



Provider of Choice: BPA's Statutory Overview & Background on Capacity

PPC Rates and Contracts

June 22, 2021

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Agenda for Today's Session

- **Statutory Overview**
- **Capacity Background**
- **Next Steps**





BPA's Statutory Authority

Mary Bodine-Watts & Erika Doot

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Disclaimer

- The purpose of this session is to identify key statutory provisions that serve as the foundation for BPA's power sales contracts.
- BPA is not providing legal advice.
- Customers are encouraged to seek independent counsel.



Governing Statutes

- The Bonneville Project Act of 1937, 16 U.S.C. § 832.
- The Pacific Northwest Consumer Power Preference Act of 1964, 16 U.S.C § 837.
- The Federal Columbia River Transmission System Act of 1974, 16 U.S.C § 838.
- The Pacific Northwest Electric Power Planning and Conservation Act of 1980, 16 U.S.C § 839.
- BPA is subject to other federal statutes that will not be discussed herein.

Framework

- BPA operates to fulfill its statutory mandates.
- BPA establishes policies to implement these statutory directives.
- BPA contracts establish buyer and seller obligations consistent with the statutes and BPA policies.



1930s Historical Context

- Federal projects to bolster economy during the Great Depression.
- Rural America lacked electrification.
- Concerns with monopolization of utilities and services.

Bonneville Project Act

- The Bonneville Project Act of 1937 created BPA and designated the Administrator as the marketer for energy generated at the Bonneville project.
- Secretary of Interior orders designated BPA as the marketer for some Reclamation Projects.
- The Project Act requires the Administrator to “at all times... give preference and priority to public bodies and cooperatives.”



Contract Term Limitation

Section 5(a) of the Project Act specifies that contracts “. . . shall be effective for such period or period, including renewals or extensions, as may be provided therein, not exceeding in the aggregate twenty years from the respective dates of the making of such contracts.”

Prohibition on Resale

Section 5(a) also specifies that contracts “shall contain a provision forbidding such private purchaser to resell any of such electric energy so purchased to any private utility or agency engaged in the sale of electric energy to the general public, and requiring the immediate canceling of such contract of sale in the event of violation of such provision.”



1960s and 70s Historical Context

- Development of Columbia River treaty increased storage and power production.
- Technological advancement and development of DC Intertie connecting PNW and California.
- Hydro-Thermal Power Program in development.

Preference Act of 1964

- Passed prior to construction of the Southern Intertie.
- Authorizes sales of electricity for use outside of the Pacific Northwest.
- Requires that contracts provide the Administrator the right to recall energy with 60 days notice if such energy is needed for use in the Pacific Northwest.



Treatment of Non-Federal Hydro

Section 3(d) of the Preference Act specifies:

- The Secretary, in making any determination of the energy requirements of any Pacific Northwest customer which is a non-Federal utility having hydroelectric generating facilities, shall exclude any amounts of hydroelectric energy generated in the Pacific Northwest and disposed of outside the Pacific Northwest by the utility which, through reasonable measures, could have been conserved or otherwise kept available for the utility's own needs in the Pacific Northwest.
- The Secretary may sell the utility as a replacement therefor only what would otherwise be surplus energy.
- This limitation is reiterated in Section 9(c) of the Northwest Power Act

Transmission System Act of 1974

- BPA becomes self financing.
- Established the Bonneville Fund which provides the Administrator with more flexibility than the annual appropriations process.
- Designated the Administrator as the marketer for all energy generated at Bureau and Corps projects in the Pacific Northwest.

1980s Historical Context

- Pending allocation of limited Federal power.
- Concerns about rate disparity between retail customers served by public bodies versus IOUs.
- Growing interest in environmental protection and energy efficiency.

Northwest Power Act

- Directed BPA to offer contracts for power sales to requesting preference customers and IOUs.
- Authorized power sales to DSIs and Federal agencies.
- Specified ratemaking procedures.
- Created the Residential Exchange Program.
- Established the PNW Electric Power and Conservation Planning Council.
- Included energy efficiency and fish and wildlife obligations.



Sales of Power

- Reaffirms preference and priority in sales of power to public bodies and cooperatives.
- Section 5(b) obligates BPA to offer contracts to meet the firm power loads of public bodies, cooperatives, and IOUs net of existing resources and other resources as determined by the Administrator.



Net Requirements Obligation

Section 5(b)(1) Northwest Power Act

“Whenever requested, the Administrator shall offer to sell to each requesting public body and cooperative entitled to preference and priority under the Bonneville Project Act of 1937 and to each requesting investor-owned utility electric power to meet the firm power load of such public body, cooperative or investor-owned utility in the Region. . .”

