,461,749
Plus: Release of Debt Service Reserve		0	0	0	0	0	0	0	0	0	0	0	0	0	0	(213,498)	0	0	0	0	0
Plus: Release of WC & Up-Front Maint Reserves		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	952,851
Plus: Release of Major Maintenance Reserves		0	0	0	0	0	0	0	0	0	0	431,441	0	0	0	0	0	0	0	0	0
Plus: Residual Value		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	421
Less: Major Maintenance Spending		0	0	0	0	0	0	0	0	0	0	(431,441)	0	0	0	0	0	0	0	0	0
Less: Major Maintenance Reserve Funding		(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	0	0	0	0	0	0	0	0	0
Less: Principal		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Less: Interest		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Cash		3,252,803	3,216,756	3,180,001	3,142,526	3,104,316	3,065,357	3,025,635	2,985,135	2,943,843	2,901,742	2,858,819	2,845,994	2,800,622	2,754,379	2,493,749	2,663,308	2,614,348	2,564,447	2,513,587	3,415,022
Equity Investment	(14,332,788)																				
Total Pre-Tax Equity Return	(14,332,788)	3,252,803	3,216,756	3,180,001	3,142,526	3,104,316	3,065,357	3,025,635	2,985,135	2,943,843	2,901,742	2,858,819	2,845,994	2,800,622	2,754,379	2,493,749	2,663,308	2,614,348	2,564,447	2,513,587	3,415,022
Pre-Tax Internal Rate of Return	21.10%																				
Taxable Income Benefit/(Liability)																					
EBITDA		3,292,025	3,255,978	3,219,223	3,181,748	3,143,538	3,104,579	3,064,857	3,024,357	2,983,065	2,940,964	2,898,041	2,845,994	2,800,622	2,754,379	2,707,247	2,663,308	2,614,348	2,564,447	2,513,587	2,461,749
Less: Interest		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Less: Tax Depreciation		(3,027,184)	(4,540,776)	(2,270,388)	(1,135,194)	(567,597)	(283,799)	(141,899)	(70,950)	(35,475)	(17,737)	(224,589)	(112,295)	(56,147)	(28,074)	(14,037)	(7,018)	(3,509)	(1,755)	(877)	(439)
Taxable Income/(Loss)		264,841	(1,284,799)	948,835	2,046,554	2,575,941	2,820,780	2,922,958	2,953,408	2,947,590	2,923,227	2,673,451	2,733,699	2,744,475	2,726,305	2,693,210	2,656,290	2,610,839	2,562,692	2,512,709	2,461,311
Tax Benefit/(Liability)																					
State/Provincial 1		(11,918)	18,000	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)	(18,000)
State/Provincial 2		0	141,568	(87,814)	(263,449)	(348,151)	(387,325)	(403,673)	(408,545)	(407,614)	(403,716)	(363,752)	(373,392)	(375,116)	(372,209)	(366,914)	(361,006)	(353,734)	(346,031)	(338,033)	(329,810)
Federal		(39,726)	192,720	(142,325)	(306,983)	(386,391)	(423,117)	(438,444)	(443,011)	(442,139)	(438,484)	(401,018)	(410,055)	(411,671)	(408,946)	(403,981)	(398,444)	(391,626)	(384,404)	(376,906)	(369,197)
Total Tax Benefit/(Liability)		(51,644)	352,288	(248,139)	(588,432)	(752,542)	(828,442)	(860,117)	(869,556)	(867,753)	(860,200)	(782,770)	(801,447)	(804,787)	(799,155)	(788,895)	(777,450)	(763,360)	(748,435)	(732,940)	(717,006)
Equity Investment	(14,332,788)																				
Total After-Tax Equity Return	(14,332,788)	3,201,159	3,569,043	2,931,862	2,554,094	2,351,774	2,236,915	2,165,518	2,115,579	2,076,090	2,041,542	2,076,049	2,044,547	1,995,835	1,955,224	1,704,854	1,885,859	1,850,988	1,816,012	1,780,647	2,698,016

