

November 16, 2015

***VIA ELECTRONIC FILING
AND OVERNIGHT DELIVERY***

Public Utility Commission of Oregon
201 High Street SE, Suite 100
Salem, OR 97301-1166

Attn: Filing Center

RE: Advice No. 15-014—Docket UE 296—Compliance Tariff Sheets

In compliance with ORS 757.205 and OAR 860-022-0025, PacifiCorp d/b/a Pacific Power (Company) submits for filing proposed tariff pages associated with Tariff P.U.C. OR No. 36, which sets forth all rates, tolls, charges, rules, and regulations applicable to electric service in Oregon. This filing is made in compliance with preliminary Order No. 15-353 and includes a January 1, 2016 effective date.

| | | |
|------------------------------------|--------------|--|
| Sixth Revision of Sheet No. 201-1 | Schedule 201 | Net Power Costs Cost-Based Supply Service |
| Fifth Revision of Sheet No. 201-2 | Schedule 201 | Net Power Costs Cost-Based Supply Service |
| Sixth Revision of Sheet No. 201-3 | Schedule 201 | Net Power Costs Cost-Based Supply Service |
| Fourth Revision of Sheet No. 205-1 | Schedule 205 | TAM Adjustment for Other Revenues |
| Third Revision of Sheet No. 205-2 | Schedule 205 | TAM Adjustment for Other Revenues |
| Fourth Revision of Sheet No. 205-3 | Schedule 205 | TAM Adjustment for Other Revenues |
| Sixth Revision of Sheet No. 220-1 | Schedule 220 | Standard Offer Supply Service |
| Third Revision of Sheet No. 220-2 | Schedule 220 | Standard Offer Supply Service |
| Sixth Revision of Sheet No. 294-2 | Schedule 294 | Transition Adjustment |
| Sixth Revision of Sheet No. 295-2 | Schedule 295 | Transition Adjustment Three-Year Cost of Service Opt-Out |
| First Revision of Sheet No. 296-3 | Schedule 296 | Transition Adjustment Five-Year Cost of Service Opt-Out |

This filing sets net power costs (NPC) for 2016 and the final transition adjustments for the 2016 direct access options, consistent with preliminary Order No. 15-353 in docket UE 296.

To support this filing and meet the requirements of OAR 860-022-0025 and OAR 860-022-0230, Pacific Power submits the tariff sheets listed above with the following supporting attachments:

- Attachment 1—Summary of NPC Updates from November 9, 2016 Indicative Filing
- Attachment 2—Description of the NPC Updates

- Attachment 3—Final Update to NPC Allocation
- Attachment 4—TAM Rate Spread, Rate Calculation, and Estimated Rate Impact
- Attachment 5—Revised Attestation of Joseph Hoerner, in accordance with paragraph 13 of the Stipulation adopted by Order No. 10-363 (Docket UE 216) and paragraph 15 of the Stipulation adopted by Order No. 14-331 (Docket UE 287)

Attachment 3 shows Oregon-allocated NPC for 2016 are forecast to be \$373.4 million. Attachment 4 shows the rate spread, rates and rate impact by rate schedule of the final proposed rate change. Tariff changes reflect revised rates and include housekeeping corrections to OAR references and updates to the Loss Adjustment Factors in Schedule 220 to reflect OATT loss rates expected to take effect December 1, 2015.

This proposed change will affect approximately 588,000 customers, and will result in an overall annual rate increase of approximately \$9.4 million or 0.7 percent. Residential customers using 900 kWh per month would see a monthly bill increase of \$0.64 per month as a result of this change.

This Final TAM Update includes several short-term firm electricity transactions and short-term gas swaps that were inadvertently omitted from the Company's November 9, 2016, indicative net power cost results. The Company notified the parties of this error when it provided its workpapers on November 12, 2015, and indicated that these transactions would be included in the Final TAM Update. As required by Orders Nos. 10-363 and 14-331, the Company has submitted a Revised Attestation of Joseph Hoerner (Attachment 5), which includes the previously omitted transactions.

Attached are CDs with the NPC updates and workpapers. Confidential information is provided subject to the protective order in this proceeding (Order No. 10-069).

If you have any questions please contact Erin Apperson, Manager, Regulatory Affairs at (503) 813-6642.

Sincerely,



R. Bryce Dalley
Vice President, Regulation

Enclosure

Cc: Service List UE 296

CERTIFICATE OF SERVICE

I certify that I served a true and correct copy of PacifiCorp's Workpapers for the Compliance Filing on the parties listed below via e-mail and/or overnight delivery in compliance with OAR 860-001-0180.

UE 296

OPUC Dockets (W)
Citizens' Utility Board of Oregon
610 Broadway, Suite 400
Portland, OR 97205
dockets@oregoncub.org

Sommer Moser (C)
Citizens' Utility Board of Oregon
610 Broadway, Suite 400
Portland, OR 97205
sommer@oregoncub.org

Bradley Mullins (C)
Mountain West Analytics
333 SW Taylor – Ste 400
Portland, OR 97204
brmullins@mwanalytics.com

Jesse E. Cowell (C)
Davison Van Cleve PC
333 SW Taylor – Ste 400
Portland, OR 97204
jec@dvclaw.com

Katherine A McDowell (C)
McDowell Rackner & Gibson PC
419 SW 11th Ave, Suite 400
Portland, OR 97205
Katherine@mc-d-law.com

Matthew McVee (C)
Pacific Power
825 NE Multnomah St Ste 1800
Portland, OR 97232
matthew.mcvee@pacificcorp.com

Robert Jenks (C)
Citizens' Utility Board of Oregon
610 Broadway, Suite 400
Portland, OR 97205
bob@oregoncub.org

S. Bradley Van Cleve (C)
Davison Van Cleve PC
333 SW Taylor – Ste 400
Portland, OR 97204
bvc@dvclaw.com

Kevin Higgins (C)
Energy Strategies LLC
215 State St Ste 200
Salt Lake City, UT 84111-2322
Khiggins@energystrat.com

Michael T. Weirich (C)
PUC Staff – Department of Justice
Business Activities Section
1162 Court Street NE
Salem, OR 97301-4096
Michael.weirich@state.or.us

Greg Bass
Noble Americas Energy Solutions LLC
401 West A St., Ste. 500
San Diego, CA 92101
gbass@noblesolutions.com

Oregon Dockets (W)
Pacific Power
825 NE Multnomah St, Ste 2000
Portland, OR 97232
oregondockets@pacificcorp.com

Gregory M. Adams (C)
Richardson Adams, PLLC
PO Box 7218
Boise, ID 83702
greg@richardsonadams.com

Jorge Ordonez (C)
Public Utility Commission of Oregon
PO Box 1088
Salem, OR 97308
jorge.ordonez@state.or.us

Dated this 16th day of November 2015.


Carrie Meyer
Supervisor, Regulatory Operations

**NET POWER COSTS
 COST-BASED SUPPLY SERVICE**
Available

In all territory served by the Company in the State of Oregon.

Applicable

To Residential Consumers and Nonresidential Consumers who have elected to take Cost-Based Supply Service under this schedule or under Schedules 210, 211, 212, 213 or 247. This service may be taken only in conjunction with the applicable Delivery Service Schedule. Also applicable to Nonresidential Consumers who, based on the announcement date defined in OAR 860-038-275, do not elect to receive standard offer service under Schedule 220 or direct access service under the applicable tariff. In addition, applicable to some Large Nonresidential Consumers on Schedule 400 whose special contracts require prices under the Company's previously applicable Schedule 48T. For Consumers on Schedule 400 who were served on previously applicable Schedule 48T prices under their special contract, this service, in conjunction with Delivery Service Schedule 48, supersedes previous Schedule 48T.

(C)

Nonresidential Consumers who had chosen either service under Schedule 220 or who chose to receive direct access service under the applicable tariff may qualify to return to Cost-Based Supply Service under this Schedule after meeting the Returning Service Requirements and making a Returning Service Payment as specified in this Schedule.

Monthly Billing

The Monthly Billing shall be the Energy Charge, as specified below by Delivery Service Schedule.

| | <u>Delivery Service Schedule No.</u> | | <u>Delivery Voltage</u> | | | |
|--|--------------------------------------|------------|-------------------------|----------------|---------------------|-----|
| | | | <u>Secondary</u> | <u>Primary</u> | <u>Transmission</u> | |
| 4 | Per kWh | 0-1000 kWh | 2.729¢ | | | (I) |
| | | > 1000 kWh | 3.728¢ | | | (I) |
| 5 | Per kWh | 0-1000 kWh | 2.729¢ | | | (I) |
| | | > 1000 kWh | 3.728¢ | | | (I) |
| For Schedules 4 and 5, the kilowatt-hour blocks listed above are based on an average month of approximately 30.42 days. Residential kilowatt-hour blocks shall be prorated to the nearest whole kilowatt-hour based upon the number of whole days in the billing period (see Rule 10 for details). | | | | | | |
| 23 | First 3,000 kWh, per kWh | | 3.023¢ | 2.928¢ | | (I) |
| | All additional kWh, per kWh | | 2.242¢ | 2.172¢ | | (I) |
| 28 | First 20,000 kWh, per kWh | | 2.956¢ | 2.846¢ | | (I) |
| | All additional kWh, per kWh | | 2.875¢ | 2.770¢ | | (I) |
| 30 | First 20,000 kWh, per kWh | | 3.160¢ | 3.125¢ | | (I) |
| | All additional kWh, per kWh | | 2.740¢ | 2.701¢ | | (I) |
| 41 | Winter, first 100 kWh/kW, per kWh | | 4.221¢ | 4.086¢ | | (I) |
| | Winter, all additional kWh, per kWh | | 2.876¢ | 2.786¢ | | (I) |
| | Summer, all kWh, per kWh | | 2.876¢ | 2.786¢ | | (I) |

For Schedule 41, Winter is defined as service rendered from December 1 through March 31, Summer is defined as service rendered April 1 through November 30.