Application of Customer Resources

- Section 5(b)(1) calls out two categories of non-federal resources that a customer is required to take to load.
- BPA must meet the customer's "firm power load . . . To the extent that such firm power load exceeds—
 - (5)(b)(1)(A): "the capability of such entity's peaking and energy resources used in the year prior to December 5, 1980, to serve its firm load in the region, and
 - (5)(b)(1)(B): "such other resources as such entity determines, pursuant to contracts under this chapter, will be used to serve its firm load in the region."
(example. A customer resource contracted for the period by the customer for the period of the contract).

Removal of Customer Resources

- 5(b)(1)(a) and (b) requires that customer resources must continue to be used to serve firm load unless they are permanently removed through one of the following:
 - 1) Administrator's consent,
 - 2) Discontinued because of obsolescence, retirement, loss of resource,
 - 3) Loss of contract right.
- For more information see BPA's 5(b)/9(c) policy on determining Net Requirements.

Acquisition of Resources

- Provided BPA with authority to acquire resources when needed to meet net requirements when they exceed Federal Base System resources.
- Includes special provisions for development of major resources over 50MW.



New Large Single Loads

- Section 7(b)(4) prohibits NLSL's from being served at the Priority Firm (PF) rate.
- A NLSL is defined as:
 - Any load associated with a new facility, and existing facility, or an expansion of an existing facility
 - Which is not contracted for, or committed to, as determined by the Administrator, by a public body, cooperative, investor-owned utility, or Federal agency customer prior to September 1, 1979, and
 - Which will result in an increase in power requirements of such customer of ten average megawatts or more in any consecutive twelve-month period.
- For more information see BPA's NLSL Policy.

Conclusion of Statutory Overview

- The purpose of this session was to identify key statutory provisions that serve as the foundation for BPA's power sales contracts.
- BPA is not providing legal advice.
- Customers are encouraged to seek independent counsel.





Background on Capacity

Lindsay Bleifuss and Emily Traetow

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Contents

- Introduction and Ex Parte reminder
- Statutes relevant to capacity conversation
- Load Following Capacity
- Slice/Block and Block Capacity
- Peak Net Requirements

Capacity Treatment

Today's Background session discusses capacity provided under Regional Dialogue's Load Following, Block and Slice/Block products. It will also start to outline some of the related issues, as we've heard from customers, to be explored in future discussions.



Ex Parte

BP-22 Rate Case is still in progress:

The ex parte rule provides that no party or participant in the proceeding shall conduct ex parte communications with the Administrator, or any BPA employee, regarding any matter pending before BPA in the BP-22 rate proceeding terms and conditions proceeding, and that neither the Administrator nor any BPA employee may request or entertain such communications.

Customer Concerns

- Slice/Block and Block customers capacity deficits (both winter and summer)
- Resource Adequacy Program capacity shortfall concerns under current Slice/Block and Block products
- Future capacity products that align with the regional Resource Adequacy Program requirements
- Future capacity products that facilitate the application of renewable resources
- Equity between products



Northwest Power Act 5(b)(1)

- Northwest Power Act 5(b)(1) - BPA is to sell electric power to meet the preference customers regional consumer load to the extent the load is not met by firm energy or peaking energy from the customer's own resources used for that load.
- The legislative history regarding section 5(b) indicates that BPA should separately identify and calculate the firm energy capability of a customer's resources applied to its load from the peaking energy capability applied to that load. *H. Rpt 96-976 96th Cong. 2d Sess. Part I.* Link: [Regional Dialogue Contract ROD](#)
- BPA's power sales contracts have traditionally focused on calculating the amount of firm energy that a customer would be entitled to purchase.



Load Following Capacity

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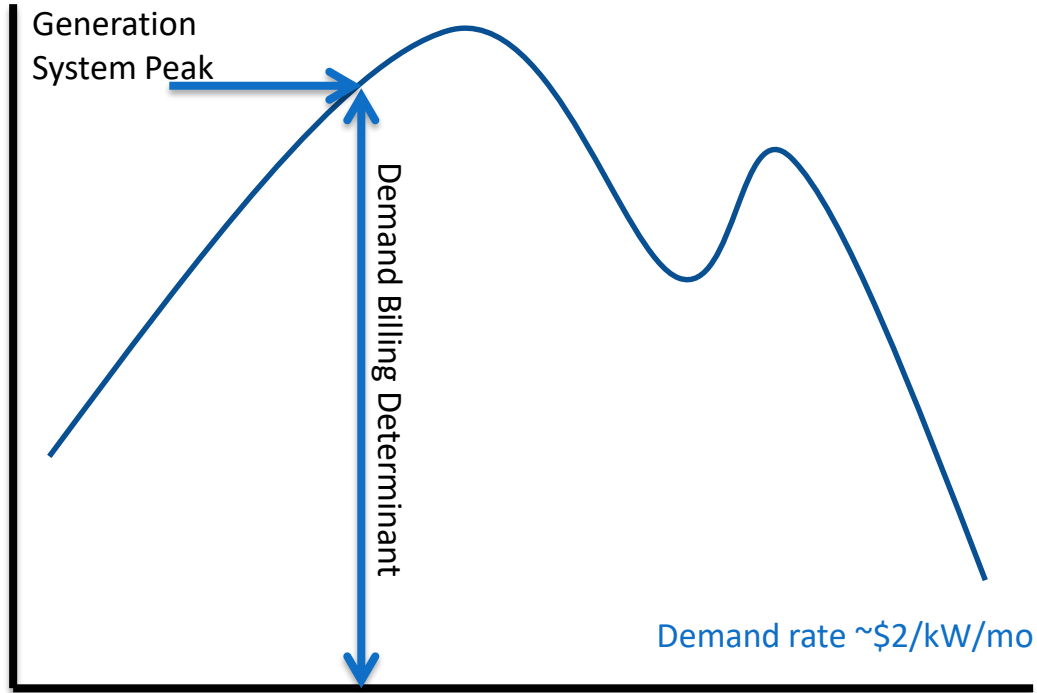


