



March 11, 2021

VIA ELECTRONIC FILING

Attention: Filing Center
Public Utility Commission of Oregon
201 High Street SE, Suite 100
P.O. Box 1088
Salem, Oregon 97308-1088

Re: Docket UM 2118 - Sunthurst Energy, LLC vs PacifiCorp dba Pacific Power

Attention Filing Center:

Alistra Till

Attached for filing in the above-captioned docket is PacifiCorp's Exhibit List and Supplemental Exhibit (PAC/300).

Please contact this office with any questions.

Sincerely,

Alisha Till Paralegal

Attachments

BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

UM 2118

In the Matter of:

SUNTHURST ENERGY, LLC,

Complainant

VS.

PACIFICORP dba PACIFIC POWER,

Respondent.

PACIFICORP'S LIST OF PREFILED AND SUPPLEMENTAL EXHIBITS TO BE ENTERED INTO THE RECORD

PREFILED EXHIBITS

Kris Bremer, Director of Generation Interconnection and Transmission Project								
Management, PacifiCorp								
PAC/100	Response Testimony of Kris Bremer							
PAC/101	Q0666 SGIA, as amended							
PAC/102	Sunthurst Letter, March 20, 2019							
PAC/103	Q1045 Interconnection Studies							
PAC/104	Sunthurst Letter, July 23, 2020							
PAC/105	Sunthurst DR Responses							
Milt Patzkows	ki, Manager of Substation Engineering, PacifiCorp; Alex Vaz, Cost							
Engineering Manager, PacifiCorp; Richard Taylor, Manager of Metering								
Engineering, PacifiCorp								
PAC/200	Response Testimony of Milt Patzkowski, Alex Vaz, and Richard Taylor							
PAC/201	Detailed Cost Estimate Report for PRS1							
PAC/202	Detailed Cost Estimate Report for PRS2							
PAC/203	Sunthurst Response to Data Requests 1.10, 1.12, 2.22, and 2.29							
PAC/204	PacifiCorp Response to Data Request 3.7							

SUPPLEMENTAL EXHIBITS

Exhibit PAC/300 Sunthurst Energy, LLC's Responses to PacifiCorp Data Requests

DATED: March 11, 2021 McDowell Rackner Gibson PC

Adam Lowney

McDowell Rackner Gibson PC 419 SW 11th Avenue, Suite 400

Portland, OR 97205 Phone: 503-595-3926

Email: adam@mrg-law.com

Matthew Loftus

PacifiCorp

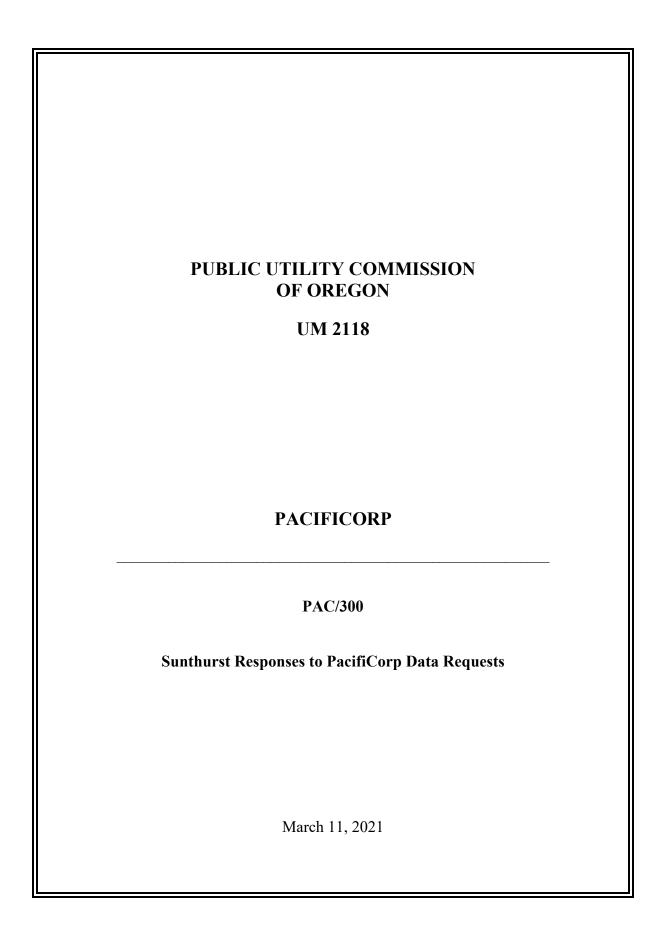
825 NE Multnomah Street, Suite 2000

Portland, OR 97232 Phone: 503-813-6338

Email:

Matthew.Loftus@PacifiCorp.com

Attorneys for PacifiCorp d/b/a Pacific Power



- 1.8. Refer to Paragraph 9 of the Complaint. Please provide all evidence Sunthurst relied on to support the allegation that, "Many Community Solar Projects have been abandoned by their owners after learning of the high costs of interconnection published in a PacifiCorp interconnection study." At a minimum, please provide the following:
- a. The name of the Community Solar project that was allegedly abandoned.
- b. The queue position of the Community Solar project that was allegedly abandoned.
- c. All communications from the Community Solar project that was allegedly abandoned indicating the reason that the project was abandoned.

Response: Please see SUN-0050, showing withdrawal of OCS006, OCS007, OCS009, OCS010, OCS013, OCS014, OCS015, OCS016, OCS017, OCS021, OCS022, and OCS031.

2.28 Refer to Sunthurst/200, Beanland/26, lines 8-10. Please provide all the calculations made by Mr. Beanland that are discussed on line 8-10 of page 26 of his testimony.

A. Mr. Beanland's response: Voltage drop analysis was performed using ASPEN Distriview software. A simplified model with the voltage regulated at the substation was developed and the distributed generation was added at the end of a 0.3 mile line extension. Generators are operated in voltage control mode and are thus adjusting their reactive power flows to regulate their voltages. The result is a voltage rise of about 0.6% at the tap line. Variations in the simulation parameters will alter the results. A printout of the results of the voltage drop analysis is provided. SUN-0141. Mr. Beanland welcomes the opportunity to review a comparable voltage drop analysis performed by PacifiCorp.

2.32 Refer to Sunthurst/200, Beanland/29, lines 17 and 18. Regarding the statement by Mr. Beanland, "Because fibers are made of glass and are fragile, having spares is critical, but a 12-fiber cable is more than adequate." Assume for purposes of this question that the 12-count fiber cable is only procured for the PRS 1 and PRS 2 projects, having spares is necessary, and this would require the incurrence of additional costs, is Sunthurst willing to pay the additional costs?

A. Sunthurst objects to answering the hypothetical question without sufficient information to provide an informed response. Such information includes, but is not limited to: whether it is prudent to maintain spare 12-count fiber in inventory versus procuring it in the rare event of a failure and, if so, how much; whether 48-pair cable can be used to patch a damaged 12-count cable; and whether PacifiCorp intends to use the fiber cable for purposes other than PRS1 and PRS2. Subject to the above objection Mr. Beanland responds: It seems prudent that some reasonable research and investigation be performed to estimate the reliability of fiber optic cables and determine the number of spares to include based on that investigation.

a. What amount of savings has Mr. Beanland determined will be achieved if 12-count fiber is used?

A. Mr. Beanland's response: Using a search on the Internet, the costs for 48-fiber and 12-fiber cable were estimated. The differences between 12 and 48-fiber non-armored all-dielectric cable is about \$0.50/ft. I do not expect there to be significant savings in stringing though termination costs should drop proportional to fiber count. Any savings in direct costs also would result in savings in indirects, overheads and PacifiCorp's 8% capital surcharge.

- 3.1 Refer to Sunthurst/300, Hale/1, lines 8-10. Please provide the evidentiary basis for Mr. Hale's claim that "Sunthurst's preferred (union) contractor can install four Class A poles with all equipment for 20% less than PacifiCorp installs 1 pole with tie-in and start-up coordination." In particular, please provide the basis for the PacifiCorp costs that Mr. Hale references and any and all communication, invoices, scope of work or other documentation from Sunthurst's preferred contractor verifying the costs to install four Class A poles with all equipment.
- A) See Enerparc email on PGE Steel Bridge project (SUN-0152, attached) and Yates SOW and email quote referenced for collector station pole work (SUN-0153-54, attached). These two separate sources confirm cost for 3-4 poles w/ equipment by Sunthurst with all equipment are \$90k. Compare this to PAC Collector station cost for 1 metering pole for OCS024 which price was \$117k in their SIS report. Sunthurst requested during the SIS review call 1 new pole be used. PAC's cost reduction in FS Report was principally in response to Sunthurst requesting the 20% Contingency be removed; however, PAC as asserted on many occasions, their cost are not solid and could go up. PAC's latest cost for Q0666 collector station is \$100,332 for same scope. 90,000 / 100,332 is 10.3% less. 90,000/117,000 is 23% less.