(continued)

**NET POWER COSTS
 COST-BASED SUPPLY SERVICE**
Monthly Billing (continued)

| <u>Delivery Service Schedule No.</u> | | <u>Delivery Voltage</u> | | | |
|--------------------------------------|-------------------|-------------------------|----------------|---------------------|-----|
| | | <u>Secondary</u> | <u>Primary</u> | <u>Transmission</u> | |
| 47/48 | Per kWh On-Peak | 2.787¢ | 2.584¢ | 2.427¢ | (l) |
| | Per kWh, Off-Peak | 2.737¢ | 2.534¢ | 2.377¢ | (l) |

For Schedule 47 and Schedule 48, On-Peak hours are from 6:00 a.m. to 10:00 p.m. Monday through Saturday excluding NERC holidays. Off-Peak hours are remaining hours.

Due to the expansions of Daylight Saving Time (DST) as adopted under Section 110 of the U.S. Energy Policy Act of 2005, the time periods shown above will begin and end one hour later for the period between the second Sunday in March and the first Sunday in April and for the period between the last Sunday in October and the first Sunday in November.

| | | | | | |
|----|---|--------|--|--|-----|
| 52 | For dusk to dawn operation, per kWh | 2.265¢ | | | (l) |
| | For dusk to midnight operation, per kWh | 2.265¢ | | | (l) |
| 54 | Per kWh | 1.666¢ | | | (l) |

| 15 | <u>Type of Luminaire</u> | <u>Nominal Rating</u> | <u>Monthly kWh</u> | <u>Rate Per Luminaire</u> | |
|----|--------------------------|-----------------------|--------------------|---------------------------|-----|
| | Mercury Vapor | 7,000 | 76 | \$ 1.73 | (l) |
| | Mercury Vapor | 21,000 | 172 | \$ 3.92 | (l) |
| | Mercury Vapor | 55,000 | 412 | \$ 9.39 | (l) |
| | High Pressure Sodium | 5,800 | 31 | \$ 0.71 | (l) |
| | High Pressure Sodium | 22,000 | 85 | \$ 1.94 | (l) |
| | High Pressure Sodium | 50,000 | 176 | \$ 4.01 | (l) |

50 A. Company-owned Overhead System

Street lights supported on distribution type wood poles: Mercury Vapor Lamps.

| <u>Nominal Lumen Rating</u> | <u>7,000</u> (Monthly 76 kWh) | <u>21,000</u> (Monthly 172 kWh) | <u>55,000</u> (Monthly 412 kWh) | |
|-----------------------------|----------------------------------|------------------------------------|------------------------------------|-----|
| Horizontal, per lamp | \$1.43 | \$3.23 | \$7.73 | (l) |
| Vertical, per lamp | \$1.43 | \$3.23 | | (l) |

Street lights supported on distribution type metal poles: Mercury Vapor Lamps.

| <u>Nominal Lumen Rating</u> | <u>7,000</u> (Monthly 76 kWh) | <u>21,000</u> (Monthly 172 kWh) | <u>55,000</u> (Monthly 412 kWh) | |
|--|----------------------------------|------------------------------------|------------------------------------|-----|
| On 26-foot poles, horizontal, per lamp | \$1.43 | | | (l) |
| On 26-foot poles, vertical, per lamp | \$1.43 | | | (l) |
| On 30-foot poles, horizontal, per lamp | | \$3.23 | | (l) |
| On 30-foot poles, vertical, per lamp | | \$3.23 | | (l) |
| On 33-foot poles, horizontal, per lamp | | | \$7.73 | (l) |

(continued)

Monthly Billing (continued)

Delivery Service Schedule No.

50 B. Company-owned Underground System

| <u>Nominal Lumen Rating</u> | <u>7,000</u> | <u>21,000</u> | <u>55,000</u> | |
|--|---------------------|----------------------|----------------------|-----|
| | (Monthly 76 kWh) | (Monthly 172 kWh) | (Monthly 412 kWh) | |
| On 26-foot poles, horizontal, per lamp | \$1.43 | | | (l) |
| On 26-foot poles, vertical, per lamp | \$1.43 | | | (l) |
| On 30-foot poles, horizontal, per lamp | | \$3.23 | | (l) |
| On 30-foot poles, vertical, per lamp | | \$3.23 | | (l) |
| On 33-foot poles, horizontal, per lamp | | | \$7.73 | (l) |

| 51 <u>Types of Luminaire</u> | <u>Nominal rating</u> | <u>Watts</u> | <u>Monthly kWh</u> | <u>Rate Per Luminaire</u> | |
|-------------------------------------|------------------------------|---------------------|---------------------------|----------------------------------|-----|
| LED | 4,000 | 100 (comp) | | \$0.56 | (l) |
| LED | 6,200 | 150 (comp) | | \$0.80 | |
| LED | 13,000 | 250 (comp) | | \$1.51 | |
| LED | 16,800 | 400 (comp) | | \$2.04 | |
| High Pressure Sodium | 5,800 | 70 | 31 | \$0.92 | |
| High Pressure Sodium | 9,500 | 100 | 44 | \$1.30 | |
| High Pressure Sodium | 16,000 | 150 | 64 | \$1.90 | |
| High Pressure Sodium | 22,000 | 200 | 85 | \$2.52 | |
| High Pressure Sodium | 27,500 | 250 | 115 | \$3.41 | |
| High Pressure Sodium | 50,000 | 400 | 176 | \$5.21 | |
| Metal Halide | 12,000 | 175 | 68 | \$2.01 | |
| Metal Halide | 19,500 | 250 | 94 | \$2.79 | (l) |

| 53 <u>Types of Luminaire</u> | <u>Nominal rating</u> | <u>Watts</u> | <u>Monthly kWh</u> | <u>Rate Per Luminaire</u> | |
|-------------------------------------|------------------------------|---------------------|---------------------------|----------------------------------|-----|
| High Pressure Sodium | 5,800 | 70 | 31 | \$0.30 | (l) |
| High Pressure Sodium | 9,500 | 100 | 44 | \$0.43 | |
| High Pressure Sodium | 16,000 | 150 | 64 | \$0.62 | |
| High Pressure Sodium | 22,000 | 200 | 85 | \$0.82 | |
| High Pressure Sodium | 27,500 | 250 | 115 | \$1.11 | |
| High Pressure Sodium | 50,000 | 400 | 176 | \$1.70 | |
| Metal Halide | 9,000 | 100 | 39 | \$0.38 | |
| Metal Halide | 12,000 | 175 | 68 | \$0.66 | |
| Metal Halide | 19,500 | 250 | 94 | \$0.91 | |
| Metal Halide | 32,000 | 400 | 149 | \$1.44 | |
| Metal Halide | 107,800 | 1,000 | 354 | \$3.42 | (l) |
| Non-Listed Luminaire, per kWh | | | 0.966¢ | | (l) |

(continued)

TAM ADJUSTMENT FOR OTHER REVENUES
Purpose

This schedule adjusts rates for Other Revenues as authorized by Order No. 10-363.

Applicable

To all Residential Consumers and Nonresidential Consumers.

Energy Charge

The adjustment rate is listed below by Delivery Service Schedule and Direct Access Delivery Service Schedule.

| | <u>Delivery Service Schedule No.</u> | | <u>Delivery Voltage</u> | | | |
|--|--------------------------------------|------------|-------------------------|----------------|---------------------|-----|
| | | | <u>Secondary</u> | <u>Primary</u> | <u>Transmission</u> | |
| 4 | Per kWh | 0-1000 kWh | 0.013¢ | | | (I) |
| | | > 1000 kWh | 0.017¢ | | | (I) |
| 5 | Per kWh | 0-1000 kWh | 0.013¢ | | | (I) |
| | | > 1000 kWh | 0.017¢ | | | (I) |
| For Schedules 4 and 5, the kilowatt-hour blocks listed above are based on an average month of approximately 30.42 days. Residential kilowatt-hour blocks shall be prorated to the nearest whole kilowatt-hour based upon the number of whole days in the billing period (see Rule 10 for details). | | | | | | |
| 23, 723 | First 3,000 kWh, per kWh | | 0.014¢ | 0.014¢ | | (I) |
| | All additional kWh, per kWh | | 0.011¢ | 0.010¢ | | (I) |
| 28, 728 | First 20,000 kWh, per kWh | | 0.014¢ | 0.014¢ | | (I) |
| | All additional kWh, per kWh | | 0.013¢ | 0.013¢ | | (I) |
| 30, 730 | First 20,000 kWh, per kWh | | 0.015¢ | 0.014¢ | | (I) |
| | All additional kWh, per kWh | | 0.013¢ | 0.013¢ | | (I) |
| 41, 741 | Winter, first 100 kWh/kW, per kWh | | 0.020¢ | 0.019¢ | | (I) |
| | Winter, all additional kWh, per kWh | | 0.014¢ | 0.013¢ | | (I) |
| | Summer, all kWh, per kWh | | 0.014¢ | 0.013¢ | | (I) |

For Schedule 41, Winter is defined as service rendered from December 1 through March 31, Summer is defined as service rendered April 1 through November 30.

