NORTH AMERICAN WATER OFFICE

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Prepared by C-BED INITIATIVE

HF 357 Talking Points SF 399

1. This legislation enables Minnesotans to benefit directly from ownership of renewable electric generation projects.

Every MW of wind generation capacity in Minnesota will produce about $200,000 worth of electricity per year. Many thousands of megawatts of wind generation capacity will be developed in Minnesota. This legislation enables a much larger portion of that $200,000 per year per MW to do more to enhance Minnesota's economy.

The attached Pie Charts compare the percentage of the $200,000 per MW per year that stays and circulates in Minnesota for a C-BED project of 5 MW or less with the percentage that stays and circulates in Minnesota from a project owned by a large outside corporation.

For C-BED Projects, about 83.2% of the money will stay and contribute to the wealth of Minnesota. Even more will stay if the Equity Partner and insurance company are from Minnesota. **For the outside corporate project, about 92% of the money leaves Minnesota immediately, no matter what.**

2. This legislation requires the MN PUC to establish, through a public and stakeholder proceeding, standardized contract language for each class of C-BED project:
   - 5 MW or less
   - Greater than 5 MW.

Standard contracts are necessary to reduce transaction costs, and to simplify and expedite the transaction process. Presently, the simple business transaction of energy for money over time gets encumbered by extensive and counter-productive contract negotiations, on a project-by-project basis. The standard contract provisions will cause the contractual agreement to comport with the relatively simple business transaction

3. This legislation provides for C-BED Projects of 5 MW or less to receive a market-derived C-BED Tariff that is determined by a net present value (NPV) calculation of the previous year's MISO Average Day Ahead Market price and the purchasing utility's filed discount rate, over the term of the contract which must extend at least 20 years.

The attached hand out provides a spread-sheet illustration of a net present value calculation for a C-BED revenue stream over a 20 year period, and compares it to the net present value of the revenue stream required by a typical merchant project contract. **The NPV of C-BED Community Value Pricing costs utility ratepayers virtually the same amount of money as the NPV of the revenue stream required by a typical outside corporate project that escalates the price by 2% per year.**

4. Prior to the end of 2011, Minnesota utilities must contract with C-BED projects of 5 MW or less until the aggregated capacity of such installed projects in Minnesota reaches 200 MW.

5. Utilities must contract with C-BED projects of whatever size until the aggregated capacity of such installed projects in Minnesota reaches 800 MW, prior to contracting with any other project developer.

6. Each project that receives the tariff price for projects of 5 MW or less must make an annual maintenance deposit to ensure the project will provide declining cost power to the system during the out-years of the contract.

7. No individual is allowed to own a disproportionate amount of C-BED generation capacity that receives the tariff for projects that are 5 MW or less.

8. The Community Value Price for power from project that are 5 MW or less provides major public and systems benefits that include:

- an overall increase in the efficiency of the transmission system by:
  a) reducing and delaying new transmission infrastructure costs because strategically sized and located new generation takes advantage of "sweet spots" where energy can be collected and delivered to load utilizing the existing system;
  b) enabling new transmission infrastructure required by the next increments of new generation outlet capacity, for system reliability, and for local load serving capacity to be developed relatively quickly, inexpensively, and more intelligently; and,
  c) reducing system line losses as more generation is located closer to load.
- a foundation throughout the state for developing the electrical system that will be required by a transportation system that increasingly relies on plug-in hybrid and electric vehicles.
- enhanced national security as the electrical generation and transmission system is dispersed and de-centralized.