Operating Year	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Debt																					
Loan Balance	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Interest 9.50%	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Principal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Annual payment		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Debt Service Coverage Ratio																					
EBITDA		3,292,025	3,255,978	3,219,223	3,181,748	3,143,538	3,104,579	3,064,857	3,024,357	2,983,065	2,940,964	2,898,041	2,845,994	2,800,622	2,754,379	2,707,247	0	0	0	0	0
Less: Major Maintenance Reserve Funding		(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	(39,222)	0	0	0	0	0	0	0	0	0
Cash Available for Debt Service		3,252,803	3,216,756	3,180,001	3,142,526	3,104,316	3,065,357	3,025,635	2,985,135	2,943,843	2,901,742	2,858,819	2,845,994	2,800,622	2,754,379	2,707,247	0	0	0	0	0
P&I		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Debt Service Coverage Ratio		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!					
Average	#DIV/0!																				
Minimum	#DIV/0!																				
Reserve Accounts																					
Reserves Funded As Part of Capital Cost																					
Beginning Balance	0	739,353	739,353	739,353	739,353	739,353	739,353	739,353	739,353	739,353	739,353	739,353	739,353	739,353	739,353	739,353	952,851	952,851	952,851	952,851	952,851
Up-Front Maintenance Reserve	53,993	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(53,993)
Working Capital	898,859	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	(898,859)
Debt Service Reserve	(213,498)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	213,498	0	0	0	0	0
Total	739,353	739,353	739,353	739,353	739,353	739,353	739,353	739,353	739,353	739,353	739,353	739,353	739,353	739,353	739,353	952,851	952,851	952,851	952,851	952,851	0
Major Maintenance Reserve Funded Through Operations																					
Beginning Balance		0	39,222	78,444	117,666	156,888	196,110	235,332	274,553	313,775	352,997	392,219	0	0	0	0	0	0	0	0	0
Funding		39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	0	0	0	0	0	0	0	0	0
Release of Funds		0	0	0	0	0	0	0	0	0	0	(431,441)	0	0	0	0	0	0	0	0	0
Ending Balance		39,222	78,444	117,666	156,888	196,110	235,332	274,553	313,775	352,997	392,219	0	0	0	0	0	0	0	0	0	0
Major Maintenance Costs																					
Occurrence 1	431,441	0	0	0	0	0	0	0	0	0	0	431,441	0	0	0	0	0	0	0	0	0
Occurrence 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major Maintenance Funding																					
Occurrence 1	431,441	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	39,222	0	0	0	0	0	0	0	0	0
Occurrence 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Interest on Reserves		14,196	14,949	15,702	16,455	17,208	17,961	18,714	19,467	20,220	20,973	21,726	14,196	14,196	14,196	14,196	18,295	18,295	18,295	18,295	18,295
Property Tax Calculation																					
Original Assessed Value		100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000	100,000
Annual Decline in Assessed Value		100.0%	99.0%	98.0%	97.0%	96.0%	95.0%	94.0%	93.0%	92.0%	91.0%	90.0%	89.0%	88.0%	87.0%	86.0%	85.0%	84.0%	83.0%	82.0%	81.0%
Annual Assessed Value		100,000	99,000	98,000	97,000	96,000	95,000	94,000	93,000	92,000	91,000	90,000	89,000	88,000	87,000	86,000	85,000	84,000	83,000	82,000	81,000
Property Tax Rate		3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%	3.50%
Property Tax Expense		3,500	3,465	3,430	3,395	3,360	3,325	3,290	3,255	3,220	3,185	3,150	3,115	3,080	3,045	3,010	2,975	2,940	2,905	2,870	2,835