(continued)

TAM ADJUSTMENT FOR OTHER REVENUES
Energy Charge (continued)

| <u>Delivery Service Schedule No.</u> | <u>Delivery Voltage</u> | | | |
|--------------------------------------|-------------------------|----------------|---------------------|-----|
| | <u>Secondary</u> | <u>Primary</u> | <u>Transmission</u> | |
| 47/48 Per kWh On-Peak | 0.013¢ | 0.012¢ | 0.011¢ | (I) |
| 747/748 Per kWh, Off-Peak | 0.013¢ | 0.012¢ | 0.011¢ | (I) |

For Schedule 47 and Schedule 48, On-Peak hours are from 6:00 a.m. to 10:00 p.m. Monday through Saturday excluding NERC holidays. Off-Peak hours are remaining hours.

Due to the expansions of Daylight Saving Time (DST) as adopted under Section 110 of the U.S. Energy Policy Act of 2005, the time periods shown above will begin and end one hour later for the period between the second Sunday in March and the first Sunday in April and for the period between the last Sunday in October and the first Sunday in November.

| | | |
|---|--------|-----|
| 52, 752 For dusk to dawn operation, per kWh | 0.011¢ | (I) |
| For dusk to midnight operation, per kWh | 0.011¢ | (I) |
| 54,754 Per kWh | 0.007¢ | (I) |

| 15 | <u>Type of Luminaire</u> | <u>Nominal Rating</u> | <u>Monthly kWh</u> | <u>Rate Per Luminaire</u> | |
|----|--------------------------|-----------------------|--------------------|---------------------------|-----|
| | Mercury Vapor | 7,000 | 76 | \$0.01 | (I) |
| | Mercury Vapor | 21,000 | 172 | \$0.02 | (I) |
| | Mercury Vapor | 55,000 | 412 | \$0.05 | (I) |
| | High Pressure Sodium | 5,800 | 31 | \$0.00 | |
| | High Pressure Sodium | 22,000 | 85 | \$0.01 | (I) |
| | High Pressure Sodium | 50,000 | 176 | \$0.02 | (I) |

50 A. Company-owned Overhead System

Street lights supported on distribution type wood poles: Mercury Vapor Lamps.

| <u>Nominal Lumen Rating</u> | <u>7,000</u> | <u>21,000</u> | <u>55,000</u> | |
|-----------------------------|------------------|-------------------|-------------------|-----|
| | (Monthly 76 kWh) | (Monthly 172 kWh) | (Monthly 412 kWh) | |
| Horizontal, per lamp | \$0.01 | \$0.02 | \$0.04 | (I) |
| Vertical, per lamp | \$0.01 | \$0.02 | | (I) |

Street lights supported on distribution type metal poles: Mercury Vapor Lamps.

| <u>Nominal Lumen Rating</u> | <u>7,000</u> | <u>21,000</u> | <u>55,000</u> | |
|--|------------------|-------------------|-------------------|-----|
| | (Monthly 76 kWh) | (Monthly 172 kWh) | (Monthly 412 kWh) | |
| On 26-foot poles, horizontal, per lamp | \$0.01 | | | (I) |
| On 26-foot poles, vertical, per lamp | \$0.01 | | | (I) |
| On 30-foot poles, horizontal, per lamp | | \$0.02 | | (I) |
| On 30-foot poles, vertical, per lamp | | \$0.02 | | (I) |
| On 33-foot poles, horizontal, per lamp | | | \$0.04 | (I) |

(continued)

Energy Charge (continued)
Delivery Service Schedule No.

 50 **B. Company-owned Underground System**

| <u>Nominal Lumen Rating</u> | <u>7,000</u> | <u>21,000</u> | <u>55,000</u> | |
|--|---------------------|----------------------|----------------------|-----|
| | (Monthly 76 kWh) | (Monthly 172 kWh) | (Monthly 412 kWh) | |
| On 26-foot poles, horizontal, per lamp | \$0.01 | | | (l) |
| On 26-foot poles, vertical, per lamp | \$0.01 | | | (l) |
| On 30-foot poles, horizontal, per lamp | | \$0.02 | | (l) |
| On 30-foot poles, vertical, per lamp | | \$0.02 | | (l) |
| On 33-foot poles, horizontal, per lamp | | | \$0.04 | (l) |

| 51, 751 <u>Types of Luminaire</u> | <u>Nominal rating</u> | <u>Watts</u> | <u>Monthly kWh</u> | <u>Rate Per Luminaire</u> | |
|--|------------------------------|---------------------|---------------------------|----------------------------------|-----|
| LED | 4,000 | 100 (comp) | | \$0.00 | |
| LED | 6,200 | 150 (comp) | | \$0.00 | |
| LED | 13,000 | 250 (comp) | | \$0.01 | (l) |
| LED | 16,800 | 400 (comp) | | \$0.01 | (l) |
| High Pressure Sodium | 5,800 | 70 | 31 | \$0.00 | |
| High Pressure Sodium | 9,500 | 100 | 44 | \$0.01 | (l) |
| High Pressure Sodium | 16,000 | 150 | 64 | \$0.01 | (l) |
| High Pressure Sodium | 22,000 | 200 | 85 | \$0.01 | (l) |
| High Pressure Sodium | 27,500 | 250 | 115 | \$0.01 | (l) |
| High Pressure Sodium | 50,000 | 400 | 176 | \$0.02 | (l) |
| Metal Halide | 12,000 | 175 | 68 | \$0.01 | (l) |
| Metal Halide | 19,500 | 250 | 94 | \$0.01 | (l) |

| 53, 753 <u>Types of Luminaire</u> | <u>Nominal rating</u> | <u>Watts</u> | <u>Monthly kWh</u> | <u>Rate Per Luminaire</u> | |
|--|------------------------------|---------------------|---------------------------|----------------------------------|-----|
| High Pressure Sodium | 5,800 | 70 | 31 | \$0.00 | |
| High Pressure Sodium | 9,500 | 100 | 44 | \$0.00 | |
| High Pressure Sodium | 16,000 | 150 | 64 | \$0.00 | |
| High Pressure Sodium | 22,000 | 200 | 85 | \$0.00 | |
| High Pressure Sodium | 27,500 | 250 | 115 | \$0.01 | (l) |
| High Pressure Sodium | 50,000 | 400 | 176 | \$0.01 | (l) |
| Metal Halide | 9,000 | 100 | 39 | \$0.00 | |
| Metal Halide | 12,000 | 175 | 68 | \$0.00 | |
| Metal Halide | 19,500 | 250 | 94 | \$0.00 | |
| Metal Halide | 32,000 | 400 | 149 | \$0.01 | (l) |
| Metal Halide | 107,800 | 1,000 | 354 | \$0.02 | (l) |
| Non-Listed Luminaire, per kWh | | | 0.005¢ | | (l) |

Available

In all territory served by the Company in the State of Oregon.

Applicable

To Nonresidential Consumers who have elected to take this service. This service may be taken only in conjunction with the applicable Delivery Service Schedule.

Energy Charge

The Energy Charge shall be based on the Energy Charge Daily Rate as described below.

The Energy Charge Daily Rate is calculated by applying the same monthly weights produced by the Weighted Market Value calculation in the Transition Adjustment Schedule – Schedule 294 to actual daily market prices reported by the Platts indices at California/Oregon Border (COB), Mid-Columbia (Mid-C) and Desert Southwest (DSW), which includes the Palo Verde and Four Corners markets. The weights and thermal value will remain constant throughout the calendar year.

| Standard Offer HLH | | | Standard Offer LLH | | |
|--------------------|---------------|-------------|--------------------|---------------|-------------|
| <u>Market</u> | <u>Weight</u> | | <u>Market</u> | <u>Weight</u> | |
| COB | 10.32% | | COB | 6.96% | |
| DSW | 17.81% | | DSW | 8.11% | |
| Mid C | 37.96% | | Mid C | 18.82% | |
| SP15 | 0.00% | | SP15 | 0.00% | |
| Thermal | 33.91% | \$19.68/MWh | Thermal | 66.11% | \$18.61/MWh |
| Total | 100% | | Total | 100% | |

(C)
 |
 (C)

If prices are not reported for a particular day or days, the average of the immediately preceding and following reported days' on-peak and off-peak prices shall be used to determine the price for the non-reported period. On-peak and off-peak hours shall be defined as reported by Platts for the Mid-Columbia Index. Currently, on-peak hours are between 6:00 a.m. and 10:00 p.m. Monday through Saturday excluding NERC holidays. Off-peak hours are all remaining hours.

Due to the expansions of Daylight Saving Time (DST) as adopted under Section 110 of the U.S. Energy Policy Act of 2005, the time periods shown above will begin and end one hour later for the period between the second Sunday in March and the first Sunday in April and for the period between the last Sunday in October and the first Sunday in November.

The Consumer shall notify the Company of its choice of this option within the period defined in OAR 860-038-275. The Consumer shall remain on this option until the Company is properly notified of the Consumers' election of Direct Access Service. The Consumer may return to Cost-Based Supply Service consistent with the provisions of Schedule 201.

(C)

(continued)

Return to Cost-Based Supply Service

The Consumer's return to Cost-Based Supply Service is restricted under the provisions of Schedule 201, Cost-Based Supply Service.

