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May 18, 2018

VIA E-TARIFF

The Honorable Kimberly D. Bose Secretary Federal Energy Regulatory Commission 888 First Street, NE Washington, DC 20426

Re: PacifiCorp, Docket Nos. ER17-219-___, EL17-27-___ eTariff Compliance Filing for Attachments U and V

Dear Secretary Bose:

Pursuant to Part 35 of the Federal Energy Regulatory Commission's (the "Commission") Rules of Practice and Procedure, and in compliance with the Commission's order in *PacifiCorp*, 163 FERC ¶ 61,035 (2018) ("April 2018 Order"), PacifiCorp hereby submits this transmittal letter and tariff records for its Open Access Transmission Tariff ("OATT") new Attachments U and V.

As discussed further in a separate compliance filing PacifiCorp is making concurrently, the Commission accepted, subject to refund, PacifiCorp's proposed revisions to Schedules 3, 3A, 5, and 6, and established hearing and settlement judge procedures for those Schedules in an order dated February 2, 2017.² Following settlement judge procedures, the parties to this proceeding reached a settlement, which was approved by the Commission in the April 2018 Order. However, the April 2018 Order required PacifiCorp to submit a compliance filing to file revised tariff records in accordance with the settlement.³ In the concurrent compliance filing, PacifiCorp is filing the revised Schedules effective January 1, 2018. With this filing, PacifiCorp is filing Attachments U and V, which set out the criteria for self-supply of Schedules 5 and 6, in compliance with the April 2018 Order, effective July 1, 2018.

In addition, PacifiCorp is also refiling Schedules 3, 3A, 5, and 6 in the present filing with an effective date of July 1, 2018. Because the effective date for the interim rates for these Schedules is February 1, 2018, the interim rates would appear as effective in the eTariff viewer rather than the tariff records filed in the concurrent filing effective January 1, 2018.

¹ 18 C.F.R. Part 35 (2018).

² PacifiCorp, 158 FERC ¶ 61,121 (2017) ("February 2017 Order").

³ April 2018 Order at P 8.



Furthermore, because PacifiCorp is modifying the Schedules to depict the 2017 rates approved by the Commission in the April 2018 Order, PacifiCorp is including the Schedules in the present filing with an effective date of July 1, 2018 to bring forward the correct tariff record as the currently-effective tariff record. Accordingly, PacifiCorp also hereby submits tariff records for Schedules 3, 3A, 5, and 6, effective as of July 1, 2018.

I. BACKGROUND

On October 28, 2016, PacifiCorp filed proposed updates to five OATT Schedules: Schedule 3, Regulation and Frequency Response Service; Schedule 3A, Generator Regulation and Frequency Response Service; Schedule 5, Operating Reserve – Spinning Reserve Service; and Schedule 6, Operating Reserve – Supplemental Reserve Service (together the "Regulation and Operating Reserve Schedules"); and Schedule 11, Unauthorized Use of Transmission Service—to which only minor clarifying revisions were proposed ("Initial Filing"). The then effective rates in these schedules were the product of a 2011 "black box" settlement that had become effective in March 2013 (the "2013 Schedules"). PacifiCorp explained that the purpose of the revisions to the Regulation and Operating Reserve Schedules were to: (1) permit PacifiCorp to better allocate the costs and benefits of providing reserve service among customer groups; (2) ensure reliable operation of the PacifiCorp transmission system; and (3) make certain that PacifiCorp recovered the costs of providing regulation reserve and operating reserve services. In addition, the proposed revisions for Regulation reserve provided for differentiated rates to reflect the variability in costs associated with variable energy resources ("VERs"), resources that are not VERs ("Non-VERs"), and load.

In response to protests and certain errors noted by Utah Municipal Power Agency and Deseret Generation & Transmission Co-operative, Inc. ("Deseret"), on December 14, 2016, PacifiCorp filed a response ("Answer"), which also amended PacifiCorp's complaint. In particular, in its Answer, PacifiCorp removed third-party shares of units at the Hunter power plant from the facilities that are likely to provide ancillary services, and corrected the amount of Deseret's peak load subject to Schedule 3 charges. These changes would reduce the rates from those PacifiCorp first proposed in its Initial Filing, and in an effort to be responsive to these changes. PacifiCorp proposed in its Answer to file updated ancillary service schedules in a

PacifiCorp, Docket No. ER17-219-000, Transmittal Letter at 1 (filed Oct. 28, 2016) ("PacifiCorp Transmittal Letter").

⁵ *Id.*; February 2017 Order at P 2.

February 2017 Order at P 38 (finding that PacifiCorp's December 14, 2016 Answer to be an amendment to its October 28, 2016 filing).

⁷ Id.



future compliance filing.⁸ PacifiCorp made that compliance filing on March 3, 2017,⁹ which the Commission accepted on June 7, 2017.¹⁰

Following the issuance of the Commission's February 2017 Order, all parties to this proceeding engaged in settlement discussions before Judge Glazer. The settlement discussions ultimately resulted in an uncontested settlement, which PacifiCorp filed with the Commission on January 31, 2018. Section 3.1 of the settlement provided that "[t]he transition to the new self-supply criteria [for Schedules 5 and 6] in Attachment 1 shall occur on (i) the first day of the month immediately following the Effective Date of the Settlement, as defined in Article 8 below, or (ii) the first day of the second month immediately following the Effective Date of the Settlement, if such later transition date will result in more efficient transition to the new practice, as mutually agreed by the Settling Parties. The new self-supply criteria were attached to the settlement as new OATT Attachments U and V. The Commission accepted the parties' uncontested offer of settlement in its April 2018 Order. Subsequently, in accordance with Section 3.1 of the settlement, the parties agreed to an effective date of the new self-supply criteria in Attachments U and V of July 1, 2018.

II. DESCRIPTION OF FILING

In compliance with the Commission April 2018 Order, ¹³ PacifiCorp is submitting tariff sheets for new Attachments U and V that reflect the criteria for self-supply of Schedules 5 and 6 agreed to by all parties to this proceeding in the uncontested offer of settlement approved by the Commission. In addition, as discussed above, PacifiCorp is also resubmitting tariff sheets for Schedules 3, 3A, 5, and 6 to supersede the tariff sheets placed into effect on an interim basis by the Chief Administrative Law Judge's February 8, 2018 order in these proceedings.

III. ADDITIONAL INFORMATION

A. Requested Effective Date

Consistent with the April 2018 Order, PacifiCorp respectfully requests an effective date of July 1, 2018 for Attachments U and V and Schedules 3, 3A, 5, and 6. PacifiCorp respectfully requests waiver of the Commission's prior notice requirements in order to permit this requested

⁸ Id.; see also PacifiCorp Answer at 54.

PacifiCorp, Docket No. ER17-219-001, Ancillary Services Compliance Filing (filed March 3, 2017) ("1st Compliance Filing").

PacifiCorp, Docket No. ER17-219-001, Delegated Letter Order (June 7, 2017) (accepting 1st Compliance Filing).

PacifiCorp, ER17-219-002, Offer of Settlement (filed Jan. 31, 2018).

¹² *Id.* at Section 3.1.