Operating Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Calendar Year		2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030
Tax Depreciation																						
Calendar Year Depreciation per Classification (%)																						
30% Double Declining			30.00%	21.00%	14.70%	10.29%	7.20%	5.04%	3.53%	2.47%	1.73%	1.21%	0.85%	0.59%	0.42%	0.29%	0.20%	0.14%	0.10%	0.07%	0.05%	0.03%
50% Double Declining			50.00%	25.00%	12.50%	6.25%	3.13%	1.56%	0.78%	0.39%	0.20%	0.10%	0.05%	0.02%	0.01%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
20-yr SL			2.50%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
40-yr SL			1.25%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Other			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Calendar Year Depreciation per Classification ($)																						
Year One Capital Cost Allocation	3,027,184		3,027,184	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
30% Double Declining	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50% Double Declining	9,081,553		0	4,540,776	2,270,388	1,135,194	567,597	283,799	141,899	70,950	35,475	17,737	8,869	4,434	2,217	1,109	554	277	139	69	35	17
20-yr SL	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40-yr SL	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major Maintenance			0	0	0	0	0	0	0	0	0	0	215,721	107,860	53,930	26,965	13,483	6,741	3,371	1,685	843	421
Annual Depreciation	12,539,740		3,027,184	4,540,776	2,270,388	1,135,194	567,597	283,799	141,899	70,950	35,475	17,737	224,589	112,295	56,147	28,074	14,037	7,018	3,509	1,755	877	439
Major Maintenance																						
Timing of Spending																						
Occurrence 1			0	0	0	0	0	0	0	0	0	0	1	2	3	4	5	6	7	8	9	10
Occurrence 2			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Depreciation Classification	Declining																					
Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Depreciation Schedule		0.00%	50.00%	25.00%	12.50%	6.25%	3.13%	1.56%	0.78%	0.39%	0.20%	0.10%	0.05%	0.02%	0.01%	0.01%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Depreciation Expense																						
	Expense	Amount																				
Occurrence 1	431,441	431,020	0	0	0	0	0	0	0	0	0	0	215,721	107,860	53,930	26,965	13,483	6,741	3,371	1,685	843	421
Occurrence 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Operating Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Book Depreciation																						
Calendar Year Depreciation per Classification (%)																						
20-yr SL			5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%	5.00%
30-yr SL			3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%
37-yr SL			2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%	2.70%
40-yr SL			2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%	2.50%
Calendar Year Depreciation per Classification ($)																						
20-yr SL	14,332,788		716,639	716,639	716,639	716,639	716,639	716,639	716,639	716,639	716,639	716,639	716,639	716,639	716,639	716,639	716,639	716,639	716,639	716,639	716,639	716,639
30-yr SL	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37-yr SL	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
40-yr SL	0		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Major Maintenance			0	0	0	0	0	0	0	0	0	0	215,721	107,860	53,930	26,965	13,483	6,741	3,371	1,685	843	421
Annual Depreciation	14,763,808		716,639	716,639	716,639	716,639	716,639	716,639	716,639	716,639	716,639	716,639	932,360	824,500	770,570	743,604	730,122	723,381	720,010	718,325	717,482	717,061
Major Maintenance																						
Timing of Spending																						
Occurrence 1			0	0	0	0	0	0	0	0	0	0	1	2	3	4	5	6	7	8	9	10
Occurrence 2			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Depreciation Classification	30-yr SL																					
Year		0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Depreciation Schedule		0.00%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%	3.33%
Depreciation Expense																						
	Expense	Depreciation Amount																				
Occurrence 1	431,441	431,020	0	0	0	0	0	0	0	0	0	0	215,721	107,860	53,930	26,965	13,483	6,741	3,371	1,685	843	421
Occurrence 2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Occurrence 4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Net Book Value																						
Beginning Balance			0	13,616,148	12,899,509	12,182,870	11,466,230	10,749,591	10,032,951	9,316,312	8,599,673	7,883,033	7,166,394	6,665,475	5,840,975	5,070,406	4,326,801	3,596,679	2,873,299	2,153,289	1,434,964	717,482
Original Book Value			14,332,788	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Plus: Major Maintenance			0	0	0	0	0	0	0	0	0	0	431,441	0	0	0	0	0	0	0	0	0
Less: Depreciation			(716,639)	(716,639)	(716,639)	(716,639)	(716,639)	(716,639)	(716,639)	(716,639)	(716,639)	(716,639)	(932,360)	(824,500)	(770,570)	(743,604)	(730,122)	(723,381)	(720,010)	(718,325)	(717,482)	(717,061)
Net Book Value			13,616,148	12,899,509	12,182,870	11,466,230	10,749,591	10,032,951	9,316,312	8,599,673	7,883,033	7,166,394	6,665,475	5,840,975	5,070,406	4,326,801	3,596,679	2,873,299	2,153,289	1,434,964	717,482	421