Loss Adjustment Factor

The loss adjustment shall be included by multiplying the above applicable Energy Charge by the following adjustment factors where the Real Power Losses Factors are as set forth for service in the PacifiCorp Zone in Schedule 10 of the Company's FERC Open Access Transmission Tariff (OATT) approved at the time of the announcement date defined by OAR 860-038-275 to be in effect for the election period: (C)

| | | |
|-------------------------------|--------|-----|
| Delivery Voltage \geq 46 kV | 1.0445 | (I) |
| Delivery Voltage < 46 kV | 1.0801 | (I) |

In addition to this energy charge, all customers purchasing this service are required to pay for ancillary services at the rates determined by the appropriate pro forma transmission tariffs.

TRANSITION ADJUSTMENT
One-Year Option - Transition Adjustments (cents/kWh)

| | 23/723 Secondary | | 23/723 Primary | | 28/728 Secondary | | 28/728 Primary | | 30/730 Secondary | |
|--------|------------------|--------|----------------|--------|------------------|--------|----------------|--------|------------------|--------|
| | HLH | LLH | HLH | LLH | HLH | LLH | HLH | LLH | HLH | LLH |
| Jan-16 | -0.151 | 0.368 | -0.351 | 0.146 | -0.069 | 0.435 | -0.095 | 0.339 | -0.203 | 0.297 |
| Feb-16 | 0.202 | 0.539 | 1.311 | 0.375 | 0.292 | 0.594 | 1.106 | 0.475 | 0.126 | 0.453 |
| Mar-16 | 0.400 | 0.490 | 0.299 | 0.329 | 0.464 | 0.559 | 0.327 | 0.381 | 0.365 | 0.421 |
| Apr-16 | 0.708 | 0.569 | 0.545 | 0.408 | 0.733 | 0.647 | 0.591 | 0.468 | 0.626 | 0.522 |
| May-16 | 0.545 | 0.530 | 0.393 | 0.329 | 0.594 | 0.589 | 0.652 | 0.485 | 0.487 | 0.463 |
| Jun-16 | 0.169 | 0.980 | -0.044 | 0.809 | 0.278 | 1.056 | 0.251 | 0.871 | 0.128 | 0.915 |
| Jul-16 | 0.183 | -0.730 | -0.442 | -0.719 | 0.256 | -0.747 | -0.273 | -1.551 | 0.121 | -0.767 |
| Aug-16 | -0.600 | -0.022 | -0.668 | -0.137 | -0.474 | 0.027 | -0.580 | -0.173 | -0.624 | -0.083 |
| Sep-16 | 0.645 | 0.290 | 0.088 | 0.123 | 0.529 | 0.371 | -0.213 | 0.213 | 0.453 | 0.239 |
| Oct-16 | 0.615 | 0.251 | 0.221 | 0.109 | 0.519 | 0.323 | 0.576 | 0.183 | 0.394 | 0.196 |
| Nov-16 | -0.341 | 0.103 | -0.615 | -0.026 | -0.299 | 0.167 | -0.423 | 0.064 | -0.384 | 0.065 |
| Dec-16 | -0.075 | 0.215 | -0.372 | 0.352 | 0.042 | 0.411 | -0.132 | 0.195 | -0.135 | 0.300 |

| | 30/730 Primary | | 41/741 Secondary | | 41/741 Primary | | 47/747,48/748 Secondary | | 47/747,48/748 Primary | |
|--------|----------------|--------|------------------|--------|----------------|--------|-------------------------|--------|-----------------------|--------|
| | HLH | LLH | HLH | LLH | HLH | LLH | HLH | LLH | HLH | LLH |
| Jan-16 | -0.197 | 0.253 | | | | | -0.237 | 0.235 | -0.444 | 0.066 |
| Feb-16 | 0.165 | 0.468 | | | | | 0.142 | 0.454 | -0.080 | 0.250 |
| Mar-16 | 0.332 | 0.366 | | | | | 0.321 | 0.349 | 0.131 | 0.173 |
| Apr-16 | 0.555 | 0.465 | 0.252 | 0.704 | 0.252 | 0.704 | 0.681 | 0.467 | 0.391 | 0.274 |
| May-16 | 0.681 | 0.390 | 0.559 | 0.667 | 0.559 | 0.667 | 0.421 | 0.516 | 0.205 | 0.281 |
| Jun-16 | 0.061 | 0.863 | 0.206 | 0.985 | 0.206 | 0.985 | 0.218 | 0.918 | -0.092 | 0.706 |
| Jul-16 | 0.126 | -0.981 | -0.378 | -0.198 | -0.378 | -0.198 | -0.415 | -0.411 | -0.129 | -0.885 |
| Aug-16 | -0.665 | -0.154 | -0.953 | 0.021 | -0.953 | 0.021 | -0.745 | -0.054 | -0.838 | -0.284 |
| Sep-16 | 0.377 | 0.192 | 0.417 | 0.247 | 0.417 | 0.247 | 0.439 | 0.203 | 0.227 | -0.001 |
| Oct-16 | 0.375 | 0.147 | 0.721 | 0.196 | 0.721 | 0.196 | 0.824 | 0.139 | 0.223 | -0.041 |
| Nov-16 | -0.498 | -0.025 | | | | | -0.587 | 0.062 | -0.718 | -0.187 |
| Dec-16 | -0.216 | 0.174 | | | | | -0.093 | 0.658 | -0.376 | 0.071 |

| | 47/747,48/748 Transmission | | 51/751 | | 52/752 | | 53/753 | | 54/754 | |
|--------|----------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| | HLH | LLH | HLH | LLH | HLH | LLH | HLH | LLH | HLH | LLH |
| Jan-16 | -0.511 | 0.037 | 0.009 | 0.479 | -0.703 | -0.232 | -2.032 | -1.561 | -1.492 | -0.845 |
| Feb-16 | -0.149 | 0.146 | 0.299 | 0.638 | -0.412 | -0.074 | -1.741 | -1.403 | -1.063 | -0.687 |
| Mar-16 | 0.061 | 0.083 | 0.534 | 0.609 | -0.178 | -0.103 | -1.506 | -1.431 | -0.536 | -0.715 |
| Apr-16 | 0.302 | 0.205 | 0.802 | 0.689 | 0.090 | -0.022 | -1.238 | -1.351 | -0.655 | -0.635 |
| May-16 | 0.203 | 0.204 | 0.700 | 0.693 | -0.012 | -0.019 | -1.340 | -1.348 | -0.554 | -0.631 |
| Jun-16 | -0.214 | 0.640 | 0.242 | 1.141 | -0.470 | 0.430 | -1.799 | -0.899 | -1.330 | -0.183 |
| Jul-16 | -0.151 | -1.020 | 0.299 | -0.521 | -0.413 | -1.232 | -1.741 | -2.561 | -2.146 | -1.845 |
| Aug-16 | -0.952 | -0.325 | -0.492 | 0.157 | -1.203 | -0.554 | -2.532 | -1.883 | -2.002 | -1.167 |
| Sep-16 | 0.216 | -0.084 | 0.721 | 0.401 | 0.010 | -0.311 | -1.319 | -1.639 | -1.477 | -0.923 |
| Oct-16 | 0.151 | -0.116 | 0.668 | 0.367 | -0.043 | -0.344 | -1.372 | -1.673 | -1.361 | -0.957 |
| Nov-16 | -0.708 | -0.227 | -0.280 | 0.253 | -0.991 | -0.458 | -2.320 | -1.787 | -0.768 | -1.071 |
| Dec-16 | -0.515 | -0.066 | -0.035 | 0.433 | -0.746 | -0.278 | -2.075 | -1.607 | -0.359 | -0.891 |

(C)

(C)

**TRANSITION ADJUSTMENT
THREE-YEAR COST OF SERVICE OPT-OUT**
Three-Year Option - Transition Adjustments (cents/kWh)
Adjustments for Consumers Electing This Option for 2014-2016 (No New Service)

(D)

| | 30/730 Secondary | | 30/730 Primary | |
|------|------------------|--------|----------------|--------|
| | HLH | LLH | HLH | LLH |
| 2014 | -0.437 | -0.275 | -0.486 | -0.344 |
| 2015 | -0.786 | -0.531 | -0.812 | -0.593 |
| 2016 | -0.931 | -0.935 | -0.960 | -0.979 |

| | 47/747, 48/748 Secondary | | 47/747, 48/748 Primary | | 47/747, 48/748 Transmission | |
|------|--------------------------|--------|------------------------|--------|-----------------------------|--------|
| | HLH | LLH | HLH | LLH | HLH | LLH |
| 2014 | -0.447 | -0.158 | -0.544 | -0.391 | -0.648 | -0.474 |
| 2015 | -0.875 | -0.534 | -0.913 | -0.662 | -0.978 | -0.704 |
| 2016 | -1.042 | -1.199 | -1.071 | -1.002 | -1.111 | -1.075 |

Adjustments for Consumers Electing This Option for 2015-2017 (No New Service)

(C)

| | 30/730 Secondary | | 30/730 Primary | |
|------|------------------|--------|----------------|--------|
| | HLH | LLH | HLH | LLH |
| 2015 | -0.715 | -0.448 | -0.757 | -0.494 |
| 2016 | -0.781 | -0.397 | -0.793 | -0.409 |
| 2017 | -0.969 | -0.598 | -0.978 | -0.596 |

| | 47/747, 48/748 Secondary | | 47/747, 48/748 Primary | | 47/747, 48/748 Transmission | |
|------|--------------------------|--------|------------------------|--------|-----------------------------|--------|
| | HLH | LLH | HLH | LLH | HLH | LLH |
| 2015 | -0.758 | -0.415 | -0.948 | -0.659 | -0.998 | -0.744 |
| 2016 | -0.844 | -0.449 | -1.025 | -0.624 | -1.061 | -0.694 |
| 2017 | -1.097 | -0.646 | -1.224 | -0.845 | -1.246 | -0.895 |

