## Deschutes Co. Fairgrounds solar bid Energy Wise Services Peter Greenberg nrawiseservice@amail.com

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## Greetings,

My name is Peter Greenberg, thank you for allowing me the time to discuss the recent solar bid. Let me introduce myself, I have 14 years experience in the solar business, we have installed approximately 14,000 kw and over 45,000 solar panels. We own approximately 150 solar systems, have installed 20 new solar products and have a good idea of what works and what doesn't. In addition I was a firefighter paramedic for 11 years first as a volunteer with Corvallis, then as a paid professional with Albany.

I realize it is difficult to know about every type of industry and product. The County had a study by Mayfield,a very good consultant, yet the bid didn't follow most of what they suggested. Their study is now out of date with regards to cost and the materials they suggested would not qualify by the very strict requirements in the bid.

If as stated, the intent of the bid was to maximize the size of the solar system, this was not done, because you did not pick the bid with the largest solar system size. The scoring was very subjective and there was little consideration to which bid offered the best value to the County. There was no explanation of how the points were determined.

This was supposed to be a design build bid, but with the very tight specs, it was extremely limited to the products that could be used. With the wealth of experience of companies in the industry, one should have simply asked the solar contractors for their best recommendation for the largest system that would give the most value to the County.

Some of the issues, I see problems with are:

1. There were 7 days from the day of the Commissioners meeting and the signing of the Intent to Award, 10/2 to protest the awarding of the contract. Typically when one is bidding on price, awards are open immediately after handing them in. In this case we were not bidding on price, instead, from what I understood to be the best value to the County, the bids were not immediately open to the public. I am certainly not a lawyer, but it seems clear to me and common sense would suggest that there is nothing to hide or gain to the county by not sharing this information. ORS 192.311 states, Proposals are not required to be open for public inspection until after the notice of intent to award a contract is issued. Your lawyer said that did not pertain and there was a different statute for road building and engineering that said bids did not need to be disclosed. Whatever the case, there were many faults with the bid process.

I was told to file a Request for Records Request, I did that and got a link to the other proposals 7 days and 4 hrs after the Co. meeting on the bid. I heard on the recording of

the Commissioners meeting that the size of the winning system is 310 kw. My proposal was 356 kw.

- 2. The Mayfield study for the bid is outdated and only talked about 190 kw, prices have dropped over the years. In addition the inverter and the panels proposed didn't meet the qualifications of the "design build" bid.
- 3. In A1.0 of the RFP, it states, "The goal is to maximize the size of the new solar system for the proposed budget." This didn't appear to be the case, as my bid was by far the largest system and had other benefits.
- 4. Extra money for the county. The solar panels I have proposed along with the racking will qualify for an extra 10% or about \$65,000 of free federal money, this is in addition to the 30% of the project cost thru the federal Inflation Reduction Act. My bid was the only one to offer that.
- 5. The bid called for inverters with a 25 year warranty. The only inverters that I know of that have this are microinverters, it is very rare to see microinverters in larger commercial projects. Regardless of their long warranty, no solar installers I know of would recommend installing almost 800 microinverters under solar panels, as no one would buy something that goes under solar panels that can last 25+ years or longer without this warranty. Microinverters or any electronics can fail and as they are underneath solar panels they can be costly to get to and replace.. In fact none of the bidders other than the winner, included these types of inverters. Elemental Energy, one of the bidders and an excellent long time solar company in Oregon, have got to be the Kings of Enphase microinverters, being a large user of them for many years, they did not put these in their bid. All of the other bidders except mine and the winners proposed Solaredge (string) inverters. As in the Enphase microinverter, Solaredge also only operates with a proprietary device under all of the solar panels that can and do fail. I do not recommend these either. I feel using a proprietary product that cannot be substituted with any other and relying on it to be perfect for decades is not the best value for a customer and can cause major issues and expense if the products fail and the company goes out of business.

Uniquely, my bid proposed an inverter that can be easily replaced with other brands, if the inverter fails and the manufacturer goes out of business, the inverter can easily be changed in an hour or 2. There are no electronics under the solar panels with my bid, which can and do fail and provide added risk with little benefit. If the Enphase or Solaredge inverters that all the other bidders proposed fail and the manufacturer goes out of business, there is no other alternative other than to take up all of the solar panels and modify the system which would be very expensive, cost easily over \$150,000 to take out the micro inverters or optimizers, replace the inverter with a type I proposed and then reinstall all of the solar panels.