Biomass CHP Cost Scenarios

Scenarios in $2012

Component	Value for Steam-Only Scenario	Gross Value for CHP Scenario	Net Value for CHP Scenario
Project developmen	$21,067	$280,280	$259,213
Boiler installed cost ($	$842,685	$3,057,600	$2,214,915
Turbine installed cost ($)	$0	$2,894,528	$2,894,528
Emission controls	$126,403	$305,760	$179,357
Condenser/Cooling Towe	$0	$1,630,720	$1,630,720
Equipment and Installation ($	$969,088	$13,715,127	$12,746,039
Interconnection ($)	$0	$199,000	$199,000
Maintenance reserve ($)	$32,639	$86,632	$53,993
Working capital reserve ($	$251,307	$1,150,166	$898,859
Debt service reserve ($	$213,498	$0	-$213,498
Debt Closing Costs & Fees	$109,646	$0	-$109,646
Equity Closing Costs & Fees	$48,718	$638,917	$590,200
Interest During Constructior	$91,371	$0	-$91,371
Routine Maintenance ($/yr	$65,279	$173,264	$107,985
Labour ($)	$40,768	$218,109	$177,341
General & Admin.	$0	$0	$0
Insurance	$4,845	$68,576	$63,730
Property taxes	$0	$3,567	
Year-10 Turbine overhaul ($)	$0	$152,880	$152,880
Year-10 Boiler overhaul ($	$0	$203,840	$203,840
Annual Fuel Use (mmBtu/yr	90,647	425,050	334,403
Annual Fuel Cost ($/yr)	$391,722	$1,836,816	$1,445,094
Plant capacity factor (%) - extract	60%	60%	60%
Plant capacity factor (%) - full condensin		25%	25%
NPV of new boiler($2M) in yr 1(	$1,685,370		
Steam Load (mmBtu/hr)	23.8	22	22
Boiler size (lb/hr)	20,000	30,000	
Boiler rating (psi)	75-100	600	
Turbine type	N/A	Condensing	
Turbine size (MW)	N/A	2.05	
Total Project Costs ($)	$1,737,334	$16,070,122	$14,332,788
Total Project Costs ($/kW)		$7,839	$6,992
Actual Loan Value	$1,042,401	$0	-$1,042,401
Actual Equity Amount	$694,934	$16,070,122	

Capacity Factor	
Steam	60%
Condensing	30%

Calculation of fuel costs:	extractior	Condensing
turbine size (kW):	1550	2050
Boiler efficiency (%)	69%	69%
Adjusted turbine size (kW):		
Adjusted KWhs:		
Fuel Use (Btu):		
Fuel Use (mmBtu):	283,367	141,683

Calculation of heat input:	
5,256	hrs
125,093	process heat (mmBtu)
181,294	heat input (mmBtu)

Efficiency:	26%	13%
Steam energy	62546.4	
Electric Energy	46179	18382
Fuel Use	425050	141683

Nova Scotia COMFIT Model | **Biomass CHP (condensing turbine; new boiler in steam-only scenario in year 10)** | **Synapse U-6 All--No Fuel**