C-BED

Discount Rate (DR) = 0.0625

Contract Year	Guaranteed Annual Price Value ($/MWh)	Predicted Nominal Energy Production (MWh/yr)	Nominal Payments to Project ($'s/yr)	Present Value of Nominal Payments to Project ($'s/yr)	Contract Levelized Payments to Project ($'s/yr)	*PV of Contract Levelized Payments to Project ($'s/yr)*
0						
1	97.00	11,625	1,127,625	1,061,294	1,037,367	*976,345*
2	97.00	11,625	1,127,625	998,865	1,037,367	*918,913*
3	97.00	11,625	1,127,625	940,108	1,037,367	*864,859*
4	97.00	11,625	1,127,625	884,808	1,037,367	*813,985*
5	97.00	11,625	1,127,625	832,760	1,037,367	*766,104*
6	97.00	11,625	1,127,625	783,774	1,037,367	*721,039*
7	97.00	11,625	1,127,625	737,670	1,037,367	*678,625*
8	97.00	11,625	1,127,625	694,278	1,037,367	*638,706*
9	97.00	11,625	1,127,625	653,438	1,037,367	*601,135*
10	97.00	11,625	1,127,625	615,000	1,037,367	*565,774*
11	75.00	11,625	871,875	447,544	1,037,367	*532,493*
12	75.00	11,625	871,875	421,218	1,037,367	*501,170*
13	75.00	11,625	871,875	396,441	1,037,367	*471,689*
14	75.00	11,625	871,875	373,120	1,037,367	*443,943*
15	75.00	11,625	871,875	351,172	1,037,367	*417,829*
16	75.00	11,625	871,875	330,515	1,037,367	*393,251*
17	75.00	11,625	871,875	311,073	1,037,367	*370,118*
18	75.00	11,625	871,875	292,775	1,037,367	*348,346*
19	75.00	11,625	871,875	275,553	1,037,367	*327,856*
20	75.00	11,625	871,875	259,344	1,037,367	*308,570*
Sum		232,500	19,995,000	11,660,750	20,747,335	*11,660,750*
CPV			11,660,750		10,185,020	
$/KWh		NPV Rate	**$0.0502**			

CORPORATE

Discount Rate (DR) = 0.0625

Contract Year	Guaranteed Annual Price Value ($/MWh)	Predicted Nominal Energy Production (MWh/yr)	Nominal Payments to Project ($'s/yr)	Present Value of Nominal Payments to Project ($'s/yr)	Contract Levelized Payments to Project ($'s/yr)	*PV of Contract Levelized Payments to Project ($'s/yr)*
0						
1	70.00	11,625	813,750	765,882	1,030,795	*970,160*
2	72.10	11,625	838,163	742,455	1,030,795	*913,092*
3	74.26	11,625	863,307	719,745	1,030,795	*859,381*
4	76.49	11,625	889,207	697,729	1,030,795	*808,829*
5	78.79	11,625	915,883	676,387	1,030,795	*761,251*
6	81.15	11,625	943,359	655,697	1,030,795	*716,471*
7	83.58	11,625	971,660	635,641	1,030,795	*674,326*
8	86.09	11,625	1,000,810	616,198	1,030,795	*634,660*
9	88.67	11,625	1,030,834	597,349	1,030,795	*597,327*
10	91.33	11,625	1,061,759	579,077	1,030,795	*562,190*
11	94.07	11,625	1,093,612	561,364	1,030,795	*529,120*
12	96.90	11,625	1,126,420	544,193	1,030,795	*497,995*
13	99.80	11,625	1,160,213	527,547	1,030,795	*468,701*
14	102.80	11,625	1,195,019	511,411	1,030,795	*441,131*
15	105.88	11,625	1,230,870	495,768	1,030,795	*415,182*
16	109.06	11,625	1,267,796	480,603	1,030,795	*390,759*
17	112.33	11,625	1,305,830	465,902	1,030,795	*367,773*
18	115.70	11,625	1,345,005	451,651	1,030,795	*346,140*
19	119.17	11,625	1,385,355	437,836	1,030,795	*325,779*
20	122.75	11,625	1,426,916	424,443	1,030,795	*306,615*
Sum		232,500	21,865,767	11,586,880	20,615,902	*11,586,880*
CPV			11,586,880		10,120,498	
$/KWh		NPV Rate	**$0.0498**			