6. I offered by far the best and longest labor and production warranty where I would pay for any lost energy between the time a part failed and when we would fix it. My proposal includes 10

years of once a year washing of the solar panels and systems check as well as daily monitoring for the first 10 years of the energy output which no one else offered.

- 7. Large long term financial difference. Figuring in a 4% Pacific Power yearly rate increase (which has been much more the last few years), the depreciation in output of the solar panel I offered and the system size difference, my bid would provide almost \$346,000 in savings over the winning bid over 25 years, including the extra \$65,000 from the IRA funds. My system is much less prone to risk of product failure and offers the simplest fix if the product manufactures go out of business.
- 8. The Meyers Berger solar panels that are in the winners bid do have a very high output after 25 years. Unfortunately the company is close to bankruptcy. Their stock traded at \$175.40 at the beginning of the year. As of 10/12/2024 they were at \$1.76. Solar panels are basically a commodity, to put large stock in a 25 year warranty and not consider the long term financial status of the manufacturer or energy savings over the life of the system, makes little sense to me. The solar panels I have proposed are US made, they are close to finishing a factory in So. Carolina. Next year they will qualify for a Made in America IRA bonus, along with the racking I proposed, which would mean an additional \$65,000 to the county through the Inflation Reduction Act. No other proposal offers this.
- 9. The winner's bid has wages priced below prevailing wages. The Materials Handler rate in Region 4 from the July 2024 BOLI wages is \$36.47, E2 has \$32 for an installation technician, this rather than what I have as simply BOLI mandated wages should disqualify their bid altogether. Why scoring wages was part of the scoring is a mystery to me. It makes no sense to score billing rates and fees in a fixed price bid.
- 10. There was too much significance placed on the scoring, which was very subjective, rather than the best value for the County. To score a 10 on references from one person and a 7 from another is practically meaningless. Contrast this with savings of almost \$350,000 more from bid to the winnders. To put scoring on one's team is mostly irrelevant, as one can see from anyone's list of projects that all of the companies are capable of doing this project. With the deadline to finish being before the Courthouse project is done, whether one finishes in 3 weeks or 5 weeks makes little difference.
- 11. I don't understand the scoring for Approach. I scored less than the winning team, yet my approach is more practical, saves more energy and money, uses less equipment that can fail, and offers services that others don't offer over 10 years.
- 12. Scoring on Team is included, who cares what the team is as long as the job gets done, good materials are used and the project is approved by the AHJ and the ETO.
- 13. Adding additional connections and electronics thru microinverters under 800 solar panels simply adds more to the risk of failure of equipment than not having it. The majority of failures are caused by faulty cabling and connections, which are factors that can occur in any electrical system. Enphase has a decent reputation but with no national reporting system on inverter

failures, there is no way of knowing what is happening with failures. Enphase stock from 2014 to 2020 never went above \$10. All of a sudden after the rapid shutdown code changes they pushed, they rose to \$319 in November 2022. From Dec. 2022 to then 10/21/2024 they went from \$319 to about \$90.17. Solaredge the inverter and optimizer everyone but me and E2 bid on went from \$83, 5 yrs ago to \$360 a few years ago after the code change to \$17.13 today

