

NR Rate 101

Provider of Choice Workshop May 21, 2024



Rate Type Background:

Bonneville currently sets rates under the umbrella of three statute-identified rate types: 7(b), 7(c), and 7(f). The applicability, ability to augment to serve, Administrator's discretion to serve, and the method used to set the rate level are different among these directives. Bonneville can also have, and does have, multiple rate schedules under a single statute-identified rate type. For example, the NR rate schedule and the FPS rate schedule are both 7(f) rate schedules but the applicability and rate design are significantly different leading Bonneville to use two rate schedules to make the distinction clear.

Rate Types

Statute	Rate Schedule	Applicability	Augment to Serve	Administrator's Discretion to Serve	Rate Level
7(b)	PF	Public requirements load that is not NLSL load.	Yes	No	Calculated based on costs and statutes
7(b)	PF	Residential Exchange	N/A	No but "in lieu" sales option available	Calculated based on costs and statutes
7(c)	IP	Existing DSIs – Port Townsend Paper	Yes	Yes	Calculated based on costs and statutes
7(f)	NR	IOU Requirements Load. Public NLSL requirements load.	Yes	No	Calculated based on costs and statutes
7(f)	FPS	Firm Surplus	Not at time of sale but yes when actual conditions change from forecast	Yes	Negotiated

NR Rate Background

- The NR rate is stipulated in section 7 of the Northwest Power Act and is applicable to service for New Large Single Loads, as well as any requirements power Investor-Owned Utilities may opt to place on BPA.
- The NR rate is a result of the Cost of Service Allocation methodology and related rate directives as stipulated in section 7 of the Northwest Power Act.
- Historically the NR Rate has exceeded both market rates and Priority-Firm rates charged to preference customers, and for that reason, little to no load is served at this rate.
- Bonneville assumes a small fictitious

 1 akW load so that a rate can be
 calculated roughly \$850 a year.
 Absent this assumption a rate
 could not be calculated until
 Bonneville had some NR load.

BP-24 Rates	FY 2024	FY 2025	Average
PF Public (Average)	\$35.13	\$36.50	\$35.81
PF Exchange	\$69.97	\$71.01	\$70.49
IP	\$40.72	\$42.04	\$41.38
NR	\$85.12	\$85.58	\$85.35

Cost Allocation Methodology

- To understand how the NR rate is computed, we walk through each step of the computations performed in RAM2024 using FY 2024 as an example.
- The NR Rate starts out at \$77.47 in 2024, using an initial allocation of costs consistent with the Power Act which is broken out as follows:

BP-24 NR Rate (FY 2024)

■ New Resources ■ Residential Exchange ■ Conservation ■ BPA Programs ■ Transmission ■ Revenue Credits ■ FPS Def

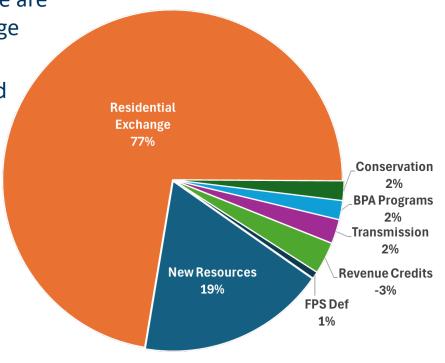


Initial Cost Allocation

 The largest components making up the NR rate are resource costs; specifically Residential Exchange Resources and New Resources¹.

 Section 7(b)(1) requires that the Federal based system (FBS) first serve PF load. Once FBS resources are exhausted Exchange Resources are called upon and then any remaining PF load is met with non-FBS resources (i.e., New Resources).

 As a result, the NR rate is left being served with the remainder which is a mix of Exchange Resources and non-FBS resources which are often higher in costs compared to FBS resources.

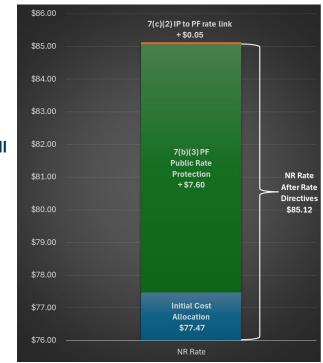


How Costs of Generation Are Allocated to Load Pools (BP-24, FY 2024)



Specific Directives After Cost Allocation

- After the initial rate is determined the NWPA prescribes specific actions be taken to ensure certain benefits and protections are met which increases the FY 2024 NR rate to \$85.12.
- A summary of the statue-driven computations are below:
 - **7(b)(1):** Requires that Federal base system resources go first to PF. This was discussed previously and makes up the basis of the initial cost allocation.
 - 7(b)(3): Any amounts not charged to public body, cooperative, and Federal agency customers by reason of 7(b)(2) shall be recovered through supplemental rate changes for all other power sold by the Administrator to all customers. This is the cost of REP rate protection, essentially REP costs that cannot be allocated to the PF public rate due to section 7(b)(2) is allocated to all other rates (PFx, IP, NR and FPS). This increases the NR rate by \$7.60.
 - **7(c)(2):** Links the IP rate to the PF rate and allocates the cost difference to all rates. The IP-PF link causes the NR Rate to increase due to a need to link the IP Rate to the Flat PF Rate; which is why the IP rate is not as high as the NR Rate. This increases the NR rate by \$0.05. The IP-PF link occurs twice, once before **7(b)(3)** and once after.