¹³ April 2018 Order at P 8.



effective date. The Commission has authority to waive the sixty day notice requirement upon a showing of "good cause." ¹⁴

Good cause exists to waive the prior notice requirements because all parties have agreed to that date in accordance with the settlement, which the Commission has already approved in its April 2018 Order.

B. Documents Included with this Filing

PacifiCorp is submitting an eTariff XML filing package that consists of the following materials:

- This Transmittal Letter:
- Revised tariff records, as approved by the Commission in the April 2018 Order, for filing in eTariff; and
- Clean versions of Attachments U and V, for filing in eLibrary.

IV. CONCLUSION

PacifiCorp respectfully requests that the Commission accept the tariff records contained herein for filing and permit an effective date of July 1, 2018.

Respectfully Submitted,

/s/ Amie V. Colby
Amie V. Colby

Attorney for PacifiCorp

See Central Hudson Gas & Electric Corp., 60 FERC \P 61,106 at 61,338, order on reh'g, 61 FERC \P 61,089 (1992).

CERTIFICATE OF SERVICE

I hereby certify that on this, the 18th day of May, 2018, I have caused a copy of the foregoing document to be served via electronic mail on the official service list compiled by the Office of the Secretary for the above-referenced proceedings.

/s/ Jessica Zahnow

Jessica Zahnow
Senior Compliance Specialist for PacifiCorp

May 18, 2018 Portland, OR

ATTACHMENT U

Requirements for Self-Supply of Schedules 5 and 6

Definitions

No definitions other than the following, those provided hereinafter, and those currently contained in PacifiCorp's Open Access Transmission Tariff ("OATT") or North American Electric Reliability Corporation ("NERC") reliability standards are required for this Attachment U.

<u>Customer</u>- Reference for the purpose of this Attachment U, refers to a customer that has successfully met qualifications to self-supply Ancillary Services.

<u>Internal Resource</u> - A resource in a PacifiCorp Balancing Authority Area ("BAA") including one that is dynamically scheduled or pseudo-tied into a PacifiCorp BAA. These resources are classified as either Participating or Non-Participating Resources.

<u>External Resource</u> - A resource that does not meet the definition of an Internal Resource but provides self-supply (or third-party supply) service via a capacity tag.

Purpose

The purpose of this Attachment U is to clarify the practices outlined in the OATT pertaining to self-supply or third-party supply of ancillary services-certification process and requirements.

Practice

The following are the requirements of PacifiCorp, the Balancing Authority and Transmission Operator, for Customers who wish to self-supply or to arrange for third- party purchase of specific Ancillary Services. PacifiCorp requires that these Ancillary Services satisfy the requirements for Schedules 5 and 6 under the currently effective PacifiCorp OATT and satisfy the relevant reliability standards of NERC or any successor organization. In addition to these requirements and the requirements listed below, the party requesting to self-supply or to arrange for third-party purchase shall also execute an Umbrella Service Agreement or a revision to an existing transmission agreement, as applicable, with PacifiCorp specifying the detailed arrangements made to supply the services including, but not limited to, specification of the

amount of service required to meet the party's obligation, identification of the generation resource(s) or system supplying the service and its Balancing Authority Area, specification of metering and communications equipment, and procedures for data exchange. In addition, PacifiCorp reserves the right to require pre-acceptance testing of the units identified and periodic testing, at such times determined by PacifiCorp, thereafter to ensure that the service can be provided in accordance with reliability standards and the contractual agreement.

Telemetry (metering) requirements for reserves

For an Internal Resource to qualify for self-supply of Operating Reserve-Spinning Reserve Service (Schedule 5) or Operating Reserve - Supplemental Reserve Service (Schedule 6) the following four-second, industry-standard data must be supplied by the designated self-supply resource. Real time data must be supplied through telemetry acceptable to PacifiCorp. In general, an example of an acceptable telemetry method is a Remote Terminal Unit ("RTU") or Inter-Control Center Communication Protocol ("ICCP"). The latter is subject to WECC Operations Network ("WON") guidelines. To the extent any data items are not applicable to a particular resource, they are not required. To the extent applicable data items are already provided through an effective interconnection agreement, they are not separately required.

- Net Generation MW
- Net Generator MVAr
- Real power flow through each of the low side feeder breakers
- Reactive power flow through each of the low side feeder breakers
- Reactive power flow from each of the shunt capacitor banks
- A phase high side transmission voltage
- B phase high side transmission voltage
- C phase high side transmission voltage
- Accumulator pulses for generator output metering kWh
- Status of all low and high side breakers
- 10-minute ramp rate, limited by capacity
- PMax

Testing and Disqualification for Self-Supply of Reserves in the PacifiCorp Balancing Authority Areas

Resources designated for self-supply of reserves, spinning or supplemental, may be tested by PacifiCorp at any time throughout the year. The test will be performed upon the physical response of resources designated for self-supply via e-Tag.

Resources called upon to supply reserves and responding to meet Western Electricity Coordinating Council ("WECC") and PacifiCorp requirements for time, output, and power quality, during the calendar year shall be deemed as passing the test. PacifiCorp will monitor resources designated and accepted for self-supply and log the date of successful operation. Failure to respond when called upon to supply reserves may disqualify the resource from self-supplying reserves as described here:

- PacifiCorp will count as a single failure event (each a "Failure Event"), any hour or group of hours that a resource does not successfully respond when called by PacifiCorp to provide reserves and that occurs before PacifiCorp provides written notice of the Failure Event to the resource owner and all Customers relying on the resource for reserves. Upon and with such written notice, a Failure Event may be assessed a "strike," the assessment of which shall be included in the written notice of the underlying Failure Event. "Written notice" for purposes of this Attachment 1 includes notice given electronically.
- Upon each written notice of a Failure Event as provided above, and before another strike may be assessed to the same resource, PacifiCorp will allow the affected Customer(s) up to three business days in which to provide written notice to PacifiCorp of the specific remedy to the resource failure that has been implemented, of alternative self-supply arrangements that have been made, or of the intent to take the applicable reserve service(s) from PacifiCorp. Absent any such written notice to PacifiCorp, the affected Customer(s) shall be subject to the applicable reserve service(s) as defined in Schedule 5 and/or Schedule 6 of PacifiCorp's OATT.
- A resource that accumulates three strikes within a rolling 12-month period will be disqualified for the balance of the month in which the third Failure Event occurs and the

entirety of the following month. PacifiCorp will give affected Customer(s) written notice of the third strike and resource disqualification and will allow Customer(s) up to three business days in which to formally notify PacifiCorp of alternative self-supply arrangements or be subject to the applicable reserve service(s) as defined in Schedule 5 and/or Schedule 6 of PacifiCorp's OATT. No Customer may designate or utilize a disqualified resource to provide self-supply service. Following the disqualification period, strikes for the resource shall be reset to zero and the resource will be again eligible to provide self-supply service subject to the provisions herein.

PacifiCorp will only test resources that are carrying operating reserves at the time the test is commenced. A resource that is experiencing a unit trip shall not be subject to the test for the operating hour during which the trip occurs. This will be accomplished with PacifiCorp calling on reserves, monitoring results and logging the test. PacifiCorp will provide written reports of all test results to the resource owner and the Customer(s) using the resource for self-supply, if different.