3.2 Refer to Sunthurst/300, Hale/2, lines 13-14. Please provide the communication from Mr. Gross to Sunthurst where he said that "PacifiCorp could safely interconnect Q0666 and Q1045 for \$250,000 each—if they wanted to." If Mr. Gross did not provide this statement in writing, please provide the details of the verbal communication.

A. Larry Gross stated this in a conference call between myself, and Ken Kaufmann near the end of his engagement before Sunthurst filed its complaint. He made a similar remark in a phone call with myself and Ken Kaufmann after a July 17, 2020 phone call with PacifiCorp. The portion of Mr. Kaufmann's notes from that July 17, 2020 phone call documenting Mr. Gross' remarks about PacifiCorp's interconnection costs is attached (SUN- 0159). "LG:" refers to statements made by Larry Gross.

3.3 Refer to Sunthurst/300, Hale/2, lines 17-20. Please provide all evidence relied on by Mr. Hale to support this testimony, including all written communication between Mr. Gross and Mr. Hale that support Mr. Hale's representations.

A. Larry Gross stated this by and through my counsel, Ken Kaufmann and by his email on September 20, 2020. Please see SUN-0155-SUN-0166, attached.

3.5 Refer to Sunthurst/300, Hale/4, lines 14-20. Please explain why Mr. Hale is qualified as an expert on the maintenance and operation of public utility substations.

A. This testimony cites PacifiCorp's own discovery responses and as such does not require being an expert on the maintenance and operation of public utility substations.

3.6 Refer to Sunthurst/400, Beanland/18, lines 16-17. When Mr. Beanland testifies that, "Low side metering is the most common type of metering used for typical electric service metering," is he referring to metering associated with distributed energy resources? If so, what is the basis for his opinion that low side metering for distributed energy resources is the "most common type of metering"?

A. No. The reference is to metering in general. In reference, see Policy 138, Section 4.1, first paragraph, "The general requirements are similar to the general requirements for metering the supply of electrical retail service by PacifiCorp."

3.7 Refer to Sunthurst/400, Beanland/20, line 1. Has Mr. Beanland estimated the amount of reduced interconnection costs that could be achieved using low-side metering?

A. Based on the Q1045 detailed expenditure report, each medium-voltage overhead meter will involve about \$11,100 of materials and \$7,074 in labor. The pole and medium-voltage instrument transformers alone are \$9,000. Lowvoltage metering current transformers can range in cost but should not exceed \$3000 for three, reducing costs by \$6000 for PacifiCorp-supplied materials. Further, the labor costs to install low-voltage ground-mounted metering will be lower than the labor costs to install pole-mounted medium-voltage metering; given the large number of low-voltage metering work performed by PacifiCorp, they are in a better position to quantify the labor savings.

- 3.8. Refer to Sunthurst/400, Beanland/20, lines 14. Please provide all evidence relied on by Mr. Beanland to support his claim that, "Low side metering is more accurate" than medium-voltage metering. In particular, please provide all treatises, studies, technical or engineering manuals, or other empirical analysis that verifies Mr. Beanland's opinion.
- a. IEEE C57.13 "IEEE Standard Requirements for Instrument Transformers" Section 5.3 describes the standard metering transformer accuracy classes for instrument transformers. Accuracy classes are listed as 0.3, 0.6, and 1.2. The best metering accuracy class is listed as "0.3" meaning 0.3%. The American National Standard for Electricity Meters defines two accuracy classes, 0.2 and 0.5 meaning 0.2% and 0.5%. On this basis, a medium-voltage metering installation with potential transformers, current transformers, and meter using the best accuracy classes listed above will have an accuracy class of (1-0.003)(1-0.003)(1-0.002)=0.992 or 0.8% accuracy.
- b. For a low-voltage metering system where the 480V can be directly applied to the meter terminals, the error caused by the potential transformers is eliminated, leading to an accuracy class of (1-0.003)(1-0.002)=0.995 or 0.5% accuracy.