Adjustments for Consumers Electing This Option for 2016-2018

(N)

| | 30/730 Secondary | | 30/730 Primary | |
|------|------------------|--------|----------------|--------|
| | HLH | LLH | HLH | LLH |
| 2016 | 0.124 | 0.180 | 0.108 | 0.145 |
| 2017 | -0.196 | 0.120 | -0.224 | 0.073 |
| 2018 | -0.292 | -0.043 | -0.340 | -0.093 |

| | 47/747, 48/748 Secondary | | 47/747, 48/748 Primary | | 47/747, 48/748 Transmission | |
|------|--------------------------|--------|------------------------|--------|-----------------------------|--------|
| | HLH | LLH | HLH | LLH | HLH | LLH |
| 2016 | -0.112 | 0.083 | -0.128 | -0.055 | -0.193 | -0.102 |
| 2017 | -0.238 | 0.183 | -0.448 | -0.138 | -0.495 | -0.216 |
| 2018 | -0.298 | -0.046 | -0.557 | -0.266 | -0.621 | -0.331 |

(N)

**TRANSITION ADJUSTMENT
 FIVE-YEAR COST OF SERVICE OPT-OUT**
Adjustments for Consumers Electing This Option for Service Beginning January 1, 2016

The Monthly Billing will be the Transition Adjustments plus the Consumer Opt-Out Charge as specified below by Delivery Service Schedule.

Transition Adjustments (cents/kWh)

| | 730 Secondary | 730 Primary | 747, 748 Secondary | 747, 748 Primary | 747, 748 Transmission |
|-------------|--------------------------|------------------------|-------------------------------|-----------------------------|----------------------------------|
| 2016 | 0.223 | 0.179 | 0.191 | -0.018 | -0.094 |
| 2017 | 0.179 | 0.133 | 0.146 | -0.074 | -0.152 |
| 2018 | 0.030 | -0.016 | -0.004 | -0.226 | -0.299 |
| 2019 | -0.092 | -0.139 | -0.127 | -0.352 | -0.422 |
| 2020 | -0.260 | -0.308 | -0.295 | -0.520 | -0.585 |

Consumer Opt-Out Charge (cents/kWh)

| | 730 Secondary | 730 Primary | 747, 748 Secondary | 747, 748 Primary | 747, 748 Transmission |
|------------------|--------------------------|------------------------|-------------------------------|-----------------------------|----------------------------------|
| 2016-2020 | 1.827 | 1.756 | 1.809 | 1.486 | 1.315 |

(C)

(C)

ATTACHMENT 1

Summary of NPC Updates from November 9, 2016 Indicative Filing

November 2015
Oregon Transition Adjustment Mechanism (TAM) Final Update
Update Explanations

Correction 1 – Corrected Short Term Transactions

During the preparation of the supporting workpapers for its indicative filing, the Company discovered that certain short-term firm electricity transactions and short-term gas swaps were inadvertently omitted from the Company's indicative net power cost results. The transactions at issue are identified in the Company's confidential workpaper "*U12 - ORTAM15 New Short term transactions NOV15 CONF.xlsx*." Correctly incorporating these transactions would have increased the Company's indicative filing by approximately \$271,000 on a total Company basis.

Update 1 – November 9, 2015 Forward Price Curve

This update incorporates the Company's official forward price curves as of November 9, 2015. The impact of this update increases net power costs by approximately \$475,000 on a total Company basis.

ATTACHMENT 2

Description of the NPC Updates

| | | |
|--|-------------|---------------|
| Oregon TAM 2016 (April 2015 Filing) | \$ NPC = \$ | 1,537,615,613 |
| | \$/MWh = \$ | 25.21 |

| | | |
|--|-------------|---------------|
| Oregon TAM 2016 (August 2015 Update Filing) | \$ NPC = \$ | 1,536,650,137 |
| | \$/MWh = \$ | 25.19 |

| | | |
|--|-------------|---------------|
| Oregon TAM 2016 (Nov 2015 Indicative Filing): | \$ NPC = \$ | 1,520,323,962 |
| | \$/MWh = \$ | 24.92 |

| | | |
|--------------------------------------|--|--------------------|
| | | Impact (\$) |
| Correction - Short term transactions | | 270,980 |

| | | |
|---|-------------|---------------|
| Oregon TAM 2016 (Nov 2015 Indicative Filing Correction): | \$ NPC = \$ | 1,520,594,942 |
| | \$/MWh = \$ | 24.93 |

| | | |
|--------------------------------|--|--------------------|
| | | Impact (\$) |
| Update - November 9, 2015 OFPC | | 474,727 |

| | | |
|---|-------------|---------------|
| Oregon TAM 2016 (Nov 2015 Final Filing): | \$ NPC = \$ | 1,521,069,669 |
| | \$/MWh = \$ | 24.94 |

ATTACHMENT 3

Final Update to NPC Allocation

ATTACHMENT 4

TAM Rate Spread, Rate Calculation, and Estimated Rate Impact

**PACIFIC POWER
STATE OF OREGON
TAM Schedule 201 Net Power Costs
Present and Proposed Rates and Revenues
Forecast 12 Months Ending December 31, 2016**

| Rate Schedule | Forecast Energy | Present Schedule 201 | | Present Rate Spread | Target Revenues | Proposed Schedule 201 | |
|--|----------------------|----------------------|----------------------|---------------------|----------------------|-----------------------|----------------------|
| | | Rates | Revenues | | | Rates | Revenues |
| Schedule 4, Residential | | | | | | | |
| First Block kWh (0-1,000) | 3,906,072,873 | 2.677 ¢ | \$104,565,571 | | \$106,596,784 | 2.729 ¢ | \$106,596,729 |
| Second Block kWh (> 1,000) | 1,377,924,557 | 3.657 ¢ | \$50,390,701 | | \$51,369,553 | 3.728 ¢ | \$51,369,027 |
| | <u>5,283,997,430</u> | | <u>\$154,956,272</u> | 42.438% | <u>\$157,966,337</u> | | <u>\$157,965,756</u> |
| | | | | | | Change | \$3,009,484 |
| Employee Discount | | | | | | | |
| First Block kWh (0-1,000) | 11,290,332 | 2.677 ¢ | \$302,242 | | | 2.729 ¢ | \$308,113 |
| Second Block kWh (> 1,000) | 5,315,117 | 3.657 ¢ | \$194,374 | | | 3.728 ¢ | \$198,148 |
| | <u>16,605,449</u> | | <u>\$496,616</u> | | | | <u>\$506,261</u> |
| Discount | | | -\$124,154 | | | | -\$126,565 |
| | | | | | | Change | -\$2,411 |
| Schedule 23, Small General Service | | | | | | | |
| Secondary Voltage | | | | | | | |
| 1st 3,000 kWh, per kWh | 900,821,085 | 2.965 ¢ | \$26,709,345 | | \$27,228,181 | 3.023 ¢ | \$27,231,821 |
| All additional kWh, per kWh | 247,078,348 | 2.199 ¢ | \$5,433,253 | | \$5,538,795 | 2.242 ¢ | \$5,539,497 |
| | <u>1,147,899,433</u> | | <u>\$32,142,598</u> | 8.803% | <u>\$32,766,976</u> | | <u>\$32,771,318</u> |
| | | | | | | Change | \$628,720 |
| Primary Voltage | | | | | | | |
| 1st 3,000 kWh, per kWh | 788,479 | 2.872 ¢ | \$22,645 | | \$23,085 | 2.928 ¢ | \$23,087 |
| All additional kWh, per kWh | 355,294 | 2.131 ¢ | \$7,571 | | \$7,718 | 2.172 ¢ | \$7,717 |
| | <u>1,143,773</u> | | <u>\$30,216</u> | 0.008% | <u>\$30,803</u> | | <u>\$30,804</u> |
| | | | | | | Change | \$588 |
| Schedule 28, General Service 31-200kW | | | | | | | |
| Secondary Voltage | | | | | | | |
| 1st 20,000 kWh, per kWh | 1,425,838,082 | 2.900 ¢ | \$41,349,304 | | \$42,152,525 | 2.956 ¢ | \$42,147,774 |
| All additional kWh, per kWh | 581,965,329 | 2.820 ¢ | \$16,411,422 | | \$16,730,218 | 2.875 ¢ | \$16,731,503 |
| | <u>2,007,803,411</u> | | <u>\$57,760,726</u> | 15.819% | <u>\$58,882,743</u> | | <u>\$58,879,277</u> |
| | | | | | | Change | \$1,118,551 |
| Primary Voltage | | | | | | | |
| 1st 20,000 kWh, per kWh | 9,764,536 | 2.792 ¢ | \$272,626 | | \$277,922 | 2.846 ¢ | \$277,899 |
| All additional kWh, per kWh | 8,839,791 | 2.717 ¢ | \$240,177 | | \$244,842 | 2.770 ¢ | \$244,862 |
| | <u>18,604,327</u> | | <u>\$512,803</u> | 0.140% | <u>\$522,764</u> | | <u>\$522,761</u> |
| | | | | | | Change | \$9,958 |
| Schedule 30, General Service 201-999kW | | | | | | | |
| Secondary Voltage | | | | | | | |
| 1st 20,000 kWh, per kWh | 175,688,856 | 3.100 ¢ | \$5,446,355 | | \$5,552,152 | 3.160 ¢ | \$5,551,768 |
| All additional kWh, per kWh | 1,041,475,343 | 2.688 ¢ | \$27,994,857 | | \$28,538,664 | 2.740 ¢ | \$28,536,424 |
| | <u>1,217,164,199</u> | | <u>\$33,441,212</u> | 9.159% | <u>\$34,090,816</u> | | <u>\$34,088,192</u> |
| | | | | | | Change | \$646,980 |
| Primary Voltage | | | | | | | |
| 1st 20,000 kWh, per kWh | 11,969,659 | 3.065 ¢ | \$366,870 | | \$373,997 | 3.125 ¢ | \$374,052 |
| All additional kWh, per kWh | 77,508,031 | 2.650 ¢ | \$2,053,963 | | \$2,093,862 | 2.701 ¢ | \$2,093,492 |
| | <u>89,477,690</u> | | <u>\$2,420,833</u> | 0.663% | <u>\$2,467,858</u> | | <u>\$2,467,544</u> |
| | | | | | | Change | \$46,711 |
| Schedule 41, Agricultural Pumping Service | | | | | | | |
| Secondary Voltage | | | | | | | |
| Winter, 1st 100 kWh/kWh, per kWh | 2,618,553 | 4.141 ¢ | \$108,434 | | \$110,540 | 4.221 ¢ | \$110,529 |
| Winter, All additional kWh, per kWh | 2,314,472 | 2.821 ¢ | \$65,291 | | \$66,559 | 2.876 ¢ | \$66,564 |
| Summer, All kWh, per kWh | 221,393,752 | 2.821 ¢ | \$6,245,518 | | \$6,366,839 | 2.876 ¢ | \$6,367,284 |
| | <u>226,326,777</u> | | <u>\$6,419,243</u> | 1.758% | <u>\$6,543,938</u> | | <u>\$6,544,377</u> |
| | | | | | | Change | \$125,134 |
| Primary Voltage | | | | | | | |
| Winter, 1st 100 kWh/kWh, per kWh | 7,933 | 4.010 ¢ | \$318 | | \$324 | 4.086 ¢ | \$324 |
| Winter, All additional kWh, per kWh | 45,374 | 2.732 ¢ | \$1,240 | | \$1,264 | 2.786 ¢ | \$1,264 |
| Summer, All kWh, per kWh | 282,020 | 2.732 ¢ | \$7,705 | | \$7,855 | 2.786 ¢ | \$7,857 |
| | <u>335,327</u> | | <u>\$9,263</u> | 0.003% | <u>\$9,443</u> | | <u>\$9,445</u> |
| | | | | | | Change | \$182 |
| Schedule 47, Large General Service, Partial Requirements 1,000kW and over | | | | | | | |
| Primary Voltage | | | | | | | |
| On-Peak, per on-peak kWh | 24,778,886 | 2.536 ¢ | \$628,393 | | | 2.584 ¢ | \$640,286 |
| Off-Peak, per off-peak kWh | 8,999,847 | 2.486 ¢ | \$223,736 | | | 2.534 ¢ | \$228,056 |
| | <u>33,778,733</u> | | <u>\$852,129</u> | | <u>\$868,342</u> | | <u>\$868,342</u> |
| | | | | | | Change | \$16,213 |
| Transmission Voltage | | | | | | | |
| On-Peak, per on-peak kWh | 8,612,187 | 2.381 ¢ | \$205,056 | | | 2.427 ¢ | \$209,018 |
| Off-Peak, per off-peak kWh | 7,766,653 | 2.331 ¢ | \$181,041 | | | 2.377 ¢ | \$184,613 |
| | <u>16,378,840</u> | | <u>\$386,097</u> | | <u>\$393,631</u> | | <u>\$393,631</u> |
| | | | | | | Change | \$7,534 |