Operating Reserve - Spinning Reserve Service (Schedule 5): This service may be self-supplied or purchased from any unit or system that has uncommitted available capacity which is online and loaded at less than maximum owned or contracted output and which may be used to satisfy the Transmission Customer's reserve obligation. The specific resources_from which the service is being provided must be identified and have observable telemetry. The party requesting to self-supply or arranging for third-party purchase shall, at its own expense, install the necessary equipment (including but not limited to metering and telecommunications equipment) for providing the service. The party requesting to self-supply or arranging for third-party purchase shall also reimburse PacifiCorp or its affiliates for any expenses incurred to accommodate the request for self-supply or third-party supply.

A. Use of an External Resource:

For generation external to PacifiCorp's BAAs to qualify for self-supply or third-party supply service, a dynamic transfer coming into PacifiCorp's energy management system ("EMS") as a dynamic schedule into the balancing authority area where the obligation originates, represented on a dynamic e-Tag, is sufficient for communication with

PacifiCorp's EMS. The author of the e-Tag is responsible for adjusting the energy profile to match the resource output for self-supply until such time as an automated process can be developed and implemented to relieve the author of this responsibility.

- B. The following information will be required to demonstrate the self-supply or third-party purchase of spinning reserve service for Internal Resources:
 - The generation resources providing the service must be located in the same PacifiCorp Balancing Authority Area as the Network Load or contractual point of receipt and must have observable telemetry.
 - Requirements for self-supply or third-party purchase of spinning reserve service shall apply at the unit level if PacifiCorp's network model includes the resource by unit, or at the plant level if PacifiCorp's network model includes the resource at the plant level.
 - Documentation that the generation resources are deliverable Network Resources as defined by a current Network Integration Transmission Service Agreement, a legacy load service agreement on file at FERC, or other firm PTP agreement, which may be reported on PacifiCorp's Electric Quarterly Report ("EQR").
 - For self-supply arrangements through a power purchase agreement, a_copy of the capacity agreement(s) or contract(s) that can be used to verify that the capacity used for this service is dedicated to serve the designated metered Network Load, and is not being used to satisfy any other capacity obligations.
 - Access to logs, dispatch records and test data that can be used to verify that spinning reserves are actually spinning and not fully loaded and are capable of being applied as reported. Resource capability for self-supply of reserves shall mean the operational capability of the unit to actually deliver the reserve energy in the event of a deployment based on the operational capability characteristics of the self-supply resource (i.e., ramp rates, PMax).

- Self-suppliers must provide a monthly reserve supply forecast no less than thirty (30) calendar days before the beginning of the month with amounts (MWs) in all hours for that month based on the forecasted percentage of reserve obligation. This 30-day forecast requirement does not replace or satisfy separate seven-day forecast requirements established by Peak Reliability and the California Independent System Operator ("CAISO").
- Self-suppliers must provide day-ahead information via e-Tag. In the day-ahead, the reserve supply forecast must be updated for the next operating day with the amount (MWs) of reserve obligation the self-supplier expects to actually be providing in all hours.
- A point of contact is always available, all hours, every day to be used to deploy the reserves.
- C. For self-supply and third-party purchases of this service, reserves must be scheduled using a capacity e-Tag consistent with PacifiCorp Business Practice #39, E-tagging Reserves. Also, consistent with Business Practice #39, when the service is needed, the reserves must be deployed by the Customer through a mid-hour tag adjustment to the energy profile. PacifiCorp will confirm customer reserves are being held via e-Tag.

Once confirmation is validated, PacifiCorp will place a phone call or adjust a capacity tag through an automated process to communicate a loss of generation in the appropriate Balancing Authority and request deployment of reserves for the appropriate length of time. PacifiCorp will provide an annual report to Customers demonstrating non-discriminatory deployment of reserves.

D. In the event that any of the above requirements fail to be met, then PacifiCorp reserves the right to bill the responsible party for this service as supplied by PacifiCorp for the duration of the failure, including reimbursement for any compliance-related penalties, charges, or other consequences, to which PacifiCorp is subject related to the failure. If the Customer fails to self-supply its spinning reserves as defined in this section and fails to notify PacifiCorp to make arrangements for service, the Customer will be subject to

spinning reserve service as defined in Schedule 5 of PacifiCorp's OATT.

- E. The service hereunder must be available to be called on by PacifiCorp to comply with NERC Standard BAL-002-WECC-2 (or any successor Reliability Standard thereto), and any such other related criteria or standards which may be imposed by a national or regional reliability council or governing regulatory body. The service will also be used by PacifiCorp to comply with its obligations under the Northwest Power Pool Reserve Sharing Group Contract and any future Reserve Sharing Group of which PacifiCorp is a member. The supplying party must, at its own expense, make the necessary arrangements, in coordination with PacifiCorp, to be able to respond to a reserve sharing event. The supplying party is not required to have a separate relationship or agreement with the Northwest Power Pool Reserve Sharing Group.
- F. PacifiCorp reserves the right to request more information from the party requesting self-supply or third-party supply and/or its supplier of spinning reserve service, in addition to the above-listed information, to ensure that this service is supplied in a reliable manner, PacifiCorp shall make best efforts to request further information no later than thirty (30) calendar days from the customer's request to self-supply or third-party supply.

Further, PacifiCorp reserves the right to reject the request to self-supply such service, or purchase it from another source, in the event that PacifiCorp, in its reasonable judgement, concludes that such self-supply or third-party purchase would impair reliability in the relevant PacifiCorp BAA or the interconnected system. PacifiCorp also reserves the right to terminate the self-supply or third-party purchase if, in its reasonable judgement, PacifiCorp concludes that such self-supply or third-party purchase is impairing reliability in the relevant PacifiCorp BAA or the interconnected system.

In the event that PacifiCorp rejects the request to self-supply or third-party purchase, or concludes that an existing self-supply or third-party purchase is impairing reliability, PacifiCorp will provide in writing detailed explanations for such determination and proposed remedy not less than thirty (30) calendar days from the customer's request to self-supply or third-party supply. Notice of rejection to self-supply or third-party purchase does not preclude a customer from reapplication.

- G. If the metered Network Load requiring the spinning reserve service has been moved electronically into another BAA, certified by NERC or its successor organization, by means of a pseudo-tie, this Section G shall apply. The pseudo-tie requires identification and observable telemetry of the specific Network Loads for which the service is to be provided. PacifiCorp requires a letter in advance from the BAA that is supplying the spinning reserve ("Supplying Balancing Authority") which certifies that this service is supplied in accordance with all current policies and quidelines of the NERC Operating Manual and/or the North American Energy Standards Board ("NAESB") standards, or any successor manual or standards, that apply to supplying Ancillary Services to loads that are located physically in another Balancing Authority Area.
 - 1. PacifiCorp will accept, in lieu of the showing required in Section A.1 above, a letter in advance from the Supplying Balancing Authority which certifies that this service is supplied in accordance with all current policies and guides of the NERC Operating Manual and/or NAESB standards, or any successor manual or standards, that apply to supplying Ancillary Services to loads that are physically located in another Balancing Authority Area.
 - 2. Whenever the pseudo-tie equipment providing the Network Load's data to PacifiCorp and/or the Supplying Balancing Authority is not used and/or not useable, the dispatcher for the entity that is not receiving the load signal shall immediately contact the dispatcher for the other entity to inform it of the loss of the signal. Thereafter, until both entities are again receiving the load signal through the pseudo-tie equipment, PacifiCorp may call upon the Supplying Balancing Authority to provide (or, if it is not the supplier of the Network Load's spinning

reserves, call upon the supplier of such spinning reserves to provide) spinning reserves when and to the extent requested.