- 3.9. Refer to Sunthurst/400, Beanland/20, line 13 to 21, line 10. Please provide the basis for the accuracy percentages relied on by Mr. Beanland, including but not limited to treatises, studies, technical or engineering manuals, equipment specifications or other empirical analysis.
- a. Please see Mr. Beanland's response to question DR3.8, above.

- 3.12 Refer to Sunthurst/200, Beanland/29, lines 11 through 13. Regarding the statement by Mr. Beanland, "With no requirement for a data-intensive RTU at the project, the fiber optic system could be replaced by a spread-spectrum radio system at likely lower cost."
- a. Please define the phrase "data-intensive RTU."
- A. I could have just said "With no requirement for an RTU at the project, the fiber optic system could be replaced by a spread-spectrum radio system at likely lower cost." Policy 138, Section 3.3.1.6 says "Unless other arrangements are made to use PacifiCorp's existing electronic communications network, the SCADA circuit will be routed over the Interconnection Customer provided T1." DTT does not require a high speed T1 circuit, but RTU telemetry does.
- b. How did Mr. Beanland determine "the fiber optic system could be replaced by a spread-spectrum radio system at likely lower cost"? Provide all evidence used by Mr. Beanland to support this statement.
- i. Without the need for the high-speed capability of the fiber to support the RTU, the lower speed spread spectrum system can be used for DTT. In PAC/200, Patzkowski, Taylor, Vaz/24, lines 13-14, PacifiCorp indicated that the cost of the spread spectrum radio system would be about \$40,000.
- ii. Stringing fiber on 0.6 miles of existing distribution line may require upgrades to structures, an additional cost that has not been identified by PacifiCorp.
- c. What material did Mr. Beanland use in his financial comparison to the fiber optic system? In particular, did Mr. Beanland consider spreadspectrum radio, antennae, coaxial cable, and antennae structure?
- i. Please see Mr. Beanland's response to (b) above.
- d. What are the heights of the antenna structures Mr. Beanland used in his financial comparison? If Mr. Beanland did not consider heights of the antenna structures please provide this confirmation.
- i. Please see Mr. Beanland's response to (b) above.
- e. What is the construction cost for installation of the spread-spectrum systems used in Mr. Beanland's financial analysis? If Mr. Beanland did not consider the construction cost for installation of the spread-spectrum systems, please provide this confirmation.
- i. Please see Mr. Beanland's response to (b) above.

- 3.14 Refer to Sunthurst/200, Beanland/32, lines 18 through 21. Regarding the statement by Mr. Beanland, "Changing from a 0.35- 15 second reclosing interval, which I understand is PacifiCorp's current setting on circuit 16 5W406, to a 5-second interval can achieve the same functionality at minimal risk and 17 render the dead-line check system unnecessary."
- a. In support of this statement, did Mr. Beanland read Policy 138, Section 6.5.2, which requires dead line checks for projects such as Q0666?
- i. The quote listed above appears to have been copied from the testimony in error. The actual statement was: "Changing from a 0.35-second reclosing interval, which I understand is PacifiCorp's current setting on circuit 5W406, to a 5-second interval can achieve the same functionality at minimal risk and render the dead-line check system unnecessary."
- ii. Yes. Mr. Beanland is aware of the language in PacifiCorp Policy 138, Section 6.5.2.
- b. If not, does Mr. Beanland agree that Policy 138 calls for dead line checking? If Mr. Beanland disagrees, please explain the basis for his disagreement.
- i. Yes, Policy 138, written by PacifiCorp for PacifiCorp use states that under certain circumstances PacifiCorp deems dead line check (DLC) a valuable feature. PacifiCorp also allows that under some circumstances DLC is not needed. The PacifiCorp Engineering Handbook on reclosing guidelines indicates that under certain circumstances where generation is present on a feeder, the recommended minimum reclosing time is 5-seconds. This same Handbook also states that "They may (emphasis added) require... special dead line checking equipment..." That DLC may or may not be implemented, indicates that its use is a matter of circumstances and interpretation. The lack of actual metered day-time minimum circuit load data leaves whether this installation meets the stated criteria open for discussion.

- 3.15 Refer to Sunthurst/211, Beanland/13.
- a. How did Mr. Gross determine that, "There is likely a slight reduction in hardware and installation cost if the point-point radios were used for the transfer trip scheme"?