**PACIFIC POWER
STATE OF OREGON
TAM Schedule 201 Net Power Costs
Present and Proposed Rates and Revenues
Forecast 12 Months Ending December 31, 2016**

| Rate Schedule | Forecast Energy | Present Schedule 201 | | Present Rate Spread | Target Revenues | Proposed Schedule 201 | |
|--|-----------------------|----------------------|----------------------|---------------------|----------------------|-----------------------|----------------------|
| | | Rates | Revenues | | | Rates | Revenues |
| Schedule 48, Large General Service, 1,000kW and over | | | | | | | |
| Secondary Voltage | | | | | | | |
| On-Peak, per on-peak kWh | 361,489,356 | 2.734 ¢ | \$9,883,119 | | \$10,075,101 | 2.787 ¢ | \$10,074,708 |
| Off-Peak, per off-peak kWh | 199,021,762 | 2.684 ¢ | \$5,341,744 | | \$5,445,509 | 2.737 ¢ | \$5,447,226 |
| | 560,511,118 | | \$15,224,863 | 4.170% | \$15,520,610 | | \$15,521,934 |
| | | | | | | Change | \$297,071 |
| Primary Voltage | | | | | | | |
| On-Peak, per on-peak kWh | 1,067,203,994 | 2.536 ¢ | \$27,064,293 | | \$27,590,024 | 2.584 ¢ | \$27,576,551 |
| Off-Peak, per off-peak kWh | 671,514,994 | 2.486 ¢ | \$16,693,863 | | \$17,018,146 | 2.534 ¢ | \$17,016,190 |
| | 1,738,718,988 | | \$43,758,156 | 11.984% | \$44,608,169 | | \$44,592,741 |
| | | | | | | Change | \$834,585 |
| Transmission Voltage | | | | | | | |
| On-Peak, per on-peak kWh | 420,559,376 | 2.381 ¢ | \$10,013,519 | | \$10,208,034 | 2.427 ¢ | \$10,206,976 |
| Off-Peak, per off-peak kWh | 316,970,565 | 2.331 ¢ | \$7,388,584 | | \$7,532,109 | 2.377 ¢ | \$7,534,390 |
| | 737,529,941 | | \$17,402,103 | 4.766% | \$17,740,143 | | \$17,741,366 |
| | | | | | | Change | \$339,263 |
| Schedule 15, Outdoor Area Lighting Service | | | | | | | |
| Secondary Voltage | | | | | | | |
| All kWh, per kWh | 9,154,109 | 2.235 ¢ | \$204,590 | | \$208,565 | 2.278 ¢ | \$208,536 |
| | 9,154,109 | | \$204,590 | 0.056% | \$208,565 | | \$208,536 |
| | | | | | | Change | \$3,946 |
| Schedule 50, Mercury Vapor Street Lighting Service | | | | | | | |
| Secondary Voltage | | | | | | | |
| All kWh, per kWh | 8,783,001 | 1.838 ¢ | \$161,687 | | \$164,827 | 1.877 ¢ | \$165,178 |
| | 8,783,001 | | \$161,687 | 0.044% | \$164,827 | | \$165,178 |
| | | | | | | Change | \$3,491 |
| Schedule 51, Street Lighting Service, Company-Owned System | | | | | | | |
| Secondary Voltage | | | | | | | |
| All kWh, per kWh | 19,673,713 | 2.901 ¢ | \$571,824 | | \$582,932 | 2.963 ¢ | \$582,409 |
| | 19,673,713 | | \$571,824 | 0.157% | \$582,932 | | \$582,409 |
| | | | | | | Change | \$10,585 |
| Schedule 52, Street Lighting Service, Company-Owned System | | | | | | | |
| Secondary Voltage | | | | | | | |
| All kWh, per kWh | 406,889 | 2.222 ¢ | \$9,041 | | \$9,217 | 2.265 ¢ | \$9,216 |
| | 406,889 | | \$9,041 | 0.002% | \$9,217 | | \$9,216 |
| | | | | | | Change | \$175 |
| Schedule 53, Street Lighting Service, Consumer-Owned System | | | | | | | |
| Secondary Voltage | | | | | | | |
| All kWh, per kWh | 9,363,960 | 0.948 ¢ | \$88,770 | | \$90,495 | 0.966 ¢ | \$90,456 |
| | 9,363,960 | | \$88,770 | 0.024% | \$90,495 | | \$90,456 |
| | | | | | | Change | \$1,686 |
| Schedule 54, Recreational Field Lighting | | | | | | | |
| Secondary Voltage | | | | | | | |
| All kWh, per kWh | 1,211,340 | 1.634 ¢ | \$19,793 | | \$20,177 | 1.666 ¢ | \$20,181 |
| | 1,211,340 | | \$19,793 | 0.005% | \$20,177 | | \$20,181 |
| | | | | | | Change | \$388 |
| Total before Employee Discount | | | | | | | |
| Employee Discount | | | \$366,372,220 | 100.000% | \$373,488,788 | | \$373,473,465 |
| | | | -\$124,154 | | -\$126,565 | | -\$126,565 |
| TOTAL | 13,128,263,000 | | \$366,248,066 | | \$373,362,223 | | \$373,346,899 |
| | | | | | | Change | \$7,098,834 |
| Schedule 47 Unscheduled kWh | | | | | | | |
| Total Forecast kWh | 2,050,352 | | | | | | |
| | 13,130,313,352 | | | | | | |