Load Following - Capacity

- By definition, a Load Following customer's Net Requirement is determined and served on an hourly basis. BPA serves the actual net requirement every hour including the hour of the customer's peak.
- A Load Following customer's Dedicated Resource amounts, if any, are applied to load at all times in accordance with the contract.
- The demand charge is applicable to customers purchasing the Load Following product and is designed to send a price signal to a limited portion of a customer's overall demand on BPA.

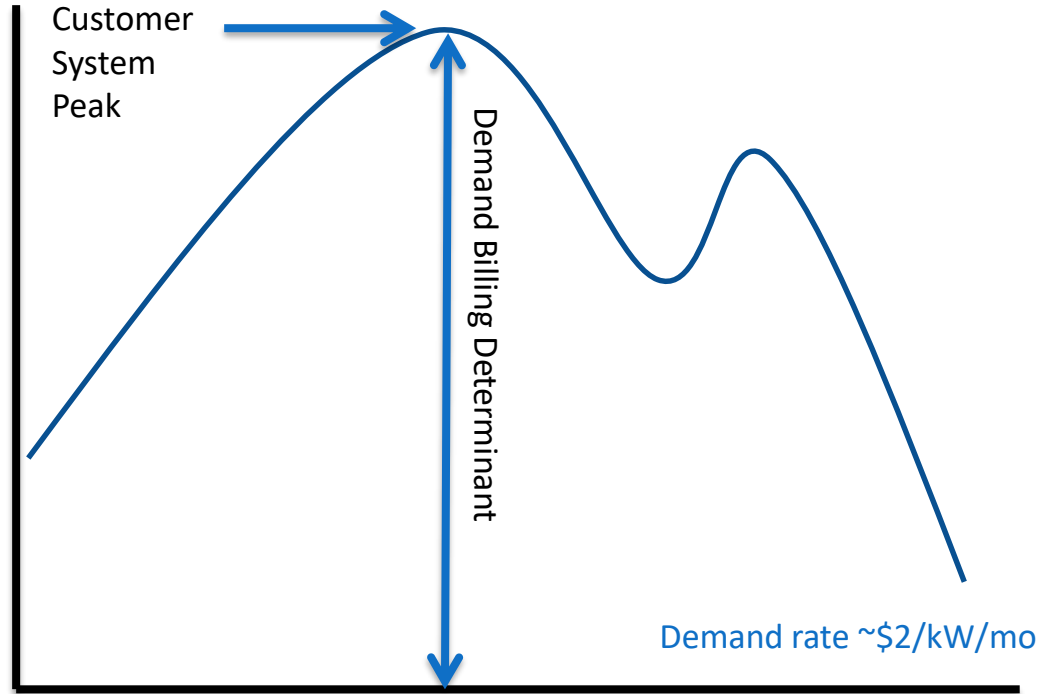


Demand before TRM



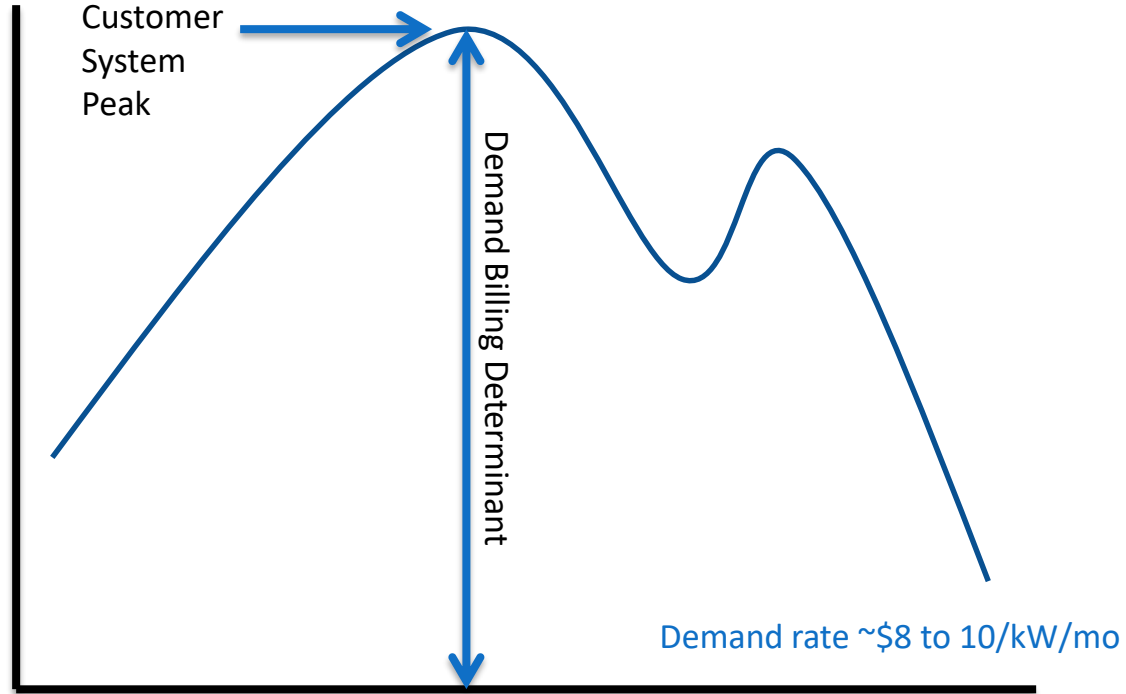
Demand TRM – Customer System Peak

Step 1: It's a price signal! Let's move to an hour that a customer can better predict and respond to.



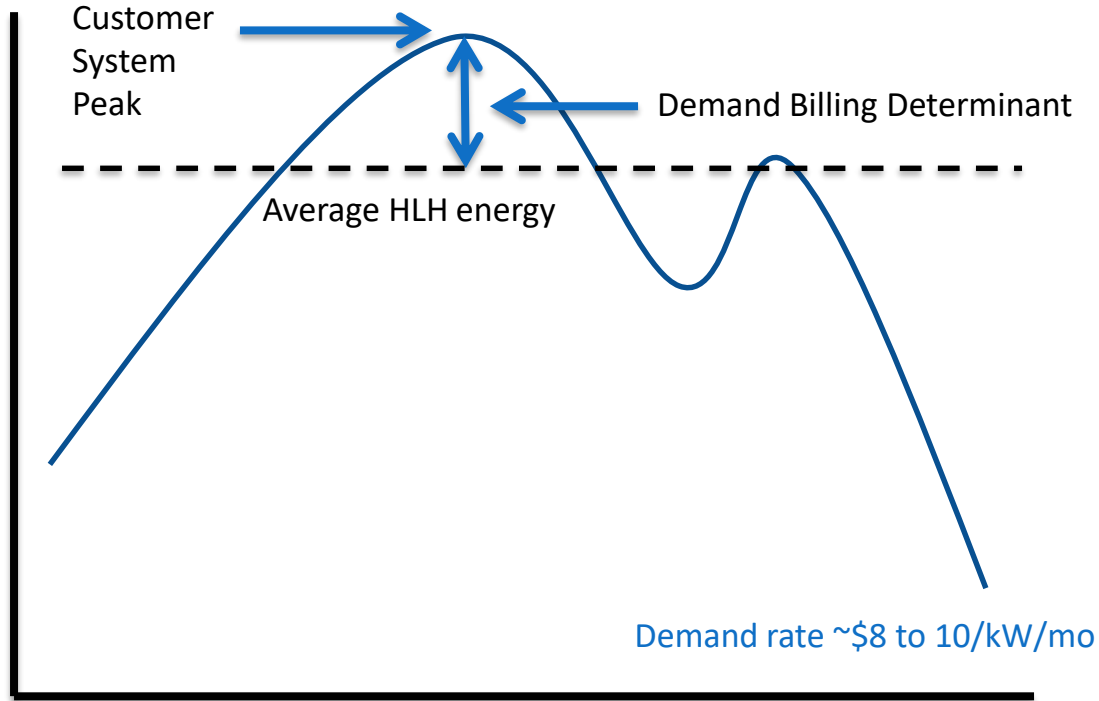
Demand TRM – Marginal Rate

Step 2: The TRM doesn't tier capacity. Let's set the demand rate at the marginal cost.