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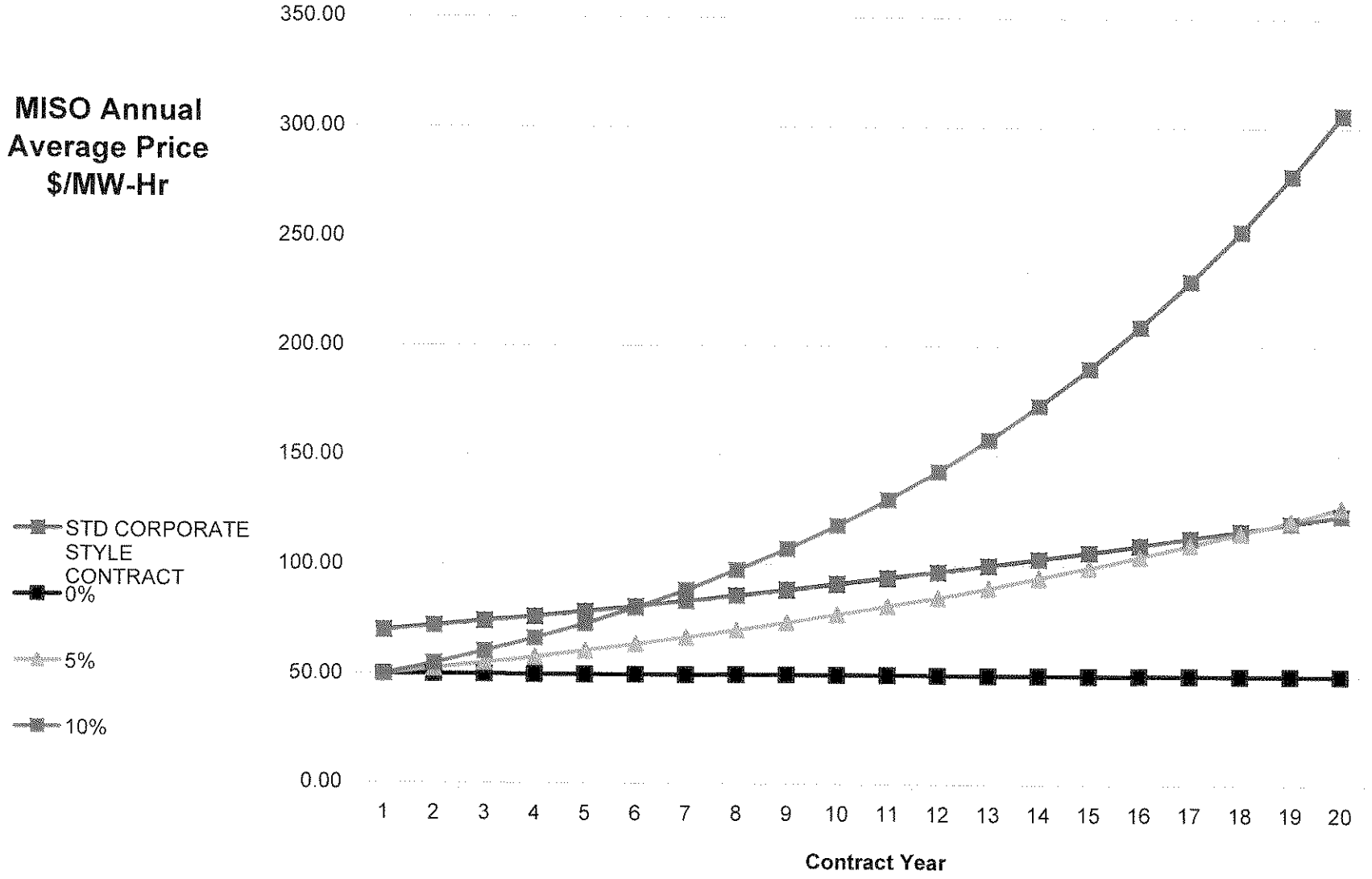
Corporate Contract vs MISO Price



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