Peter Greenberg Energy Wise Services

	3	56.5 kw DC, E		310.44 kw, E2								
Year	Solar panel output Silfab 430	4% inc/yr Pac Power	Initial kwh	Earnings/yr	Meyers Berger initial kwh	Meryes Berger depreciation	Earnings/yr					
1	100%	0.1057	518,294	\$54,786	446,219	100%	\$47,168					
2	98.00%	\$0.110	518,294	\$55,838	446,219	98%	\$48,073					
3	97.68%	\$0.114	518,294	\$57,879	446,219	97.75%	\$49,869					
4	97.35%	\$0.119	518,294	\$59,995	446,219	97.50%	\$51,731					
5	97.03%	\$0.124	518,294	\$62,189	446,219	97.25%	\$53,662					
6	96.71%	\$0.129	518,294	\$64,462	446,219	97.00%	\$55,665					
7	96.39%	\$0.134	518,294	\$66,819	446,219	96.75%	\$57,742					
8	96.07%	\$0.139	518,294	\$69,261	446,219	96.50%	\$59,897					
9	95.75%	\$0.145	518,294	\$71,793	446,219	96.25%	\$62,131					
10	95.43%	\$0.150	518,294	\$74,418	446,219	96.00%	\$64,449					
11	95.12%	\$0.156	518,294	\$77,139	446,219	95.75%	\$66,852					
12	94.80%	\$0.163	518,294	\$79,959	446,219	95.50%	\$69,345					
13	94.49%	\$0.169	518,294	\$82,882	446,219	95.25%	\$71,930					
14	94.18%	\$0.176	518,294	\$85,912	446,219	95.00%	\$74,611					
15	93.87%	\$0.183	518,294	\$89,052	446,219	94.75%	\$77,391					
16	93.56%	\$0.190	518,294	\$92,308	446,219	94.50%	\$80,274					
17	93.25%	\$0.198	518,294	\$95,682	446,219	94.25%	\$83,264					
18	92.94%	\$0.206	518,294	\$99,180	446,219	94.00%	\$86,365					
19	92.63%	\$0.214	518,294	\$102,806	446,219	93.75%	\$89,581					
20	92.32%	\$0.223	518,294	\$106,564	446,219	93.50%	\$92,915					
21	92.02%	\$0.232	518,294	\$110,460	446,219	93.25%	\$96,374					
22	91.71%	\$0.241	518,294	\$114,498	446,219	93.00%	\$99,960					
23	91.41%	\$0.251	518,294	\$118,684	446,219	92.75%	\$103,679					
24	91.11%	\$0.261	518,294	\$123,023	446,219	92.50%	\$107,535					
25	90.80%	\$0.271	518,294	\$127,520	446,219	92.25%	\$111,535					
Totals over 25 yrs	30.0076	ψ0.271	310,234	\$2,143,112	440,210	32.2370	\$1,861,996					
Totals over 20 yrs				<b>\$2,140,112</b>			<b>\$1,001,000</b>					
		Silfab, EWS	Meyers B, E2									
	System size in kw	356.5	310.44									
	Initial kwh/yr savings	518,294	446,219									
	25 yr savings (at 4% yr PP incr)	\$2,144,104	\$1,861,996									
	Savings over 25 years over E2	\$282,108										
	Cost after ETO	\$639,845	\$639,845									
	Federal IRA	-\$191,954	-\$191,954									
	Federal IRA bonus	-\$63,985	<u>\$0</u>									
	Net cost	\$383,907	\$447,892									
	25 yr savings, net	\$1,760,197	\$1,414,105									
	Savings over E2 between energy and bonus IRA	\$346,093										
	Advantage with EWS	Uptime warra	nty, spare 60 kw	inverter, washing	for 10 years, much le	ess risk of inverte	er mfg. failure					

## **Deschutes County Fairgrounds - Solar PV**

9/19/2024

	Points	E2 Solar		Sunlight Solar			Energy Wise			A&R Solar				Pure Energy				Power Northwest					Elemental Energy				Capstone Solutions - LATE								
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Cover Letter	P/F	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	P						П
Project Team	20	18	20	18	18	18	18	16	18	10	11	10	15	18	19	15	16	17	18	15	17	18	19	13	17	16	17	15	16	П					٦
Approach	20	18	16	18	18	17	15	15	17	14	15	13	17	17	18	16	17	16	15	10	16	18	18	12	16	16	12	10	15						П
Customer Service	20	18	18	18	18	10	17	16	18	16	15	15	18	12	16	15	17	10	10	10	15	18	18	15	17	14	17	15	16						
Related Project Experience	15	14	11	13	15	12	13	14	15	12	15	13	12	13	12	13	12	12	5	13	13	14	14	12	12	16	10	12	12						
References	10	10	10	10	10	10	10	10	9	10	7	10	10	10	8	10	10	10	5	10	10	10	8	10	9	10	6	10	10	П					П
Billing Rates/Fee Schedule	15	14	15	15	15	14	15	13	12	10	10	14	13	15	15	10	12	12	5	10	13	14	15	10	11	12	12	15	14						
Attachments - Signature Sheet	P/F	Р	Р	Р	Р	Р	Р	Р	Р	F	F	F	F	Р	Р	Р	Р	Ρ	Р	Р	Р	Р	Р	Р	Р	Р	Р	Р	P						
Overall	100	92	90	92	94	81	88	84	89	72	73	75	85	85	88	79	84	77	58	68	84	92	92	72	82	84	74	77	83	0	0	0		0	٦
Average Score		92				85.5				76.25				84				71.75					84.5			79.5				0					
Position			1				2			_	Incomplete			4				6						3		5					LATE				