Scenario Analysis

- BPA evaluated two scenarios that include adding 1,000aMW of NR load representing either New Large Single Loads from Preference customers, or IOUs demonstrating a net requirement they are seeking BPA to serve. The new NR load is served with different resource assumptions to gain insight on how the PF and NR rate moves.
- Each scenario uses BP-24 Rate Case as a base and reports a rate period average.
- Scenario results demonstrate how the cost of non-FBS resources can influence the NR rate up or down. The PF rate decreases slightly when NR load is added due to it picking up a portion of the REP program costs.

Scenario	Scenario Assumptions*	(Rate Period Average/MWh)	PF Public	NR Rate
BP-24 Base	BP-24 Rate Case		\$35.81	\$85.35
BP-24 Scenario 1	Acquire a new annual 1,000 aMW block of non-F	BS resource at \$80/MWh	\$35.06	\$85.03
BP-24 Scenario 2	Acquire a new annual 1,000 aMW block of non-FE	SS resources at \$60/MWh	\$34.47	\$69.16

^{*}Analysis adjusts firm energy only, no adjustments to secondary inventory.

Detailed Resource Cost Allocation by BP-24 NR Scenario

BP-24 Base Case	Whole System	Priority Firm Loads	IP, NR and SP Loads	\$ MWh*	
Federal Base System	58%	59%	0%	\$ 33.72	
Exchange Resources	42%	41%	84%	\$ 68.86	
New Resources	0.5%	0.0%	16%	\$ 91.52	
Weighted Avg Rate	\$ 48.68	\$ 47.96	\$ 72.41		

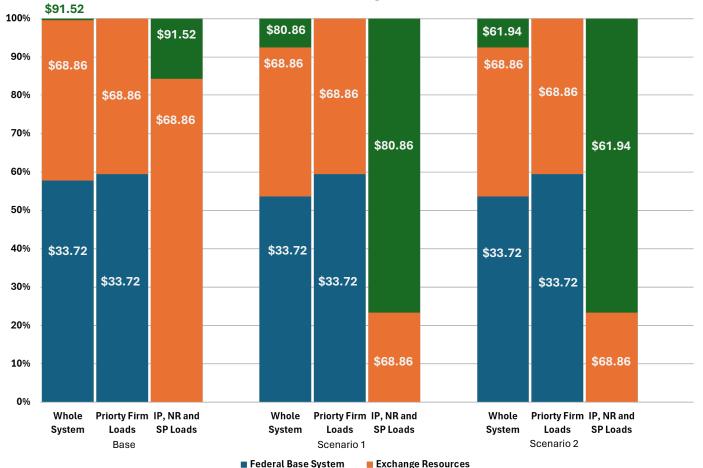
BP-24 Scenario 1 (\$80 non-FBS)	Whole System	Priority Firm Loads	IP, NR and SP Loads	\$ MWh*
Federal Base System	54%	59%	0%	\$ 33.72
Exchange Resources	39%	41%	23%	\$ 68.86
New Resources	8%	0%	77%	\$ 80.86
Weighted Avg Rate	\$ 50.93	\$ 47.96	\$ 78.05	

- This slide shows how adding non-FBS "New Resources" influence the allocation of resources and associated costs to each rate pool.
- Scenario 1 decreases due to lower non-FBS resource costs being added and fewer Exchange Resources being used.
- Scenario 2 decreases even further with non-FBS resource costs nearing \$62 MWh.

BP-24 Scenario 2 (\$60 non-FBS)	Whole System	Priority Firm Loads	IP, NR and SP Loads	\$ MWh*
Federal Base System	54%	59%	0%	\$ 33.72
Exchange Resources	39%	41%	23%	\$ 68.86
New Resources	8%	0%	77%	\$ 61.94
Weighted Avg Rate	\$ 49.50	\$ 47.96	\$ 63.56	

^{*}The quoted \$ MWh is based on resource cost only and does not include other costs or credits which contribute to the rates quoted on prior slides.

Resource Cost Allocation by BP-24 NR Scenario



Post 2028 REP - NR Rate Scenario's

- The Post-2028 REP Process evaluated the impact on NR load and REP benefits when adding NR load and non-FBS resources in a world without the 2012 REP Settlement.
- Without an REP Settlement rate directives require the 7(b)(2) Rate Test be performed which can lead to greater variability in rates compared to the fixed REP Settlement stream currently in place.
- The BP-24 and REP NR scenarios are the same except the model is ran outside of settlement mode and some minor differences in inputs exist. As a result, the NR rate increases scenario's.
- The 7(b)(3) surcharge is higher in the REP scenarios reflecting an increase in rate protection from performing the 7(b)(2) Rate Test instead of applying a fixed REP cost determined in the settlement.