- 3. If the Supplying Balancing Authority or the supplier of spinning reserves fails to meet the requirements set forth in Section G.2 (i.e., fails to notify PacifiCorp of the Supplying Balancing Authority's loss of its ability to receive the Network Load's signal and/or fails to supply spinning reserves when called upon by PacifiCorp), PacifiCorp reserves the right to bill the responsible party for this service for the duration of the failure, including reimbursement for any penalties, charges, or other consequences to which PacifiCorp is subject related to the failure.
- 4. PacifiCorp reserves the right to request more information from the Supplying Balancing Authority and/or the Network Load's supplier of spinning reserve service, in addition to the above referenced letter, to ensure that this service is supplied in a reliable manner. PacifiCorp shall make best efforts to request further information no later than thirty (30) calendar days from the customer's request.

Further, PacifiCorp reserves the right to reject the request to self-supply such service, or purchase it from another source, in the event that PacifiCorp, in its reasonable judgement, concludes that such self-supply or third-party purchase would impair reliability in the relevant PacifiCorp Balancing Authority Area or the interconnected system.

PacifiCorp also reserves the right to terminate the self-supply or third-party purchase if, in its reasonable judgement, PacifiCorp concludes that such self-supply or third-party purchase is impairing reliability in the relevant PacifiCorp Balancing Authority Area or the interconnected system.

In the event that PacifiCorp rejects the request to self-supply or third-party purchase, or concludes that an existing self-supply or third-party purchase is impairing reliability, PacifiCorp will provide in writing detailed explanations for such determination,

proposed remedy not less than thirty (30) calendar days from the customer's request to self-supply or third-party supply. Notice of rejection to self-supply or third-party purchase does not preclude customer from reapplication.

H. During periods when reserve deployment is required, PacifiCorp will notify the Customer either through electronic means or by phone call that reserves are required, the amount of reserves to deploy and the appropriate length of time of deployment. Specific notice arrangements will be agreed to between the Customer and PacifiCorp during the certification process.

Energy supplied by a Customer during periods of reserve deployment will be settled financially for the amount of energy deployed as represented on the Customer adjusted energy profile of the capacity tag(s) for External Resources and for Internal Resources not represented in the network model. Resources supplying reserves that are represented in the network model will not receive separate energy settlement. These resources will receive settlements per Schedule 9 of PacifiCorp's OATT for Non-Participating Resources or directly from CAISO for Participating Resources.

Financial settlement for Internal Resources not in the network model and External Resources will be settled based on the integrated tag value multiplied by the hourly settled PACE or PACW ELAP price, adjusted for losses consistent with PacifiCorp's OATT.

Operating Reserve - Supplemental Reserve Service (Schedule 6):

This service may be self-supplied or purchased from any qualifying unit, system, or qualifying interruptible load to meet the Network Load Transmission Customer's reserve obligation. The unit or system must consist of one or more quick-start units that are off-line but capable of serving demand in 10 minutes, or uncommitted available capacity that is on-line and loaded at less than maximum owned or contracted output which can be fully applied in 10 minutes. The interruptible load must be located within PacifiCorp Balancing Authority Area and must be capable of being interrupted within 10 minutes in the reasonable judgement of PacifiCorp. The specific resources for which the service is being provided must be identified and have observable telemetry. The party requesting to self-supply or arranging for third-party purchase shall, at its own expense, install the necessary equipment (including but not limited to metering and telecommunications equipment) for providing the service. The party requesting to self-supply or arranging for third-party purchase shall also reimburse PacifiCorp or its affiliates for any expenses incurred to accommodate the request for self-supply or thirdparty supply.

A. Use of an External Resource:

For generation external to PacifiCorp's BAAs to qualify for self-supply or third-party supply service, a dynamic transfer coming into PacifiCorp's EMS as a dynamic schedule into the balancing authority area where the obligation originates, represented on a dynamic e-Tag is sufficient for communication with PacifiCorp's EMS. The author of the e-Tag is responsible for adjusting the energy profile to match the resource output for self-supply until such time as an automated process can be developed and implemented to relieve the author of this responsibility.

- B. The following information will be required to demonstrate the self-supply or third-party purchase of supplemental reserve service for Internal Resources:
 - The generation resources providing the service must be located in the same PacifiCorp Balancing Authority Area as the Network Load or contractual point of receipt and must have observable telemetry.

- Requirements for self-supply or third-party purchase of supplemental reserve service shall apply at the unit level if PacifiCorp's network model includes the resource by unit or at the plant level if PacifiCorp's network model includes the resource at the plant level.
- Documentation that the generation resources are deliverable Network Resources as defined by a current Network Integration Transmission Service Agreement, a legacy load service agreement on file at FERC, or other firm PTP agreement, which may be reported on PacifiCorp's Electric Quarterly Report ("EQR").
- For self-supply arrangements through a power purchase agreement, a copy of the capacity agreement(s) or contract(s) that can be used to verify that the capacity used for this service is dedicated to serve the designated metered Network Load, and is not being used to satisfy any other capacity obligations.
- If interruptible load is used, explicit description of the load, curtailment method, process utilized to trigger the curtailment and interruptible contract.
- Deployment capability must be proven by the selfsupply Customer in a fashion acceptable to PacifiCorp. Requirements will depend on the type resource claimed as supplemental reserves and may include load trip testing or requesting an unplanned start on a reserve generator. Procedures must be validated prior to certification and also may require at least bi-annual validation.
- Access to logs, dispatch records and test data that can be used to verify that supplemental reserves are available and not fully loaded, and are capable of being applied as reported. Resource capability for self-supply of reserves shall mean the operational capability of the unit to actually deliver the reserve energy in the event of a deployment based on the operational capability characteristics of the self-supply resource (i.e., ramp rates, PMax).

- Self-suppliers must provide a monthly reserve supply forecast no less than thirty (30) calendar days before the beginning of the month with amounts (MWs) in all hours for that month based on the forecasted percentage of reserve obligation. This 30-day forecast requirement does not replace or satisfy separate seven-day forecast requirements established by Peak Reliability and the California Independent System Operator ("CAISO").
- Self-suppliers must provide day-ahead information via e-Tag. In the day-ahead, the reserve supply forecast must be updated for the next operating day with the amount (MWs) of reserve obligation the self-supplier expects to actually be providing in all hours.
- A point of contact is always available, all hours, every day to be used to call on the reserves.
- C. For self-supply and third-party purchases of this service, reserves must be scheduled using a capacity e-Tag consistent with PacifiCorp Business Practice #39, E-Tagging of Reserves. Also, consistent with Business Practice #39, when the service is needed, the reserves must be deployed by the Customer through a mid-hour tag adjustment to the energy profile. PacifiCorp will confirm customer reserves are being held via e-Tag.
 - Once confirmation is validated, PacifiCorp will place a phone call or adjust a capacity tag through an automated process to communicate a loss of generation in the appropriate Balancing Authority and request deployment of reserves for the appropriate length of time. PacifiCorp will provide an annual report to Customers demonstrating non-discriminatory deployment of reserves.
- D. In the event that any of the above requirements fail to be met, then PacifiCorp reserves the right to bill the responsible party for this service as supplied by PacifiCorp for the duration of the failure, including reimbursement for any compliance-related penalties, charges or other consequences which PacifiCorp is subject to related to the failure. If the Customer fails to self- supply its supplemental reserves as defined in this section and fails to notify PacifiCorp to make arrangements for service, the Customer will be subject to