PACIFIC POWER
STATE OF OREGON
TAM Schedule 205 - TAM Adjustment for Other Revenues
Proposed Rates and Revenues
Forecast 12 Months Ending December 31, 2016

| Rate Schedule | Forecast Energy | Present | Proposed Change | | Total Proposed |
|--|----------------------|-----------------------|-----------------|------------------|-----------------------|
| | | Schedule 205 Rates | Rates | Revenues | Schedule 205 Rates |
| Schedule 4, Residential | | | | | |
| First Block kWh (0-1,000) | 3,906,072,873 | -0.004 ¢ | 0.017 ¢ | \$664,032 | 0.013 ¢ |
| Second Block kWh (> 1,000) | 1,377,924,557 | -0.006 ¢ | 0.023 ¢ | \$316,923 | 0.017 ¢ |
| | <u>5,283,997,430</u> | | | <u>\$980,955</u> | |
| Employee Discount | | | | | |
| First Block kWh (0-1,000) | 11,290,332 | | 0.017 ¢ | \$1,919 | |
| Second Block kWh (> 1,000) | 5,315,117 | | 0.023 ¢ | \$1,222 | |
| | <u>16,605,449</u> | | | <u>\$3,141</u> | |
| Discount | | | | -\$785 | |
| Schedule 23, Small General Service | | | | | |
| Secondary Voltage | | | | | |
| 1st 3,000 kWh, per kWh | 900,821,085 | -0.005 ¢ | 0.019 ¢ | \$171,156 | 0.014 ¢ |
| All additional kWh, per kWh | 247,078,348 | -0.003 ¢ | 0.014 ¢ | \$34,591 | 0.011 ¢ |
| | <u>1,147,899,433</u> | | | <u>\$205,747</u> | |
| Primary Voltage | | | | | |
| 1st 3,000 kWh, per kWh | 788,479 | -0.004 ¢ | 0.018 ¢ | \$142 | 0.014 ¢ |
| All additional kWh, per kWh | 355,294 | -0.003 ¢ | 0.013 ¢ | \$46 | 0.010 ¢ |
| | <u>1,143,773</u> | | | <u>\$188</u> | |
| Schedule 28, General Service 31-200kW | | | | | |
| Secondary Voltage | | | | | |
| 1st 20,000 kWh, per kWh | 1,425,838,082 | -0.005 ¢ | 0.019 ¢ | \$270,909 | 0.014 ¢ |
| All additional kWh, per kWh | 581,965,329 | -0.004 ¢ | 0.017 ¢ | \$98,934 | 0.013 ¢ |
| | <u>2,007,803,411</u> | | | <u>\$369,843</u> | |
| Primary Voltage | | | | | |
| 1st 20,000 kWh, per kWh | 9,764,536 | -0.004 ¢ | 0.018 ¢ | \$1,758 | 0.014 ¢ |
| All additional kWh, per kWh | 8,839,791 | -0.004 ¢ | 0.017 ¢ | \$1,503 | 0.013 ¢ |
| | <u>18,604,327</u> | | | <u>\$3,261</u> | |
| Schedule 30, General Service 201-999kW | | | | | |
| Secondary Voltage | | | | | |
| 1st 20,000 kWh, per kWh | 175,688,856 | -0.005 ¢ | 0.020 ¢ | \$35,138 | 0.015 ¢ |
| All additional kWh, per kWh | 1,041,475,343 | -0.004 ¢ | 0.017 ¢ | \$177,051 | 0.013 ¢ |
| | <u>1,217,164,199</u> | | | <u>\$212,189</u> | |
| Primary Voltage | | | | | |
| 1st 20,000 kWh, per kWh | 11,969,659 | -0.005 ¢ | 0.019 ¢ | \$2,274 | 0.014 ¢ |
| All additional kWh, per kWh | 77,508,031 | -0.004 ¢ | 0.017 ¢ | \$13,176 | 0.013 ¢ |
| | <u>89,477,690</u> | | | <u>\$15,450</u> | |
| Schedule 41, Agricultural Pumping Service | | | | | |
| Secondary Voltage | | | | | |
| Winter, 1st 100 kWh/kWh, per kWh | 2,618,553 | -0.006 ¢ | 0.026 ¢ | \$681 | 0.020 ¢ |
| Winter, All additional kWh, per kWh | 2,314,472 | -0.004 ¢ | 0.018 ¢ | \$417 | 0.014 ¢ |
| Summer, All kWh, per kWh | 221,393,752 | -0.004 ¢ | 0.018 ¢ | \$39,851 | 0.014 ¢ |
| | <u>226,326,777</u> | | | <u>\$40,949</u> | |
| Primary Voltage | | | | | |
| Winter, 1st 100 kWh/kWh, per kWh | 7,933 | -0.006 ¢ | 0.025 ¢ | \$2 | 0.019 ¢ |
| Winter, All additional kWh, per kWh | 45,374 | -0.004 ¢ | 0.017 ¢ | \$8 | 0.013 ¢ |
| Summer, All kWh, per kWh | 282,020 | -0.004 ¢ | 0.017 ¢ | \$48 | 0.013 ¢ |
| | <u>335,327</u> | | | <u>\$58</u> | |
| Schedule 47, Large General Service, Partial Requirements 1,000kW and over | | | | | |
| Primary Voltage | | | | | |
| On-Peak, per on-peak kWh | 24,778,886 | -0.004 ¢ | 0.016 ¢ | \$3,965 | 0.012 ¢ |
| Off-Peak, per off-peak kWh | 8,999,847 | -0.004 ¢ | 0.016 ¢ | \$1,440 | 0.012 ¢ |
| | <u>33,778,733</u> | | | <u>\$5,405</u> | |
| Transmission Voltage | | | | | |
| On-Peak, per on-peak kWh | 8,612,187 | -0.004 ¢ | 0.015 ¢ | \$1,292 | 0.011 ¢ |
| Off-Peak, per off-peak kWh | 7,766,653 | -0.004 ¢ | 0.015 ¢ | \$1,165 | 0.011 ¢ |
| | <u>16,378,840</u> | | | <u>\$2,457</u> | |

PACIFIC POWER
STATE OF OREGON
TAM Schedule 205 - TAM Adjustment for Other Revenues
Proposed Rates and Revenues
Forecast 12 Months Ending December 31, 2016

| Rate Schedule | Forecast Energy | Present | Proposed Change | | Total Proposed |
|--|-----------------|-----------------------|-----------------|--------------------|-----------------------|
| | | Schedule 205 Rates | Rates | Revenues | Schedule 205 Rates |
| Schedule 48, Large General Service, 1,000kW and over | | | | | |
| Secondary Voltage | | | | | |
| On-Peak, per on-peak kWh | 361,489,356 | -0.004 ¢ | 0.017 ¢ | \$61,453 | 0.013 ¢ |
| Off-Peak, per off-peak kWh | 199,021,762 | -0.004 ¢ | 0.017 ¢ | \$33,834 | 0.013 ¢ |
| | 560,511,118 | | | \$95,287 | |
| Primary Voltage | | | | | |
| On-Peak, per on-peak kWh | 1,067,203,994 | -0.004 ¢ | 0.016 ¢ | \$170,753 | 0.012 ¢ |
| Off-Peak, per off-peak kWh | 671,514,994 | -0.004 ¢ | 0.016 ¢ | \$107,442 | 0.012 ¢ |
| | 1,738,718,988 | | | \$278,195 | |
| Transmission Voltage | | | | | |
| On-Peak, per on-peak kWh | 420,559,376 | -0.004 ¢ | 0.015 ¢ | \$63,084 | 0.011 ¢ |
| Off-Peak, per off-peak kWh | 316,970,565 | -0.004 ¢ | 0.015 ¢ | \$47,546 | 0.011 ¢ |
| | 737,529,941 | | | \$110,630 | |
| Schedule 15, Outdoor Area Lighting Service | | | | | |
| Secondary Voltage | | | | | |
| All kWh, per kWh | 9,154,109 | -0.003 ¢ | 0.014 ¢ | \$1,282 | 0.011 ¢ |
| | 9,154,109 | | | \$1,282 | |
| Schedule 50, Mercury Vapor Street Lighting Service | | | | | |
| Secondary Voltage | | | | | |
| All kWh, per kWh | 8,783,001 | -0.003 ¢ | 0.012 ¢ | \$1,054 | 0.009 ¢ |
| | 8,783,001 | | | \$1,054 | |
| Schedule 51, Street Lighting Service, Company-Owned System | | | | | |
| Secondary Voltage | | | | | |
| All kWh, per kWh | 19,673,713 | -0.005 ¢ | 0.018 ¢ | \$3,541 | 0.013 ¢ |
| | 19,673,713 | | | \$3,541 | |
| Schedule 52, Street Lighting Service, Company-Owned System | | | | | |
| Secondary Voltage | | | | | |
| All kWh, per kWh | 406,889 | -0.003 ¢ | 0.014 ¢ | \$57 | 0.011 ¢ |
| | 406,889 | | | \$57 | |
| Schedule 53, Street Lighting Service, Consumer-Owned System | | | | | |
| Secondary Voltage | | | | | |
| All kWh, per kWh | 9,363,960 | -0.001 ¢ | 0.006 ¢ | \$562 | 0.005 ¢ |
| | 9,363,960 | | | \$562 | |
| Schedule 54, Recreational Field Lighting | | | | | |
| Secondary Voltage | | | | | |
| All kWh, per kWh | 1,211,340 | -0.003 ¢ | 0.010 ¢ | \$121 | 0.007 ¢ |
| | 1,211,340 | | | \$121 | |
| Total before Employee Discount | | | | \$2,327,231 | |
| Employee Discount | | | | -\$785 | |
| TOTAL | | | | \$2,326,446 | |
| Schedule 47 Unscheduled kWh | | 2,050,352 | | | |
| Total Forecast kWh | | 13,130,313,352 | | | |