A. Sunthurst retained Mr. Gross because his current position—Vice President of Power System Protection at Electrical Consultants, Inc., his references, and his lengthy resume of prior experience designing interconnections make him highly qualified to give expert advice and opinions on community solar project interconnections. Beyond the reasons above, Mr. Gross no longer is advising Sunthurst and Sunthurst does not know the bases for Mr. Gross' expert opinion on this subject.

- b. What radio, antennae, coaxial cable, antennae structure did Mr. Gross use in his financial comparison to the fiber optic system?
- A. Please refer to Sunthurst's response to question 3.15(a), above.
- c. What are the heights of the antenna structures Mr. Gross used in his financial comparison?
- A. Please refer to Sunthurst's response to question 3.15(a), above.
- d. What is the construction cost for installation of the spread-spectrum systems used in Mr. Gross' financial analysis
- A. Please refer to Sunthurst's response to question 3.15(a), above.

- 4.3 Refer to Sunthurst/400, Beanland/22, lines 1-2, where Mr. Beanland testifies that PacifiCorp utilized spread-spectrum radio for direct transfer trip communication at OCS024 and OCS045.
 - a. Has Mr. Beanland performed any analysis comparing the cost of a fiber optic link for OCS024 and OCS045 to the cost of spread-spectrum radio? If so, please provide Mr. Beanland's analysis.
 - i. Mr. Beanland's testimony is that PacifiCorp has indicated that the use of spread spectrum radio to implement DTT for these two projects was deemed acceptable by PacifiCorp, and that spread spectrum radio is substantially cheaper than fiber according to PacifiCorp's estimates and testimony.
 - b. Referring to OCS045, does Mr. Beanland agree that the distance from the point of interconnection to the Line Recloser 5D311 is 2.08 miles (see Sunthurst/403, Beanland7)? If Mr. Beanland disagrees, please explain the basis for his disagreement.
 - i. Mr. Beanland observes that the OCS045 System Impact Study Report indicates that the circuit distance is 2.08 miles. Mr. Beanland has not, himself, measured the distance.
 - c. Referring to OCS024, does Mr. Beanland agree that the distance from the point of interconnection to the Line Recloser UMDB1 is 2.47 miles. If Mr. Beanland disagrees, please explain the basis for his disagreement.
 - i. Mr. Beanland observes that the OCS024 Interconnection Agreement indicates that the circuit distance is 2.47 miles. Mr. Beanland has not himself measured the distance.

Oregon Community Solar Inte				Max MW	Location of Generating Facility		Reports								
Q#	Request Date		Comp any Name	Output Size (MW)	County	ST	Туре	Fast Track Fast Track	System Impact Study	COST (\$K)	\$K/MW		Facilitie s Study	Request Status Explanation	
OCS001	2/6/20	In Progress		1.46	Crook	OR	Solar		Available	613	\$	420		0	
OCS002	2/6/20	In Progress		0.9	Crook	OR	Solar		Available	93	\$	103		0	
OCS003	2/10/20	In Progress		0.8	Klamath	OR	Solar	Available	Available	192	\$	240		0	
OCS004	2/10/20	In Progress		0.8	Klamath	OR	Solar	Available	Available	248	\$	310		0	
OCS005	2/13/20	In Progress	Fleet [0.36	Wallowa	OR	Solar	Available			\$	-		IA executed 5	5/19/202
OCS006	2/13/20	Deactivated		1.04	Wallowa	OR	Solar		Available	549	\$	528		0	
OCS007	2/14/20	Deactivated		0.875	Umatilla	OR	Solar		Available	573	\$	655		0	
OCS008	2/14/20	In Progress		2.16	Linn	OR	Solar		Available	68	\$	31		0	
OCS009	2/14/20	Deactivated		1.625	Umatilla	OR	Solar		Available	855	\$	526		0	
OCS010	2/14/20	Deactivated		1.875	Wallowa	OR	Solar		Available	1093	\$	583		0	
OCS011	2/17/20	In Progress		1	Wallowa	OR	Solar		Available	575	\$	575		0	
OCS012	3/12/20	In Progress	Bonne	0.996	Multnomah	OR	Solar	Available						IA executed 7	/7/2020
OCS013	3/16/20	Deactivated		1.26	Jefferson	OR	Solar							WITHDRAWN	1
OCS014	3/16/20	Deactivated		1.395	Linn	OR	Solar							WITHDRAWN	٧
OCS015	3/16/20	Deactivated		1.98	Douglas	OR	Solar							0	
OCS016	3/20/20	Deactivated		2	Klamath	OR	Solar							WITHDRAWN	١
OCS017	3/20/20	Deactivated		1.287	Jackson	OR	Solar	Available						WITHDRAWN	١
OCS018	3/24/20	In Progress		0.567	Umatilla	OR	Solar	Available						0	
OCS019	3/30/20	In Progress		0.882	Klamath	OR	Solar	Available						0	
OCS020	3/30/20	In Progress		0.594	Klamath	OR	Solar	Available						0	
OCS021	4/3/20	Deactivated		1.4	Klamath	OR	Solar							0	
OCS022	4/7/20	Deactivated		0.9	Klamath	OR	Solar							0	
OCS023	4/8/20	In Progress		0.6	Klamath	OR	Solar							0	
OCS024	4/15/20	In Progress		1.56	Umatilla	OR	Solar							0	
OCS025	4/23/20	In Progress		2.8	Klamath	OR	Solar							0	
OCS026	4/30/20	In Progress		1.5	Linn	OR	Solar							0	
OCS027	5/6/20	In Progress		2.875	Linn	OR	Solar							0	
OCS028	5/12/20	In Progress		1.75	Jackson	OR	Solar							0	
OCS029	5/14/20	In Progress		0.522	Douglas	OR	Solar							0	
OCS030	6/1/20	In Progress		1.728	Lane	OR	Solar							0	
OCS031	6/1/20	Deactivated		1.791	Linn	OR	Solar							0	
OCS032	6/10/20	In Progress		1.5	Polk	OR	Solar							0	
OCS033	6/11/20	In Progress		1	Douglas	OR	Solar							0	
OCS034	7/1/20	In Progress		0.978	Klamath	OR	Solar							0	