- supplemental reserve service as defined in Schedule 6 of PacifiCorp's OATT.
- E. The service hereunder must be available to be called on by PacifiCorp to comply with the NERC Disturbance Control Standard (NERC BAL-002-2 or any successor Reliability Standard thereto), and any such other related criteria or standards which may be imposed by a national or regional reliability council or governing regulatory body. The service will also be used by PacifiCorp to comply with its obligations under the Northwest Reserve Sharing Group Contract and any future Reserve Sharing Group of which PacifiCorp or its affiliates are a member. The supplying party must, at its own expense, make the necessary arrangements, in coordination with PacifiCorp, to be able to respond to a Reserve Sharing event. The supplying party is not required to have a separate relationship or agreement with the Northwest Power Pool Reserve Sharing Group.
- F. PacifiCorp reserves the right to request more information from the party requesting self-supply or third-party supply and/or its supplier of supplemental reserve service, in addition to the above-listed information, to ensure that this service is supplied in a reliable manner. PacifiCorp shall make best efforts to request further information no later than thirty (30) calendar days from the customer's request to self-supply or third-party supply.

Further, PacifiCorp reserves the right to reject the request to self-supply such service, or purchase it from another source, in the event that PacifiCorp, in its reasonable judgement, concludes that such self-supply or third-party purchase would impair reliability in the relevant PacifiCorp BAA or the interconnected system. PacifiCorp also reserves the right to terminate the self-supply or third-party purchase if, in its reasonable judgement, PacifiCorp concludes that such self-supply or third-party purchase is impairing reliability in the relevant PacifiCorp BAA or the interconnected system.

In the event that PacifiCorp rejects the request to self-supply or third-party purchase, or concludes that an existing self-supply or third-party purchase is impairing reliability, PacifiCorp will provide in writing detailed explanations for such determination, proposed remedy not less than thirty (30) calendar days from the customer's

- request to self-supply or third-party supply. Notice of rejection to self-supply or third-party purchase does not preclude customer from reapplication.
- G. If the metered Network Load requiring the reserves has been moved electronically into another BAA, certified by NERC or its successor, by means of a pseudo-tie, this Section G shall apply. The pseudo-tie requires identification and observable telemetry of the specific Network Loads for which the service is to be provided.
 - 1. PacifiCorp will accept, in lieu of the showing required in Section A above, a letter in advance from the BAA that is supplying the supplemental reserve ("Supplying Balancing Authority"), which certifies that this service is supplied in accordance with all current policies of the NERC Operating Manual and/or NAESB standards, or any successor manual or standards, that apply to supplying Ancillary Services to loads that are located physically in another Balancing Authority Area.
 - 2. Whenever the pseudo-tie equipment providing the Network Load's data to PacifiCorp and/or the Supplying Balancing Authority is not used and/or not useable, the dispatcher for the entity that is not receiving the load signal shall immediately contact the dispatcher for the other entity to inform it of the loss of the signal. Thereafter, until both entities are again receiving load signal through the pseudo-tie equipment, PacifiCorp may call upon the Supplying Balancing Authority to provide supplemental reserves when and to the extent requested.
 - 3. If the Supplying Balancing Authority or the supplier of spinning reserves fails to meet the requirements set forth in Section G.2 (i.e., fails to notify PacifiCorp of the Supplying Balancing Authority's loss of its ability to receive the load signal and/or fails to supply supplemental reserves when called upon by PacifiCorp), PacifiCorp reserves the right to bill the responsible party for this service for the duration of the failure, including reimbursement for any penalties, charges, or other consequences which PacifiCorp is subject to related to the failure.
 - 4. PacifiCorp reserves the right to request more information from the Supplying Balancing Authority

and/or the Network Load's supplier of the supplemental reserves, in addition to the above referenced letter, to ensure that this service is supplied in a reliable manner. PacifiCorp shall make best efforts to request further information no later than thirty (30) calendar days from the customer's request.

Further, PacifiCorp reserves the right to reject the request to self-supply such service, or purchase it from another source, in the event that PacifiCorp, in its reasonable judgement, concludes that such selfsupply or third-party purchase would impair reliability in PacifiCorp's Balancing Authority Area or the interconnected system. PacifiCorp also reserves the right to terminate the self-supply or third-party purchase if, in its reasonable judgement, PacifiCorp concludes that such self-supply or third-party purchase is impairing reliability in the relevant PacifiCorp Balancing Authority Area or the interconnected system. In the event that PacifiCorp rejects the request to self-supply or third-party purchase, or concludes that an existing self-supply or third-party purchase is impairing reliability, PacifiCorp will provide in writing detailed explanations for such determination, proposed remedy not less than thirty (30) calendar days from the customer's request to self-supply or thirdparty supply. Notice of rejection to self-supply or third-party purchase does not preclude customer from reapplication.

H. During periods when reserve deployment is required,
PacifiCorp will notify the Customer either through
electronic means or by phone call that reserves are
required, the amount of reserves to deploy and the
appropriate length of time of deployment. Specific
notice arrangements will be agreed to between the
Customer and PacifiCorp during the certification process.

Energy supplied by a Customer during periods of reserve deployment will be settled financially for the amount of energy deployed as represented on the Customer adjusted energy profile of the capacity tag(s) for External Resources and for Internal Resources not represented in the network model. Resources supplying reserves that are represented in the network model will not receive separate energy settlement. These resources will receive settlements as uninstructed imbalances per Schedule 9 of

PacifiCorp's OATT for Non-Participating Resources or direct from CAISO for Participating Resources.

Financial settlement for Internal Resources not in the network model and External Resources will be settled based on the integrated tag value multiplied by the hourly settled PACE or PACW ELAP price, adjusted for losses consistent with PacifiCorp's OATT.

ATTACHMENT V

Calculation of Reserve Obligation and Self-Supply (or Third-Party Supply) of Reserve Services under Schedules 5 and 6

Consistent with the terms and conditions for self-supply (or third-party supply) set forth in Attachment U, this Attachment V sets forth the general calculation of Total Operating Reserve Obligation and Operating Reserve Purchase Obligation accounting for self-supply (or third-party supply) of reserves services under Schedules 5 and 6. For simplicity, use of the term "self-supply" herein refers to self-supply or third-party supply.

Definitions

Load Obligation for Reserves ("Load"): A Transmission Customer's Load Obligation for Reserves is its metered load within the BAA, plus metered load(s) transferred into the BAA via Dynamic Transfer, less metered load(s) transferred out of the BAA via Dynamic Transfer, less contractual adjustments, plus losses (applicable losses under Schedule 10 of the OATT).

Load Obligation for Reserves = (+) metered load in the BAA, (+) metered load(s) brought into the BAA via Dynamic Transfer, (-) metered load(s) transferred from the BAA via Dynamic Transfer (-) load served via other contractual arrangements (+) losses

Generation Obligation for Reserves ("Generation"): A
Transmission Customer's Generation Obligation for Reserve
service is its metered net generation (gross generation less
station service) or e-Tagged scheduled amount, depending on
contractual arrangements for jointly-owned facilities, plus
metered net generation transferred into the BAA via Dynamic
Transfer, less metered net generation transferred out of the BAA
via Dynamic Transfer, less metered net generation transferred
out of the BAA via Dynamic Transfer, less Sales without
Reserves, plus Purchases without Reserves.

Generation Obligation for Reserves = (+) metered net generation (or scheduled), (+) metered net generation transferred into the BAA via Dynamic Transfer, (-) metered net generation transferred out of the BAA via Dynamic Transfer, (-) Sales without Reserves, (+) Purchases without Reserves.

Total Operating Reserve Obligation: A Transmission Customer's Total Operating Reserve Obligation equals the Load Obligation for Reserves plus the Generation Obligation for Reserves.

Operating Reserve Purchase Obligation: A Transmission Customer's Operating Reserve Purchase Obligation for each Operating Reserve - Spinning (Schedule 5 service) and Operating Reserve - Supplemental (Schedule 6 service) shall each be calculated each hour as the positive difference, if any, between the Total Operating Reserve Obligation (i.e., Generation plus Load) and any self-supply divided by 1.5 percent. For each service, the reserve purchase obligation multiplied by the applicable rate yields the reserve charge. The general reserve purchase obligation can be expressed as follows:

Operating Reserve Purchase Obligation = (Load + Generation) - (Self-Supply/1.5%)

In a given hour, any Operating Reserve - Spinning (Schedule 5) self-supplied in excess of the total spinning reserve purchase obligation by a transmission customer shall be applied against that customer's Schedule 6 (supplemental reserve) purchase obligation for that same hour, consistent with the current BAL-002-WECC-2a standard.

Hourly Calculation Procedure

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Where:
 [A] = Load (MWh)
 [B] = Generation (MWh)
 [C] = Total Operating Reserve Obligation (MWh) = [A] + [B]
 [D] = Operating Reserve - Spinning self-supply capacity tags (MWh)
 [E] = Operating Reserve - Supplemental self-supply capacity tags
 (MWh)
 [F] = Operating Reserve - Spinning self-supply credit (MWh)
 [G] = Operating Reserve - Supplemental self-supply credit (MWh)
 [H] = Operating Reserve - Spinning net purchase obligation (MWh)
 [I] = Operating Reserve - Supplemental reserve net purchase
 obligation (MWh)
 [J] = Operating Reserve - Spinning charge net of self-supply
 credit ($)
 [K] = Operating Reserve - Supplemental charge net of self-supply
 credit ($)
For a given hour:
1. Calculate Total Operating Reserve Obligation [C]
   = [A] + [B]
2. Calculate Operating Reserve - Spinning self-supply credit [F]
   = Minimum ([C] and [D]/1.5%)
3. Calculate Operating Reserve - Supplemental self-supply credit
  [G]
   = Minimum ([C] and (([D]/1.5%) - [F]) + ([E]/1.5%))
4. Calculate Operating Reserve - Spinning reserve net purchase
  obligation [H]
  = [C] - [F]
5. Calculate Operating Reserve - Supplemental reserve net
  purchase obligation [I]
  = [C] - [G]
6. Calculate Operating Reserve - Spinning reserve charge net of
  self-supply credit [J]
  = [H] \times [Schedule 5 rate ($/MWh)]
7. Calculate Operating Reserve - Supplemental reserve charge net
  of self-supply credit [K]
   = [I] \times [Schedule 6 rate ($/MWh)]
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SCHEDULE 3

Regulation and Frequency Response Service

Regulation and Frequency Response Service is necessary to provide for the continuous balancing of resources (generation and interchange) with load and for maintaining scheduled Interconnection frequency at sixty cycles per second (60 Hz). Regulation and Frequency Response Service is accomplished by committing on-line generation whose output is raised or lowered (predominantly through the use of automatic generating control equipment) and by other non-generation resources capable of providing this service as necessary to follow the moment-by-moment changes in load. The obligation to maintain this balance between resources and load lies with the Transmission Provider (or the BA that performs this function for the Transmission Provider).

The Transmission Provider must offer this service when the Transmission Service is used to serve load within its BAA. Transmission Customer must purchase this service from the Transmission Provider, self-supply the service, or make alternative comparable arrangements to satisfy its Regulation and Frequency Response Service obligation as further described in applicable PacifiCorp business practices. The Transmission Provider will take into account the speed and accuracy of regulation resources in its determination of Regulation and Frequency Response reserve requirements, including as it reviews whether a self-supplying Transmission Customer has made alternative comparable arrangements. Upon request by the self-supplying Transmission Customer, the Transmission Provider will share with the Transmission Customer its reasoning and any related data used to make the determination of whether the Transmission Customer has made alternative comparable arrangements.

For purposes of serving load under this schedule, the amount of and charges for Regulation and Frequency Response Service are differentiated by load, Variable Energy Resources (VERs), and resources that are not VERs (Non-VERs). The Transmission Customer shall pay a total Regulation and Frequency Response Service charge under this tariff equal to the sum of the charges applicable to the customer's load, VERs, and Non-VERs, as set forth below. To the extent the BA performs this service for the Transmission Provider, charges to the Transmission Customer are to reflect only a pass-through of the costs charged to the Transmission Provider by that BA.

Charge for Regulation and Frequency Response Service:

The load charges below apply to all load served by Network Integration Transmission Service or by Point-To-Point Transmission Service. Firm imports do not reduce the load obligation.

The rates below are applied to the Transmission Customer's Monthly Network Load for Network Integration Transmission Service or to the load served by Point-To-Point Transmission Service.

Load

		Effective rates July	Effective rates
		13, 2017 through	beginning January 1,
		December 31, 2017	2018
1.	Yearly Rate	\$2.25 per kW-Year	\$2.124 per kW-Year
2.	Monthly Rate	\$0.188 per kW-Month	\$0.177 per kW-Month

The charges below apply to all generators serving Network Load and are differentiated by the type of resources (VERs or Non-VERs) serving that load. The applicable differentiated rate below is applied to customers by charging the monthly rate times the nameplate capacity of the generator.

Each year by December 1, the Transmission Customer shall provide to the Transmission Provider, attestation of the nameplate capacity of VERs and Non-VERs owned or controlled by the Transmission Customer and located within the BAA.

VERs - Uncommitted Scheduling

		Effective Rates from	Effective Rates
		July 13, 2017 through	beginning January 1,
		December 31, 2017	2018
1.	Yearly Rate	\$6.984 per kW-Year	\$6.593 per kW-Year
2.	Monthly Rate	\$0.582 per kW-Month	\$0.549 per kW-Month

VERs - Committed Scheduling

To qualify for this committed scheduling rate for a month, during every hour of that month (except as specified below), a VER customer must utilize and submit into BSAP by 57 minutes prior to the operating hour (T-57), consistent with PacifiCorp's EIM Business Practice, hour-ahead base schedules consistent with PacifiCorp's VER forecast vendor's forecast available as of no more than 72 minutes prior to the operating hour (T-72) without modification or manual override of the hour-ahead forecast, fifteen-minute schedule, and five-minute schedule. In any calendar month for up to two operating hour

intervals, a VER customer may utilize and submit into BSAP by T-57, hour-ahead schedules consistent with PacifiCorp's VER forecast vendor's forecast available as of up to 90 minutes prior to the operating hour (T-90), without modification or manual override of the hour-ahead forecast, fifteen-minute schedule, and five-minute schedule, and still be eligible for this rate. Use and submission into BSAP of hour-ahead schedules older than PacifiCorp's VER forecast vendor's forecast at T-90 in any hour during a calendar month will make a VER customer ineligible for this rate in that month.

		Effective Rates from	Effective Rates
		July 13, 2017 through	beginning January 1,
		December 31, 2017	2018
1.	Yearly Rate	\$5.965 per kW-Year	\$5.631 per kW-Year
2.	Monthly Rate	\$0.497 per kW-Month	\$0.469 per kW-Month

Non-VERs

		Effective Rates from Effective Rates
		July 13, 2017 through beginning January 1,
		December 31, 2017 2018
1.	Yearly Rate	\$1.90 per kW-Year \$1.794 per kW-Year
2.	Monthly Rate	\$0.158 per kW-Month \$0.150 per kW-Month

Self-Supply:

A Network Customer may choose to self-supply its Regulation and Frequency Response Service obligation consistent with the requirements herein and PacifiCorp's business practices and consistent with the settlement in Docket Nos. ER17-219 and EL17-27.

The total charge for failure to self-supply shall not exceed the Monthly Rate pursuant to this Schedule 3 times the highest amount in megawatts not covered under self-supply.

SCHEDULE 3A

Generator Regulation and Frequency Response Service

Generator Regulation and Frequency Response Service is necessary to provide for the continuous balancing of resources (generation and interchange) with load and for maintaining scheduled Interconnection frequency at sixty cycles per second (60 Hz). Generator Regulation and Frequency Response Service is accomplished by committing on-line generation whose output is raised or lowered (predominantly through the use of automatic generating control equipment) as necessary to follow the moment-by-moment changes for a generator located within the BAA. The obligation to maintain this balance between resources and the generator's schedule lies with the Transmission Provider (or the BAA that performs this function for the Transmission Provider).

The Transmission Provider must offer this service when transmission service is provided for a generator physically or electrically located in the Transmission Provider's BAA. Generator Regulation and Frequency Response Service applies to the extent that a Transmission Customer is not already subject to Regulation and Frequency Response Service provided under Schedule 3. When applicable, the Transmission Customer must purchase Generator Regulation and Frequency Response Service from the Transmission Provider, self-supply the service, or make alternative comparable arrangements, as further described in applicable PacifiCorp business practices which may include self-supplying regulation reserve capacity from generation or non-generation resources or through dynamically scheduling its generation to another BAA. The Transmission Provider will take into account the speed and accuracy of regulation resources in its determination of Generator Regulation and Frequency Response reserve requirements, including as it reviews whether a self-supplying Transmission Customer has made alternative comparable arrangements. Upon request by the self-supplying Transmission Customer, the Transmission Provider will share with the Transmission Customer its reasoning and any related data used to make the determination of whether the Transmission Customer has made alternative comparable arrangements.

For purposes of exports or Third-Party Sales, the amount of and charges for Generator Regulation and Frequency Response Service are differentiated by the type of exporting resource (Variable Energy Resources (VERs) or resources that are not VERs (Non-VERs)) and are set forth below. To the extent a BA performs this service for the Transmission Provider, charges to the Transmission Customer are to reflect only a pass-through of the costs charged to the Transmission

Provider by that BA. The Transmission Provider may not charge a Transmission Customer for regulation reserves under both Schedule 3 and Schedule 3A for the same transaction.

Charge for Generator Regulation and Frequency Response Service:

The charges below apply to generation that originates in the PacifiCorp BAA and terminates in another BAA or for any resource not designated as a Network Resource. The applicable differentiated rate below is applied to customers by charging the monthly rate times the nameplate capacity of the generator.

Each year by December 1, the Transmission Customer shall provide to the Transmission Provider, attestation of the nameplate capacity of VERs and Non-VERs owned or controlled by the Transmission Customer and located within the BAA.

VERs - Uncommitted Scheduling

		Effective Rates from	Effective Rates
		July 13, 2017 through	beginning January 1,
		December 31, 2017	2018
1.	Yearly Rate	\$6.984 per kW-Year	\$6.593 per kW-Year
2.	Monthly Rate	\$0.582 per kW-Month	\$0.549 per kW-Month

VERs - Committed Scheduling

To qualify for this committed scheduling rate for a month, during every hour of that month (except as specified below), a VER customer must utilize and submit into BSAP by 57 minutes prior to the operating hour (T-57), consistent with PacifiCorp's EIM Business Practice, hour-ahead base schedules consistent with PacifiCorp's VER forecast vendor's forecast available as of no more than 72 minutes prior to the operating hour (T-72) without modification or manual override of the hour-ahead forecast, fifteen-minute schedule, and five-minute schedule. In any calendar month for up to two operating hour intervals, a VER customer may utilize and submit into BSAP by T-57, hour-ahead schedules consistent with PacifiCorp's VER forecast vendor's forecast available as of up to 90 minutes prior to the operating hour (T-90), without modification or manual override of the hour-ahead forecast, fifteen-minute schedule, and five-minute schedule, and still be eliqible for this rate. Use and submission into BSAP of hour-ahead schedules older than PacifiCorp's VER forecast vendor's forecast at T-90 in any hour during a calendar month will make a VER customer ineligible for this rate in that month.

		Effective Rates from Effective Rates
		July 13, 2017 through beginning January 1,
		December 31, 2017 2018
1.	Yearly Rate	\$5.965 per kW-Year \$5.631 per kW-Year
2.	Monthly Rate	\$0.497 per kW-Month \$0.469 per kW-Month

Non-VERs

		Effective Rates from	Effective Rates
		July 13, 2017 through	beginning January 1,
		December 31, 2017	2018
1.	Yearly Rate	\$1.90 per kW-Year	\$1.794 per kW-Year
2.	Monthly Rate	\$0.158 per kW-Month	\$0.150 per kW-Month

Self-Supply:

A Network Transmission Customer may choose to self-supply its Generator Regulation and Frequency Response Service obligation consistent with the requirements herein and PacifiCorp's business practices and consistent with the settlement in Docket Nos. ER17-219 and EL17-27.

The total charge for failure to self-supply shall not exceed the Monthly Rate pursuant to this Schedule 3A times the highest amount in megawatts not covered under self-supply.

SCHEDULE 5

Operating Reserve - Spinning Reserve Service

Spinning Reserve Service is needed to serve load in the BAA and to support other transmission usage sourced from generation in the BAA including exports and sales. Spinning Reserve Service may be provided by generating units that are on-line and loaded at less than maximum output and by non-generation resources capable of providing The Transmission Provider must offer this service this service. when the transmission service is used to serve load within its BAA and to support other transmission usage sourced from generation in the BAA including exports and sales. The Transmission Customer must purchase this service from the Transmission Provider, self-supply the service, or make alternative comparable arrangements to satisfy its Spinning Reserve Service obligation. The amount of and charges for Spinning Reserve Service are set forth below. To the extent the BA performs this service for the Transmission Provider, charges to the Transmission Customer are to reflect only a pass-through of the costs charged to the Transmission Provider by that BA.