TAM
PACIFIC POWER
ESTIMATED EFFECT OF PROPOSED PRICE CHANGE
ON REVENUES FROM ELECTRIC SALES TO ULTIMATE CONSUMERS
DISTRIBUTED BY RATE SCHEDULES IN OREGON
FORECAST 12 MONTHS ENDING DECEMBER 31, 2016

| Line No. | Description | Sch No. | No. of Cust | MWh | Present Revenues (\$000) | | | Proposed Revenues (\$000) | | | Change | | | | Line No. | | | | |
|------------------------------------|--|---------|-------------|------------|--------------------------|---------------------|-------------|---------------------------|---------------------|-------------|--------------------|----------------|-------------------|----------------|----------|--|--|--|--|
| | | | | | Base Rates | Adders ¹ | Net Rates | Base Rates | Adders ¹ | Net Rates | Base Rates (\$000) | % ² | Net Rates (\$000) | % ² | | | | | |
| | | | | | (5) | (6) | (7) | (8) | (9) | (10) | (11) | (12) | (13) | (14) | | | | | |
| | | | | | | | (5) + (6) | | | (8) + (9) | (8) - (5) | (11)/(5) | (10) - (7) | (13)/(7) | | | | | |
| Residential | | | | | | | | | | | | | | | | | | | |
| 1 | Residential | 4 | 484,847 | 5,283,998 | \$599,886 | \$4,914 | \$604,800 | \$603,877 | \$4,914 | \$608,791 | \$3,991 | 0.7% | \$3,991 | 0.7% | 1 | | | | |
| 2 | Total Residential | | 484,847 | 5,283,998 | \$599,886 | \$4,914 | \$604,800 | \$603,877 | \$4,914 | \$608,791 | \$3,991 | 0.7% | \$3,991 | 0.7% | 2 | | | | |
| Commercial & Industrial | | | | | | | | | | | | | | | | | | | |
| 3 | Gen. Svc. < 31 kW | 23 | 76,799 | 1,149,043 | \$124,706 | \$5,159 | \$129,865 | \$125,541 | \$5,159 | \$130,700 | \$835 | 0.7% | \$835 | 0.6% | 3 | | | | |
| 4 | Gen. Svc. 31 - 200 kW | 28 | 9,753 | 2,026,408 | \$182,635 | \$2,978 | \$185,613 | \$184,137 | \$2,978 | \$187,115 | \$1,502 | 0.8% | \$1,502 | 0.8% | 4 | | | | |
| 5 | Gen. Svc. 201 - 999 kW | 30 | 888 | 1,306,642 | \$104,811 | \$929 | \$105,740 | \$105,731 | \$929 | \$106,660 | \$920 | 0.9% | \$920 | 0.9% | 5 | | | | |
| 6 | Large General Service >= 1,000 kW | 48 | 203 | 3,036,760 | \$212,674 | (\$9,438) | \$203,236 | \$214,629 | (\$9,438) | \$205,191 | \$1,955 | 0.9% | \$1,955 | 1.0% | 6 | | | | |
| 7 | Partial Req. Svc. >= 1,000 kW | 47 | 7 | 52,208 | \$5,418 | (\$173) | \$5,245 | \$5,450 | (\$173) | \$5,277 | \$32 | 0.9% | \$32 | 1.0% | 7 | | | | |
| 8 | Agricultural Pumping Service | 41 | 7,969 | 226,662 | \$26,037 | (\$1,274) | \$24,763 | \$26,203 | (\$1,274) | \$24,929 | \$166 | 0.6% | \$166 | 0.7% | 8 | | | | |
| 9 | Total Commercial & Industrial | | 95,619 | 7,797,723 | \$656,281 | (\$1,819) | \$654,462 | \$661,691 | (\$1,819) | \$659,872 | \$5,410 | 0.8% | \$5,410 | 0.8% | 9 | | | | |
| Lighting | | | | | | | | | | | | | | | | | | | |
| 10 | Outdoor Area Lighting Service | 15 | 6,475 | 9,154 | \$1,171 | \$219 | \$1,390 | \$1,176 | \$219 | \$1,395 | \$5 | 0.4% | \$5 | 0.4% | 10 | | | | |
| 11 | Street Lighting Service | 50 | 230 | 8,783 | \$972 | \$194 | \$1,166 | \$976 | \$194 | \$1,170 | \$4 | 0.4% | \$4 | 0.3% | 11 | | | | |
| 12 | Street Lighting Service HPS | 51 | 746 | 19,674 | \$3,436 | \$717 | \$4,153 | \$3,450 | \$717 | \$4,167 | \$14 | 0.4% | \$14 | 0.3% | 12 | | | | |
| 13 | Street Lighting Service | 52 | 26 | 407 | \$53 | \$9 | \$62 | \$53 | \$9 | \$62 | \$0 | 0.0% | \$0 | 0.0% | 13 | | | | |
| 14 | Street Lighting Service | 53 | 248 | 9,364 | \$587 | \$116 | \$703 | \$589 | \$116 | \$705 | \$2 | 0.3% | \$2 | 0.3% | 14 | | | | |
| 15 | Recreational Field Lighting | 54 | 107 | 1,211 | \$101 | \$19 | \$120 | \$102 | \$19 | \$121 | \$1 | 1.0% | \$1 | 0.8% | 15 | | | | |
| 16 | Total Public Street Lighting | | 7,832 | 48,593 | \$6,320 | \$1,274 | \$7,594 | \$6,346 | \$1,274 | \$7,620 | \$26 | 0.4% | \$26 | 0.3% | 16 | | | | |
| 17 | Total Sales before Emp. Disc. & AGA | | 588,298 | 13,130,314 | \$1,262,487 | \$4,369 | \$1,266,856 | \$1,271,914 | \$4,369 | \$1,276,283 | \$9,427 | 0.8% | \$9,427 | 0.7% | 17 | | | | |
| 18 | Employee Discount | | | | (\$466) | (\$3) | (\$469) | (\$469) | (\$3) | (\$472) | (\$3) | | (\$3) | | 18 | | | | |
| 19 | Total Sales with Emp. Disc | | 588,298 | 13,130,314 | \$1,262,021 | \$4,366 | \$1,266,387 | \$1,271,445 | \$4,366 | \$1,275,811 | \$9,424 | 0.8% | \$9,424 | 0.7% | 19 | | | | |
| 20 | AGA Revenue | | | | \$2,439 | | \$2,439 | \$2,439 | | \$2,439 | \$0 | | \$0 | | 20 | | | | |
| 21 | Total Sales | | 588,298 | 13,130,314 | \$1,264,460 | \$4,366 | \$1,268,826 | \$1,273,884 | \$4,366 | \$1,278,250 | \$9,424 | 0.8% | \$9,424 | 0.7% | 21 | | | | |

¹ Excludes effects of the Low Income Bill Payment Assistance Charge (Sch. 91), BPA Credit (Sch. 98), Klamath Dam Removal Surcharges (Sch. 199), Public Purpose Charge (Sch. 290) and Energy Conservation Charge (Sch. 297).

² Percentages shown for Schedules 48 and 47 reflect the combined rate change for both schedules

ATTACHMENT 5

Attestation of Joseph Hoerner

**BEFORE THE PUBLIC UTILITY COMMISSION
OF OREGON**

UE 296

In the Matter of
PACIFICORP d/b/a PACIFIC POWER,
2016 Transition Adjustment Mechanism.

REVISED ATTESTATION OF
JOSEPH P. HOERNER

1 STATE OF OREGON)
2) ss
3 County of Multnomah)

4 I, JOSEPH P. HOERNER, being first duly sworn on oath, depose and say:

5 1. My full name is Joseph P. Hoerner. I am employed by PacifiCorp. My
6 present position is Director, Energy Supply Management, for PacifiCorp.

7 2. I am making this attestation in compliance with Paragraph 13 of the
8 stipulation adopted by the Public Utility Commission of Oregon in Order
9 No. 10-363 in docket UE 216 on September 16, 2010, and Paragraph 15 of the
10 stipulation adopted by the Commission in Order No. 14-331 on October 1,
11 2014.

12 3. I understand that this attestation will be filed on November 16, 2015.

13 4. I submitted an executed attestation on November 9, 2015, stating that all NPC
14 contracts (a) executed before the contract lockdown date of November 3,
15 2015, and (b) included in the 2016 TAM rate effective period, were reflected
16 in the Indicative Filing.

17 5. At the time of my November 9, 2015 attestation, I was not aware that certain
18 short-term firm electricity transactions and short-term gas swaps had been

1 included in the data supporting the Company's Indicative Filing but
2 inadvertently omitted from the GRID run supporting the Indicative Filing.
3 The Company discovered this error while preparing the workpapers for the
4 Indicative Filing.

5 6. When the Company served its workpapers for the Indicative Filing on
6 November 12, 2015, the Company advised parties of this mistake and
7 indicated that it would be corrected in the Final TAM Update.

8 7. I attest that all NPC contracts (a) executed before the contract lockdown date
9 of November 3, 2015, and (b) included in the 2016 TAM rate effective period,
10 were reflected in the workpapers for the Indicative Filing, served on
11 November 12, 2015, and are reflected in the Final TAM Update filed on
12 November 16, 2016, concurrently with this revised attestation.

13 I declare under penalty of perjury under the laws of the state of Oregon that the
14 foregoing is true and correct based on my information and belief as of the date of this
15 attestation.

16 SIGNED this: 16th day of November, 2015, at Salt Lake City, Utah

17 Signed: Joseph P. Hoerner

18 SUBSCRIBED AND SWORN to before me this 16th day of November, 2015.

19 Melanie R. Allen

20 Notary Public, State of Utah
21 My Commission expires: 9/11/18