Exhibit PAC/300 Page 17 of 22

Daniel Hale

From: Thomas Houghton <t.houghton@enerparc.us>

Sent: Wednesday, June 17, 2015 6:33 AM

To: Daniel Hale

Subject: Re: Steel Bridge Oregon project **Attachments:** PDF to PO151000036.pdf

Attached is the lineup we are using for interconnection.

PGE won't allow a recloser as the main interconnection protective device. I've installed the Cooper Nova recloser several times. Cost is typically \$25k for the recloser and controller, \$8k for a pole mounted disconnect switch and \$1,500 per Class 3 utility pole. Typically you will need 3 poles if using a recloser lineup, 1 for pole mounted disconnect/riser, 1 for the recloser itself and 1 for metering. In total the cost to install all this inclusive of all misc hardware, MV conductors and termination back in your step up transformer assuming a 1000' run is around \$90k and should take a good crew of lineman 1 to 2 days.

Thomas Houghton | Director of Engineering and Construction | Enerparc Inc. | F +1 510-788-2762 | C +1 925-683-7185 | 1999 Harrison Street, Oakland,CA 94612, USA www.enerparc.com

From: Thomas Houghton

Sent: Wednesday, June 17, 2015 5:50 AM

To: Daniel Hale

Subject: Re: Steel Bridge Oregon project

Dan,

Here's all the files I have in regards to interconnection:

https://server.enerparc.us/fl/pxVt8Y5IxF

Let me know if you want to discuss.

Thanks for the referrals.

Cheers,

Thomas

Thomas Houghton | Director of Engineering and Construction | Enerparc Inc. | F +1 510-788-2762 | C +1 925-683-7185 | 1999 Harrison Street, Oakland, CA 94612, USA

Exhibit PAC/300 Page 18 of 22

SUN-0153

Daniel Hale

From: Daniel Hale <daniel@sunthurstenergy.com>
Sent: Tuesday, October 16, 2018 11:36 AM

To: 'jyates@yateslineco.com' **Subject:** Quote Request 1 of 2

Attachments: Pilot Rock PV System-Permit Set_15-1211R3-electonly.pdf; SE_Pilot Rock PH2_3mW

Set.pdf; IMG_0660.JPG; Q0666 Aerial.pdf

Tracking: Recipient Read

'jyates@yateslineco.com' Read: 10/16/2018 11:40 AM

Hi John,

Worked along your crew on Enerparc's Ewuana 2 in KFalls as the 480V electrical sub.