Charges for Spinning Reserve Service:

Under the current NERC Regional Reliability Standard BAL-002-WECC, the Transmission Provider is required to maintain a minimum amount of contingency reserve equal to the sum of three percent of hourly integrated load plus three percent of hourly integrated generation with at least half as spinning. Consistent with the Transmission Provider operating in accordance with this reliability standard, the charges for Schedule 5 below apply one and one-half percent to load and one and one-half percent to generation.

For load, the rates below are charged to a Network Customer's hourly integrated load (including losses).

For generation, the rates below are applied to customers by charging actual hourly generation delivered to the Transmission Provider at the Point of Receipt.

The rate shall be an Hourly Rate of:

	Effective rates	Effective rates
	February 13, 2017	beginning January 1,
	through December 31,	2018
	2017	
Schedule 5 (Spinning	\$0.16 per MWh	\$0.151 per MWh
Reserves)		

Self-Supply:

A Transmission Customer may choose to self-supply all or a portion of its reserve obligation.

The total reserve obligation for a Transmission Customer who self-supplies is determined by the currently-effective version of the NERC Regional Reliability Standard BAL-002-WECC. The requirement is currently equal to the sum of one and one-half percent of hourly integrated load plus one and one-half percent of hourly integrated generation. For a Transmission Customer choosing to self-supply a portion of its reserve obligation, the billing determinants for supplemental purchases of Schedule 5 reserve service shall be determined by: (1) identifying the difference between the amount self-supplied during each hour each month and the Transmission Customer's full requirement, as determined by NERC Regional Reliability Standard BAL-002-WECC; (2) charging the Transmission Customer the Hourly Rate multiplied by the amount of megawatts identified in (1) where the Transmission Customer failed to supply its full requirement for each hour, if any failure occurred.

The Transmission Customer shall schedule that portion which it will self-supply and/or supply from third parties pursuant to procedures set forth in the business practices of the Transmission Provider. During any period that a Transmission Customer has scheduled self-supply and/or supply from third parties but fails to provide the full amount scheduled due to partial or full forced outage of the generation source or a transmission curtailment or interruption, the Transmission Customer shall purchase the shortfall at the Hourly Rate, as described in the proceeding section.

Spinning Reserve Service to be Provided:

The Transmission Provider, using its generators controlled by automatic generation control, will provide the capacity required to provide Spinning Reserve Service for a Transmission Customer. Upon an outage of a generation resource for which Spinning Reserve Service has been purchased from the Transmission Provider, the Transmission Provider will provide replacement capacity commencing immediately upon such outage until the earlier of (1) the restoration of such resource to service by the Transmission Customer or (2) the end of ten (10) full minutes after the occurrence of such outage.

To the extent that the Transmission Provider determines that a Transmission Customer's specific Spinning Reserve Requirements are not being fully met through the purchase of Spinning Reserve Service as provided above, the Transmission Provider reserves the right (upon

filing with the Commission) to require such Transmission Customer to purchase a greater amount of Spinning Reserve Service.

SCHEDULE 6

Operating Reserve - Supplemental Reserve Service

Supplemental Reserve Service is needed to serve load in the BAA and to support other transmission usage sourced from generation in the BAA including exports and sales; however, it is not available immediately to serve load but rather within a short period of time. Supplemental Reserve Service may be provided by generating units that are on-line but unloaded, by quick-start generation or by interruptible load or other non-generation resources capable of providing this service. The Transmission Provider must offer this service when the transmission service is used to serve load within its BAA and to support other transmission usage sourced from generation in the BAA including exports and sales. The Transmission Customer must purchase this service from the Transmission Provider, self-supply the service, or make alternative comparable arrangements to satisfy its Supplemental Reserve Service obligation. of and charges for Supplemental Reserve Service are set forth below. To the extent the BA performs this service for the Transmission Provider; charges to the Transmission Customer are to reflect only a pass-through of the costs charged to the Transmission Provider by that BA.

Charges for Supplemental Reserve Service:

Under the current NERC Regional Reliability Standard BAL-002-WECC, the Transmission Provider is required to maintain a minimum amount of contingency reserve equal to the sum of three percent of hourly integrated load plus three percent of hourly integrated generation with at least half as spinning. Consistent with the Transmission Provider operating in accordance with this reliability standard, the charges for Schedule 6 below apply one and one-half percent to load and one and one-half percent to generation.

For load, the rates below are charged to a Network Customer's hourly integrated load (including losses).

For generation, the rates below are applied to customers by charging actual hourly generation delivered to the Transmission Provider at the Point of Receipt.

The rate shall be an Hourly Rate of:

Effective Rates from	Effective Rates
February 13, 2017	beginning January 1,
through December 31,	2018

	2017	
Schedule 6	\$0.16 per MWh	\$0.151 per MWh
(Supplemental		
Reserves)		

Self-Supply:

A Transmission Customer may choose to self-supply all or a portion of its reserve obligation.

The total reserve obligation for a Transmission Customer who self-supplies is determined by the currently-effective version of the NERC Regional Reliability Standard BAL-002-WECC. The requirement is currently equal to the sum of one and one-half percent of hourly integrated load plus one and one-half percent of hourly integrated generation. For a Transmission Customer choosing to self-supply a portion of its reserve obligation, the billing determinants for supplemental purchases of Schedule 6 reserve service shall be determined by: (1) identifying the difference between the amount self-supplied during each hour of each month and the Transmission Customer's full requirement, as determined by NERC Regional Reliability Standard BAL-002-WECC; (2) charging the Transmission Customer the Hourly Rate multiplied by the amount of megawatts identified in (1) where the Transmission Customer failed to supply its full requirement for each hour, if any failure occurred.

The Transmission Customer shall schedule that portion which it will self-supply and/or supply from third parties pursuant to procedures set forth in the Business Practices of the Transmission Provider. During any period that a Transmission Customer has scheduled self-supply and/or supply from third parties but fails to provide the full amount scheduled due to partial or full forced outage of the generation source or a transmission curtailment or interruption, the Transmission Customer shall purchase the shortfall at the hourly rate.

Supplemental Reserve Service to be Provided:

The Transmission Provider, using its generators controlled by automatic generation control, will provide the capacity required to provide Supplemental Reserve Service for a Transmission Customer. Upon an outage of a generation resource for which Supplemental Reserve Service has been purchased from the Transmission Provider, the Transmission Provider will provide replacement capacity commencing at the end of ten (10) full minutes after such outage until the earlier of (1) the restoration of such resource to service by the Transmission Customer or (2) the end of the first full hour

immediately following such outage.

To the extent that the Transmission Provider determines that a Transmission Customer's specific Supplemental Reserve Requirements are not being fully met through the purchase of Supplemental Reserve Service as provided above, the Transmission Provider reserves the right (upon filing with the Commission) to require such Transmission Customer to purchase a greater amount of Supplemental Reserve Service.