Assumptions		**Notes:**
General Inflation Factor (revenue and expenses)	1.92%	From NSPI 2009 IRP Update
Capital Costs (Uses of Funds)		
Development	259,213	Net of steam-only scenario
Equipment & Installation	12,746,039	Net of steam-only scenario
Interconnection	199,000	Net of steam-only scenario
Reserves		
Up-Front Maintenance	53,993	Net of steam-only scenario
Working Capital	898,859	Net of steam-only scenario
Debt Service Reserve	(213,498)	Net of steam-only scenario
Financing		
Debt Closing Costs & Fees	(109,646)	Net of steam-only scenario
Equity Closing Costs & Fees	590,200	Net of steam-only scenario
Interest During Construction	(91,371)	Net of steam-only scenario
Total Project Cost	14,332,788	Net of steam-only scenario
Total Project Cost ($/kW)	6,992	Net of steam-only scenario
Initial Reserve Account Sizing		
Upfront Maintenance (months of Year 1 O&M)	6	6991603.771
Working Capital (months of Year 1 OPEX)	6	
Debt Service Reserve (months of P&I)	6	
Capital Structure (Sources of Funds)		
Amount ($)		
Grants (net value)	0	
Debt	0	
Equity	14,332,788	
Total Sources of Funds	14,332,788	
Amount (%)		
Grants	0.0%	
Debt	0.0%	
Equity	100.0%	
Total Sources of Funds	100.0%	
Grants:		
State and Federal Incentives	0	
State/Provincial Tax 1	0	
State/Provincial Tax 2	0	
Federal tax	0	
Net Value of Grants	0	
Debt Terms		
Amount	0	(Based on target debt/equity ratio)
Loan Life	15	
Interest Rate	9.50%	
Up-Front Fee (%)	1.00%	
Up-Front Fee ($)	0	
Closing Costs	0	(5% of loan value)
Tax Depreciation Allocation		
% of Total Project Cost		
30% Double Declining	0.0%	
50% Double Declining	84.5%	95% of equipment and installation
20-yr SL	0.0%	
40-yr SL	0.0%	
Other	0.0%	
Non-Depreciable	15.52%	Interconnection, development, reserves and f
Total	100.0%	
Amount Allocated		
30% Double Declining	0	
50% Double Declining	12,108,737	
20-yr SL	0	
40-yr SL	0	
Other	0	
Non-Depreciable	2,224,051	
Total	14,332,788	
Year One Depreciation		
Year One Percent	25.0%	(Based on the "half year rule")
Year One Amount	3,027,184	

Assumptions:		**Notes:**
Operating Inputs		
Net Generator Capacity (MW)	2.05	1.55 MW at full extraction, 2.05 MW at full condensing
Energy Production:		
Net Capacity Factor		60% of time at full extraction, another 25% at full condensing
Net Output in MWhs	13,534	
Annual Operating Expenses		
Annual Fuel Cost		
Fuel Required per Year (mmBtu)	0	Net of steam-only scenario
Initial year Fuel Price ($/mmBtu)	$0.00	
Annual O&M (expensed)	285,326	Escalates at inflation.
Site Maintenance	0	Escalates at inflation.
General & Administrative	0	Escalates at inflation.
Insurance	63,730	Escalates at inflation.
Land Lease	0	Escalates at inflation.
Parasitic Loads	151,583	14% of generaton priced at $80 per MWh.
Property Tax		
Project Hard Costs	12,746,039	
Assessed Value (%)	0.78%	Machinery and equipment is not assessed.
Assessed Value ($)	100,000	
Annual Decline in Assessed Value	1.00%	
Assessed Value Minimum %	0.00%	
Property Tax Rate	3.50%	
Revenue Assumptions		
Levelized Energy Price ($/MWh)	269.00	
% of Levelized Rate Escalating @ Infl.	0.0%	
Other Revenues (increases with inflation)	0	
Return Metrics		
20-year Equity IRR		
Pre-Tax	20.98%	
After-Tax	17.50%	
Average Debt Service Coverage Ratio	#DIV/0!	
Minimum Debt Service Coverage Ratio	#DIV/0!	
Minimum Annual After-Tax Equity Net Benefits	1,905,831	Includes tax benefit/(liability)
Tax Rates:		
Federal Income Tax	15.0%	
State/Provincial Income Tax		
Tax Rate 1		
Applicable Income (less than X)	400,000	
Tax Rate 1	4.5%	
Tax Rate 2 (for income greater than X)	16.0%	
Major Maintenance		
Replacement Occurs Every X Years	11	
Cost of Replacement (Year 0 Dollars)	356,720	
Tax Depreciation Classification of Spending	50% Double Declining	
Book Depreciation Classification of Spending	30-yr SL	
Residual Value		
Residual Value (Net Book Value)	421	
Book Depreciation Classifications		
20-yr SL	100.0%	
30-yr SL	0.0%	
37-yr SL	0.0%	
40-yr SL	0.0%	
Non-Depreciable	0.00%	
Total	100.0%	
Amount Allocated		
20-yr SL	14,332,788	
30-yr SL	0	
37-yr SL	0	
40-yr SL	0	
Non-Depreciable	0	
Total	14,332,788	