As may have noted, we have 2 very similar developments, a 2mW and a 3mW, in Pilot Rock, OR that need same scope.

Can you provide quote for each, figuring 2 mob's as each project can't be guaranteed done at same time, though we'd strive to. Please include a Line Item Deduct, if both systems can be installed on same mob. There'd be 1-2 additional mob's once PacifiCorp completes fiber from Pilot Rock substation to each SEL relay.

Could you quotes by next Friday 11/26.

Call if can help with questions.

Daniel Hale, Principal MRED, LEED AP, STI Certified Sunthurst Energy, LLC

P: 310.975.4732 | F: 323.782.0760

W: SunthurstEnergy.com

Energy Trust of Oregon Trade Ally Licensed in CA, ID, OR, UT, WA

Daniel Hale

From: John Yates <jyates@yateslineco.com>
Sent: Wednesday, October 31, 2018 7:58 AM

To: Daniel Hale

Subject: RE: Quote Request 2mW (Q0666) and 3mW (Q1045)

Dan,

For each individual site below I will list the details and your estimate

- Mobilization from/to PDX 10hours
- 4-Person Line Crew
- All material minus pole switch and recloser (\$33k from Enerparc)
- 40' Class 3 Doug Fir Full Treat Poles
- 1-Ton Pick Up, Bucket Truck, Line Truck, Dump Body, Back Hoe, Equipment/Pulling Trailers

Selling Price Estimate: \$58227.44 per location +33,000 = \$90-91k

John Yates Yates Line Co. 503-812-9827 jyates@yateslineco.com

From: Daniel Hale <daniel@sunthurstenergy.com> Sent: Wednesday, October 31, 2018 7:16:11 AM

To: John Yates

Subject: Re: Quote Request 2mW (Q0666) and 3mW (Q1045)

Hi John

The set up would be near same, for PacifiCorp as jobs near same size. Can you bid as budgetary using same Tri-Axis design.

Understand on test-in notes. Tri Axis did my 2mW production estimate certification.

Thx

Daniel Hale

www.sunthurstenergy.com

310.975.4732

By iPhone

On Oct 31, 2018, at 6:45 AM, John Yates \(\)jyates@yateslineco.com \(\) wrote:

Hello Dan,

Sunthurst Energy

From: Larry C. Gross <Larry.Gross@eciusa.com>
Sent: Wednesday, September 30, 2020 11:59 PM

To: Ken Kaufmann
Cc: Sunthurst Energy
Subject: RE: Next steps

Ken and Dan,

We believe it would not be appropriate for me to "testify" in a legal arbitration or other format.

Larry

From: Ken Kaufmann < Ken@kaufmann.law>
Sent: Friday, September 18, 2020 3:51 PM
To: Larry C. Gross < Larry.Gross@eciusa.com>
Cc: Daniel Hale < daniel@sunthurstenergy.com>

Subject: Next steps

Hello Larry,

PacifiCorp is not going to back off its demand for 3 meters at Pilot Rock Solar 1 and 2 and Dan will be filing for arbitration (or possibly a PUC complaint) on this issue next week.



Mindful that the arbiter/judge might not be an engineer, Sunthurst needs an expert



Specifically, I envision the following input from an expert in written sworn affidavit:



There may be minor rebuttal testimony depending upon what PacifiCorp says. And there may be a telephonic hearing where the witness affirms his testimony and answers questions from the factfinder and/or PacifiCorp.

SUN-0156 Exhibit PAC/300

Dan and I think you have been a great help so far and would like you to be Sunthurst's expert witness on the above issue. We have spoken in the past that your company might have heartburn about your involvement in litigation. However the involvement I specify above is very discreet and narrower, I think, than what we had in mind last we discussed.

Can you please consider and let me know if you can do the above?

Thank you for your consideration.

Sincerely,

Kenneth Kaufmann Attorney at Law 1785 Willamette Falls Dr., Suite 5 West Linn, OR 97068 (503) 230-7715 (office) (503) 972-2921 (fax) (503) 595-1867 (direct) ken@kaufmann.law

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Exhibit PAC/300 Page 22 of 22



LG: most of the equipment being specified is not necessary for the interconnection. (This is not value engineering). If they wanted to make it work, they could do the interconnection for way less money). With their money, they do it cheap and dirty. For your money, they do it expensive.

LG: Can we ask them for a mid-project update on the costs? Maybe they are way under budget.

Dan: