Exploring Section 7(f) Power Rate Options

January 28, 2020
TC-22, BP-22 and EIM Phase III Workshop
Agenda

- Disclaimer
- Background
- Current Options
- Section 7(f)
- Concept Summary
- Going forward
Disclaimer

• The rates, terms, and products described in here are for discussion purposes only.

• This presentation is provided by BPA Staff as a conceptual response to customer requests. (BP-20 ROD, BP-20-A-03, at 40-41).
Background

• **Section 5(b) of the Northwest Power Act (NWPA)**
  • Establishes BPA’s obligation to supply power to meet power customers’ “net requirements” load.
  • Net requirements is the firm load requirement that remains after accounting for customers’ dedicated resources.
  • Includes New Large Single Loads (NLSLs). An NLSL is a facility within a preference customer’s load that increases by 10aMW or more in a year.
  • Includes *both* preference customer load and IOU requirements load.

• **Section 5(b) / 7(b) Rate (PF Customer)**
  • Price of power sold to meet preference customers’ “general requirements” is set pursuant to section 7(b) of the NWPA. Includes PF Tier 1 and Tier 2 rates.
  • “General requirements” excludes NLSLs.

• **Section 5(b) / 7(f) Rate (NLSLs, IOUs)**
  • Firm power sold to serve 5(b) load of IOUs and NLSLs of publics is sold at rates set by NWPA section 7(f).

• **Section 5(f) / 7(f) Rate (Firm Surplus)**
  • Section 5(f) permits sales of remaining firm power after meeting 5(b), (c), (d) load obligations.
  • Section 7(f) establishes rates for all other firm power sold for use in the pacific northwest.
Section 7(f) Rates

• Currently, BPA sets two types of rates under Section 7(f):
  • **New Resource Firm Power (NR) Rate**
    • Serves IOU 5(b) requirements load and preference customer NLSLs.
    • BPA *must* provide power for net requirements sales (guaranteed supply).
    • Fully allocated costs result in a high rate, BP-20 level is $79.80/MWh.
  • **Firm Power and Surplus Products and Services (FPS) Rate**
    • Dependent on firm surplus availability, which means generally shorter terms, but can extend multiple years.
    • Specified by BPA and/or negotiated between buyer and seller; rate can be based on market.
Rates Today

- FBS (7(b)(1))
- New Resources (7(b)(1))
- Exchange Resource (7(b)(1))
- New Resources (7(b)(1))
- Exchange
- FBS
- 7(b) Rate Pool (PF and IOU Exchange Loads)
- 7(a)(1), 7(g)
- 7(f) Rate Pool NR, NLSL, Firm Surplus (within region)
- 7(f) Deficiency
- IOU Req. Load
- NLSL Load
- Firm Surplus Load

January 28, 2020
Pre-Decisional. For Discussion Purposes Only.
The Request

- Costs allocated to the 7(f) rate pool result in high rates, which incents customers to look to other suppliers for long-term NLSL service.
  - NR rate = guaranteed supply, but is expensive.
  - FPS rate = negotiated/market rate, but supply limited to projected yearly surplus inventory.
- Customers request that BPA consider developing different rate alternatives to serve growing NLSLs.

**Question:** Can BPA redesign existing 7(f) rates or create a new rate under 7(f) to attract customers that serve NLSLs?
NR Rate History

- In prior rate cases, NR has been designed in various ways.
- BPA’s policy decisions have affected design of NR rate.
  - When BPA forecasted periods of surplus or risk of load loss, BPA assumed more market risk, and set the NR rate at less than fully allocated costs (1996).

<table>
<thead>
<tr>
<th>Rate Case</th>
<th>Rate Level ($/MWh)*</th>
<th>Allocation Design</th>
</tr>
</thead>
<tbody>
<tr>
<td>1981</td>
<td>$22</td>
<td>New Resource Costs</td>
</tr>
<tr>
<td>1982</td>
<td>$30</td>
<td>Exchange resource cost</td>
</tr>
<tr>
<td>1983</td>
<td>$29</td>
<td>Set equal to the SP rate</td>
</tr>
<tr>
<td>1996</td>
<td>$20</td>
<td>Set equal to PF</td>
</tr>
<tr>
<td>2000</td>
<td>$37</td>
<td>Exchange Resource costs</td>
</tr>
<tr>
<td>2007</td>
<td>$68</td>
<td>Exchange Resource costs</td>
</tr>
<tr>
<td>2020</td>
<td>$80</td>
<td>Exchange Resource cost</td>
</tr>
</tbody>
</table>

*All historical rates are approximate.
NLSL Contractual Context

• NLSL Service Options
  • Under Regional Dialogue (RD), Load Following customers have a contractual right to have BPA serve an NLSL with power at the NR rate.
  • Slice/Block and Block customers do NOT currently have contractual ability to purchase power at the NR rate to serve NLSLs. However, they can purchase Firm Surplus power at the FPS rate.
  • BPA has NR Block contracts with some IOUs, which limits the ability of those customers to have BPA serve their NLSLs with power at the NR rate. However, they can purchase Firm Surplus power at the FPS rate.

• NLSL Policy Green Exception Option
  • This option permits an NLSL customer to purchase a limited amount of PF power if the customer applies an onsite renewable or co-generation resource to reduce its load below 10 aMW. BPA serves the remaining NLSL load below 10 aMW at PF rates.
  • In Subscription contracts (FY2002-2011), the NLSL/Green Exception offered an additional option to use offsite renewable resources. However, this option was sunset as of December 31, 2006. Only one customer has a grandfathered contractual provision that allows them to continue to use the offsite Green Exception.
Current Options
For NLSL Loads

• BP-20 NR Rate at $79.80/MWh (only available to NLSLs of Load Following preference customers).
• Firm surplus power from BPA, when available.
• Green Exception Option under the NLSL Policy for onsite renewable or co-generation resources only.
• Self-supply with non-federal resources, and/or market purchases.
Limitations of Existing Options

• NR rate is more than twice the PF rate.
• FPS sales limited to Firm Surplus power availability as a yearly average.
• Green Exception Option is limited to NLSL customers with onsite renewable or co-generation resources applied to reduce load below 10 aMW, for a limited power purchase of up to 9.9 aMW at PF rates.
• Market power purchases, for self-supply, risk exposure to fluctuating market prices (e.g. winter 2019 price hike).
Concept Summary
New 7(f) Rate Options

• Policy Question?
  • Should BPA take on more market risk and redesign the 7(f) to attract customers that serve NLSLs?
  • If so…

• Conceptual Idea
  • BPA is considering selling a limited amount of additional firm power at a new 7(f) rate.
  • Aggregate amount eligible for purchase would be limited and subject to Administrator’s discretion (priority to preference customers).
  • Power could be sold as either:
    o New specific NR Rate (for the limited power).
    o New Firm Surplus Rate (for the limited power).
Conceptual Idea: Add a Bucket to 7(f)
New Specific NR Rate

• **Description**
  - Would apply to limited amount of power sold to serve NLSLs and IOU requirements loads (priority to PF customers).

• **Potential Pricing**
  - PF + 7(b)(3) Surcharge
  - PF + 7(b)(3) Surcharge + market adder
  - Market + 7(b)(3) Surcharge (not to exceed PF + 7(b)(3) Surcharge, and no lower than PF)

• **Pros**
  - Initial sale not dependent on surplus availability.
  - Term of sale more flexible (i.e. may extend through end of RD contracts (2028)).

• **Cons**
  - Only available to Load Following Customers’ NLSLs.
  - Rate must include a 7(b)(3) Surcharge (per the REP Settlement).
  - **Significant** contractual amendments needed to make this more broadly available to other customers (Slice/Block, Block & IOUs).
  - May require acquiring resources to supply.
New Firm Surplus Rate

• Description
  • Would apply to a limited amount of power sold to potentially serve any load within region (priority to PF customers).

• Potential Pricing
  • Rate indexed relative to the PF rate, as follows, but not lower:
    • Equal to PF
    • PF + market adder
    • Negotiated rate

• Pros
  • No RD contract adjustments needed
  • No REP 7(b)(3) Surcharge
  • Potentially available to all customers based on rate case determined eligibility.

• Cons
  • Supply limited to available surplus.
# Risks and Limitations

<table>
<thead>
<tr>
<th>Market Price Risk</th>
<th>BPA’s Power Supply</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Higher than new 7(f) rate</td>
<td>Deficit</td>
<td>In a low water year, trading floor inventory is smaller than rate case; if market prices are simultaneously <em>above</em> the new 7(f) rate, BPA may face paying more for balancing purchases at prices higher than sales at the new 7(f) rate.</td>
</tr>
<tr>
<td>Lower than new 7(f) rate</td>
<td>Surplus</td>
<td>In a surplus water year, trading floor inventory exceeds rate case; if market prices are <em>above</em> the new 7(f) rate, BPA will have made less off of the new 7(f) sale than it could have on the trading floor.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>In a low water year, trading floor inventory is smaller than rate case; if market prices are simultaneously <em>below</em> the new 7(f) rate, BPA may face paying less for balancing purchases at prices lower than sales at the new 7(f) rate.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>In a surplus water year, trading floor inventory exceeds rate case; if market prices are <em>below</em> the new 7(f) rate, BPA locked in a sale at higher prices that it would have received on the trading floor.</td>
</tr>
</tbody>
</table>
# New Section 7(f) rate concept

<table>
<thead>
<tr>
<th>NWPA section</th>
<th>Rate Schedule</th>
<th>Applicability</th>
<th>Augment to serve</th>
<th>Administrator’s discretion to serve</th>
<th>Rate Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>7(f)</td>
<td>Status quo NR</td>
<td>IOU requirements load. Public NLSL requirements load.</td>
<td>Yes</td>
<td>No</td>
<td>Status quo calculation based on costs and statutes</td>
</tr>
<tr>
<td></td>
<td><strong>New</strong> specific rate under the NR rate schedule</td>
<td>Load Following Customers (absent contract changes)</td>
<td></td>
<td>Yes</td>
<td><strong>Must incorporate 7(b)(3) surcharge</strong></td>
</tr>
<tr>
<td></td>
<td>Status quo FPS</td>
<td>Firm Surplus</td>
<td>Not at time of sale but yes when actual conditions change from forecast</td>
<td>Yes</td>
<td><strong>Negotiated based on current market value</strong></td>
</tr>
<tr>
<td></td>
<td><strong>New</strong> firm surplus rate under the FPS rate schedule</td>
<td>Potentially available to all customers based on rate case determined eligibility</td>
<td>Not at time of sale but yes when actual conditions change from forecast</td>
<td>Yes</td>
<td><strong>Determined through rate setting process</strong></td>
</tr>
</tbody>
</table>
Next steps

- Please email comments to ypcornejo@bpa.gov by February 11th
- Further discuss and develop the concept
- Additional workshop discussions, as necessary