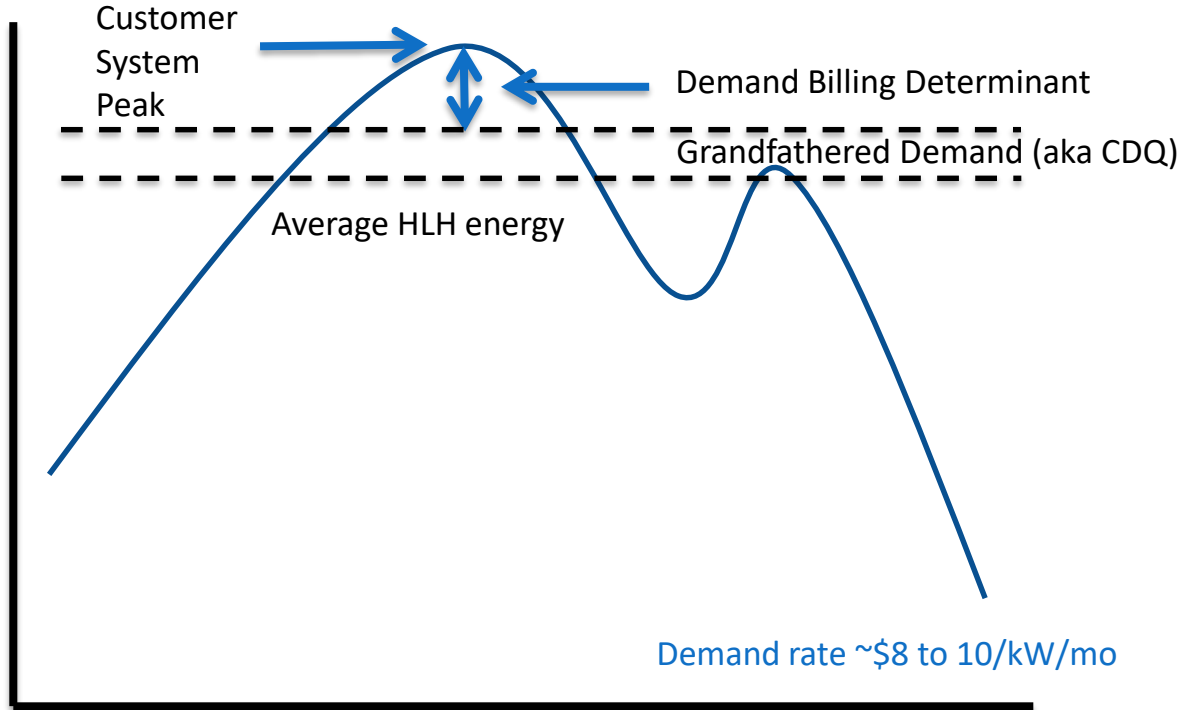
Demand TRM – HLH Load Factors

Step 3: Ack! That's bringing in way too much capacity revenue. Let's shrink the billing determinant.



Demand TRM – Grandfathered Demand

Step 4: Double ack!
 That's causing some serious rate impacts.
 Let's grandfather in some demand until the rate impacts settle down to plus or minus 5%. Grandfathering in all but 9% did it!



Contract Demand Quantity

Contract Demand Quantity (CDQ)

- Contract Demand Quantity (CDQ) is essentially grandfathered demand. It was calculated prior to power delivery under the Regional Dialogue contracts, in 2011.
- The CDQ is based on historical information (FY 2005-2007 HLH load factors and FY 2010 HLH loads).
- Customers were grandfathered approximately 91% of their historical demand to provide incentive to lower their peak by providing a marginal price signal on an incremental component of demand.
- Each customer has a CDQ for each month (12 values that are applicable for the entire length of the contract).

Load Following Demand Charges

- Using average monthly billing data from FY 2018 and FY 2019, the sum of all Load Following customers' demand billing determinants divided by the sum of all Load Following customers' Customer System Peaks was on average 9%.

All Load Following Customers	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
Demand Billing Determinant (MW)	229	167	444	274	541	785	421	352	422	441	650	512	437
Total CSP (MW)	4,266	4,806	5,411	5,182	5,914	5,384	4,496	4,205	4,288	4,561	4,635	4,207	4,780
Demand BD / CSP	5%	3%	8%	5%	9%	15%	9%	8%	10%	10%	14%	12%	9%

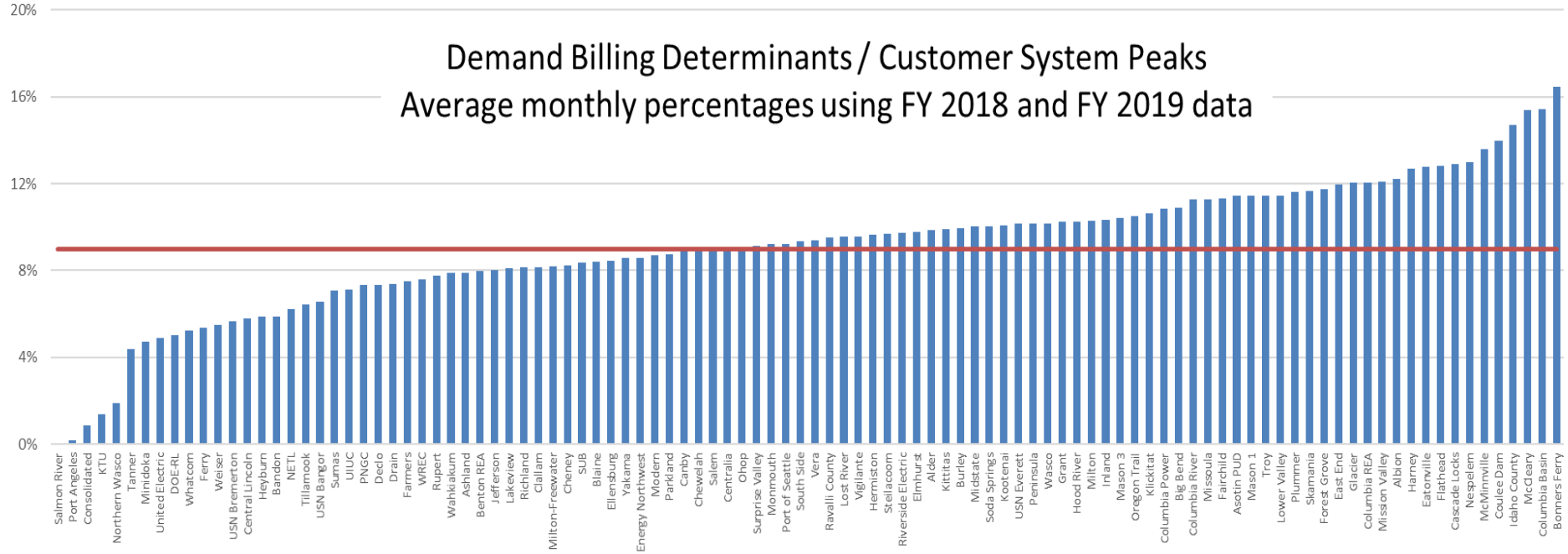
- Actual demand charges in FY 2018 and FY 2019 were on average \$51.3 million per year. Demand revenue is credited to the non-Slice cost pool.

All Load Following Customers	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Total
Demand Billing Determinant (MW)	229	167	444	274	541	785	421	352	422	441	650	512	
Demand Rate \$/kW/mo	10.45	10.65	11.83	11.45	11.15	9.28	7.68	6.49	6.92	9.63	10.98	10.91	
Average Demand Revenue (\$000s)	\$ 2,397	\$ 1,782	\$ 5,252	\$ 3,143	\$ 6,037	\$ 7,287	\$ 3,237	\$ 2,285	\$ 2,919	\$ 4,246	\$ 7,139	\$ 5,581	\$ 51,304



All Load Following Customers' %

Demand Billing Determinants / Customer System Peaks
Average monthly percentages using FY 2018 and FY 2019 data



Slice/Block and Block Capacity

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Slice/Block and Block - Capacity

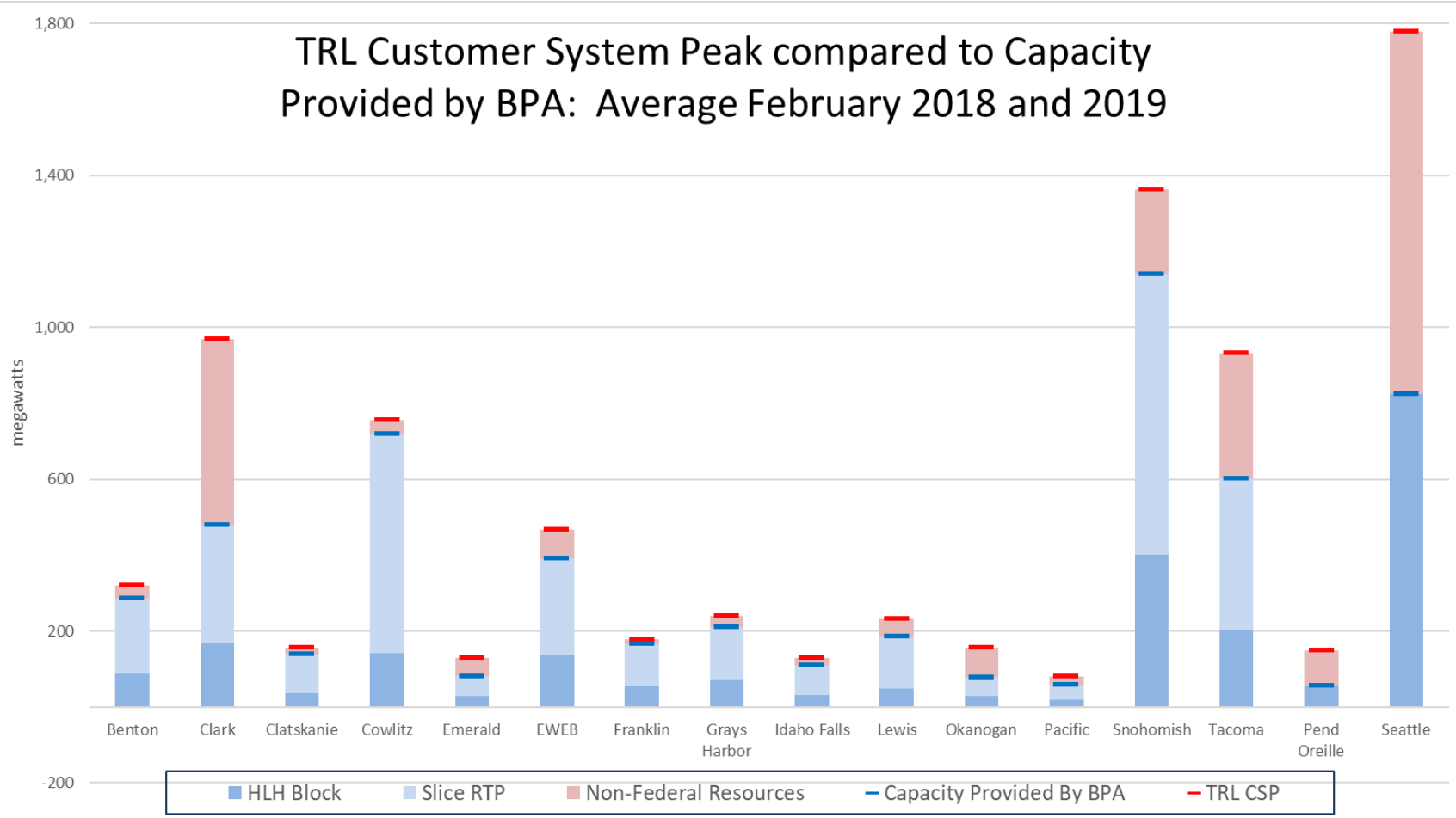
- Slice/Block and Block customers' Net Requirement is determined on a planned annual basis. BPA determines the annual amount of firm power the customer is entitled to through an annual calculation established in the Slice/Block and Block contract.
- The Slice/Block and Block products are not designed to meet a customer's hourly net requirement. The customer takes on the responsibility to acquire additional power to meet its loads if needed, or to sell surplus when the amounts provided by BPA exceed its load.