Scenario	Scenario Assumptions	PF Public (\$/MWh)	NR Rate (\$/MWh)	REP (\$ million)
Base	BP-24 Rate Case	\$35.81	\$85.35	\$274
REP Reference Case	BP-24 Rate Case converted to Non-Settled REP Reference Case ^{1/}	\$30.89	\$100.25	\$108
REP Scenario 1	Acquire a new annual 1,000 aMW block of non-FBS resource at \$80/MWh	\$31.03	\$99.41	\$247
REP Scenario 2	Acquire a new annual 1,000 aMW block of non-FBS resources at \$60/MWh	\$30.85	\$83.26	\$273

Detailed Resource Cost Allocation by REP NR Scenario

Base Case (BP-24)	Whole System	Priority Firm Loads	IP, NR and SP Loads	\$ MWh*
Federal Base System	58%	59%	0%	\$ 33.72
Exchange Resources	42%	41%	84%	\$ 68.86
New Resources	0.5%	0.0%	16%	\$ 91.52
Weighted Avg Rate	\$ 48.68	\$ 47.96	\$ 72.41	

REP Scenario 1 (\$80 non-FBS)	Whole System	Priority Firm Loads	IP, NR and SP Loads	\$1	\$ MWh*	
Federal Base System	55%	62%	0%	\$	31.82	
Exchange Resources	37%	38%	23%	\$	70.72	
New Resources	8%	0%	77%	\$	80.93	
Weighted Avg Rate	\$ 50.01	\$ 46.77	\$ 78.54			

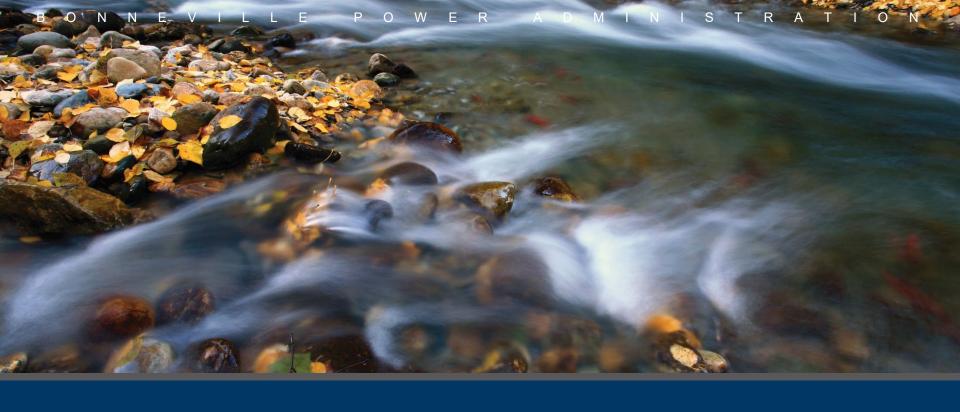
REP Reference Case	Whole System	Priority Firm Loads	IP, NR and SP Loads	\$ MWh*
Federal Base System	58%	59%	0%	\$ 31.82
Exchange Resources	42%	41%	84%	\$ 70.72
New Resources	0%	0%	16%	\$ 92.74
Weighted Avg Rate	\$ 47.61	\$ 46.77	\$ 74.17	

REP Scenario 2 (\$60 non-FBS)	Whole System	Priority Firm Loads	IP, NR and SP Loads	\$ MWh*
Federal Base System	55%	62%	0%	\$ 31.82
Exchange Resources	37%	38%	23%	\$ 70.72
New Resources	8%	0%	77%	\$ 62.01
Weighted Avg Rate	\$ 48.53	\$ 46.77	\$ 64.05	

^{*}The quoted \$ MWh is based on resource cost only and does not include other costs or credits which contribute to the rates quoted on prior slides.

In Summary

- The NR Rate often exceeds market rates and Priority-Firm rates due to the Cost of Service Allocation and rate directives in the Northwest Power Act.
 - Section 7(b)(1) leaves the NR rate being served with higher cost resources after PF and IP Loads are met.
 - Section 7(b)(3) assigns a portion of rate protection determined by the section 7(b)(2) Rate Test to NR loads.
 - Section 7(c)(2) links the IP rate to the PF rate which leads to a small amount of costs flowing to the NR rate.
- As shown in the scenarios, the NR Rate changes based on resources serving the load and the associated costs coupled with additional charges resulting from rate directives.
- The outcome of the 7(b)(2) Rate Test or a future REP Settlement will have an impact on the NR rate via section 7(b)(3).



Questions?