Capacity provided by BPA

- The charts on the following slides compare each Slice/Block and Block customer's peak load to the amount of capacity provided by BPA to that customer. All data is an average of monthly amounts from FY 2018 and FY 2019.
 - “TRL CSP” is measured Total Retail Load Customer System Peak in megawatts from the [Transparency Net Requirements Process](#)
 - “Slice RTP” is maximum hourly Slice Right to Power in megawatts from the Slice Computer Application
 - “HLH Block” is Tier 1 HLH Block amounts in average megawatts from bills
- Capacity provided by BPA is equal to:
 - If a Slice/Block customer, then Slice RTP plus HLH Block
 - If a Block customer, then HLH Block



TRL Customer System Peak compared to Capacity Provided by BPA: Average February 2018 and 2019



TRL CSP (MW) - HLH Block (aMW) - Slice RTP, if applicable (MW)												average FY2018 and FY2019	
Slice/Block	(a negative number means capacity provided by BPA is greater than the customer's peak load)												
Customer Name	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
Benton PUD	(6)	(4)	(19)	(41)	34	13	(50)	42	53	76	112	45	21
Clark PUD	300	313	405	319	488	435	271	167	352	377	436	320	349
Clatskanie PUD	25	22	17	8	19	10	6	(12)	(18)	(1)	2	6	7
Cowlitz	78	55	35	(21)	35	(4)	(62)	(113)	(116)	(33)	8	(10)	(12)
Emerald	41	40	48	36	50	40	31	16	19	26	34	22	33
EWEB	41	77	94	34	76	62	12	(31)	2	26	41	11	37
Franklin PUD	(0)	(7)	(10)	(25)	12	(6)	(23)	16	28	48	64	38	11
Grays Harbor PUD	11	11	11	(7)	29	10	(17)	(43)	(58)	(48)	(34)	(13)	(12)
Idaho Falls	10	12	16	15	17	11	(3)	(17)	(15)	14	17	10	7
Lewis PUD	14	18	29	2	46	19	(10)	(39)	(52)	(18)	(23)	(14)	(2)
Okanogan PUD	37	48	57	48	78	49	18	12	26	32	44	23	39
Pacific PUD	6	8	13	4	21	14	1	(10)	(17)	(16)	(13)	(1)	1
Snohomish PUD	96	63	133	40	224	86	(73)	(259)	(217)	(100)	(19)	(18)	(4)
Tacoma	244	267	282	217	331	225	121	11	54	116	168	141	181
TOTAL	896	922	1109	629	1460	964	222	(261)	41	499	836	561	657
Block													
Customer Name	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
Pend Oreille PUD	126	94	108	98	93	83	87	119	115	106	105	96	103
Seattle	819	798	804	704	954	805	1006	1088	1296	1002	982	567	902
TOTAL	944	893	912	803	1047	888	1093	1208	1410	1108	1087	663	1005

TRL CSP (MW) - HLH Block (aMW) - Slice RTP, if applicable (MW) - Dedicated Resources* (aMW)											average FY2018 and FY2019			
(a negative number means the sum of capacity provided by BPA and Dedicated Resources is greater than the customer's peak load)														
Slice/Block	Customer Name	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
	Benton PUD	(15)	(13)	(28)	(50)	26	4	(59)	32	43	67	103	36	12
	Clark PUD	60	72	164	78	247	195	30	54	130	151	210	79	122
	Clatskanie PUD	25	22	17	8	19	10	6	(12)	(18)	(1)	2	6	7
	Cowlitz	46	5	(18)	(74)	(16)	(52)	(107)	(152)	(157)	(67)	(23)	(42)	(55)
	Emerald	(1)	(3)	4	(8)	5	(2)	(14)	(26)	(24)	(18)	(11)	(21)	(10)
	EWEB	4	28	44	(13)	36	27	(31)	(104)	(59)	(7)	18	(19)	(6)
	Franklin PUD	(8)	(15)	(19)	(33)	3	(14)	(31)	7	19	39	56	30	3
	Grays Harbor PUD	10	10	10	(8)	28	9	(18)	(44)	(59)	(48)	(35)	(13)	(13)
	Idaho Falls	(4)	(6)	(12)	(12)	(8)	(9)	(18)	(23)	(20)	6	4	(6)	(9)
	Lewis PUD	13	18	28	0	45	18	(11)	(41)	(54)	(19)	(24)	(14)	(3)
	Okanogan PUD	10	18	22	18	53	28	(3)	(19)	(11)	(5)	7	(2)	10
	Pacific PUD	6	8	13	4	21	14	1	(10)	(17)	(16)	(13)	(1)	1
	Snohomish PUD	72	20	75	(7)	189	58	(99)	(286)	(239)	(120)	(39)	(38)	(35)
	Tacoma	15	48	72	(0)	135	82	(24)	(137)	(98)	(22)	4	(15)	5
	TOTAL	232	212	370	(96)	782	368	(378)	(760)	(562)	(60)	260	(19)	29
	Block													
	Customer Name	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Average
	Pend Oreille PUD	28	20	21	25	23	14	(17)	4	4	17	18	19	15
	Seattle	217	369	259	259	551	413	297	186	214	273	314	110	288
	TOTAL	244	389	280	284	574	427	280	190	219	290	331	129	303

* Dedicated Resources are average energy amounts from Exhibit A (flat within month), see Net Requirements Transparency Process

Peak Net Requirements

- Under Regional Dialogue, BPA recognized peak net requirements could become important in the future, to comply with section 5(b) of the Northwest Power Act and due to uncertainty of future demand, BPA included a peak net requirement provision in the Slice/Block and Block contract (Section 3.4 Peak Amount Methodologies).
- BPA did not calculate peak net requirements at the onset of the Regional Dialogue contract. At that time BPA forecasted sufficient peaking capability from the Federal Base System for the demands placed on it.
- BPA has no plans to implement peak net requirements during the term of the Regional Dialogue contract, but recognizes the need to address the issue under Provider of Choice due to capacity constraints and value going forward.
- As stated earlier, the Load Following product automatically meets the peak net requirements.



Capacity Topics for Next Meeting

- Resource adequacy customer concerns
 - Modifications to future products or new capacity products that align with the regional Resource Adequacy Program requirements
- Customer ideas and comments
 - Customers present ideas that address capacity concerns (work through PPC)
 - Address/discuss customer feedback submitted on this meeting



Next Steps

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Next Steps

- BPA seeking feedback regarding Capacity by July 6. Please provide feedback to post2028@bpa.gov (copy your Power AE), via discussions with your Power AE, or through your trade organizations as applicable.
 - The next discussion session on Capacity will be August 24.
 - Work through PPC to coordinate customer presentations for that session.
- The next PPC-hosted meeting will be July 13 featuring discussion on HWM and the Tier 1 System (full schedule on following slide)

Thank you for your time today and your ongoing engagement in post-2028 conversations.

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Schedule

	4-6 Weeks Between Background and Discussion (schedule subject to adjustment)
May 27, 10am-noon	HWM & Tier 1 System Background
June 8, 1-3pm	Non-Federal Resources Background
June 22, 1-3	BPA's Statutes, Capacity & Resource Adequacy Background
July 13, 1-3	HWM & Tier 1 System Discussion
July 27, 1-3	Non-Federal Resource Discussion
August 10, 1-3	Carbon Background, Term/Cost Control Background
August 24, 1-3	Capacity & Resource Adequacy Discussion
September 14, 1-3	Transfer & Transmission Background, EE Background
September 28, 1-3	Carbon Discussion
October 12, 1-3	Transfer & Transmission Discussion
October 26, 1-3	Term/Cost Control Discussion and revisit Interests
November 9, 1-3	EE Discussion
Mid-November	REP Background
December 14	
Mid-December	

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