Washington DSM Advisory Group Meeting April 28, 2022















Agenda

- 2020-2021 Biennial Conservation Report preview Nancy Goddard
- 2022-2023 DSM forecast Nancy
- System Benefits Charge (Schedule 191) review, condition 12d Nancy
- Conservation Potential Assessment, Non-Energy Impacts Peter Schaffer
 - Condition 11a
- Demand Response programs preview of upcoming filings Peter
- Procurement update Home Energy Reports / Business Energy Reports Barb Modey
- Updates
 - Follow-up from 2/28/2022 meeting Charity Spires
 - CETA: Equity Advisory Group, Clean Energy Implementation Plan Cory Scott
 - Clean Energy Implementation Plan utility actions Nancy
 - On-Bill Financing, Craft3 requested amendments Nancy
 - Upcoming drafts due to the DSM Advisory Group Nancy
 - DSM Advisory Group meetings for balance of 2022 Nancy

2020-2021 Biennial Conservation Report Preview















2020-2021 Biennial Conservation Report Preview

- Preview of Biennial Conservation Report
 - Short of target
 - Communicated COVID impacts and forecast showing shortfall at DSM Advisory Group meetings
 - Adaptively managed with incentive increases, vendor incentives and more
 - Used all available excess conservation from prior periods
 - Considered in compliance with target based on HB 1446
 - A qualifying utility is considered in compliance with its biennial acquisition target for cost-effective conservation in (b) of this subsection if events beyond the reasonable control of the utility that could not have been reasonably anticipated or ameliorated prevented it from meeting the conservation target. Events that a qualifying utility may demonstrate were beyond its reasonable control, that could not have reasonably been anticipated or ameliorated, and that prevented it from meeting the conservation target include: (i) Natural disasters resulting in the issuance of extended emergency declarations; (ii) the cancellation of significant conservation projects; and (iii) actions of a governmental authority that adversely affects the acquisition of cost-effective conservation by the qualifying utility.

2022-2023 DSM Forecast















April 2022 Forecast

	2022-2023 Biennial Target Savings and Budget Projections by Program									
	2022 PacifiCorp	Washington Conse	rvati	on Estimates	2023 PacifiCorp	Washington Conser	vatio	on Estimates	2022 + 2023	2022 + 2023
Program or Initiative	Gross kWh/Yr Savings @site	Gross kWh/Yr Savings @gen		Estimated expenditures	Gross kWh/Yr Savings @site	Gross kWh/Yr Savings @gen		Estimated Expenditures	Gross MWh Savings @site	Gross MWh Savings @gen
Low Income Weatherization (114)	169,130	182,112	\$	937,500	169,130	182,112	\$	1,043,750	338	36
Home Energy Savings (118)	5,370,349	5,782,578	\$	6,483,260	10,202,760	10,985,924	\$	9,687,465	15,573	16,769
Home Energy Reports (N/A)	4,099,519	4,414,198	\$	372,430	(169,081)	(182,060)	\$	383,545	3,930	4,23
Total Residential Programs	9,638,998	10,378,888	\$	7,793,190	10,202,809	10,985,976	\$	11,114,759	19,842	21,36
Wattsmart Business (140) - Commercial	19,902,736	21,415,742	\$	6,522,362	21,612,900	23,255,913	\$	6,593,203	41,516	44,67
Wattsmart Business (140) - Industrial	5,917,030	6,320,275	\$	1,939,081	12,896,890	13,775,813	\$	3,372,053	18,814	20,09
Wattsmart Business (140) - Irrigation	1,075,824	1,158,404	\$	352,560	868,229	934,874	\$	274,861	1,944	2,093
Total Business Programs	26,895,590	28,894,422	\$	8,814,003	35,378,019	37,966,600	\$	10,240,117	62,274	66,861
Northwest Energy Efficiency Alliance	3,078,115	3,313,583		862,100	3,695,655	3,977,193		862,100	6,774	7,29
Distribution Efficiency		82,000				83,000		-	-	165
Total Other Conservation Initiatives	3,078,115	3,395,583	\$	862,100	3,695,655	4,060,193	\$	862,100	6,774	7,450
Be wattsmart, Begin at Home			\$	64,523			\$	64,523		-
Customer outreach/communication			\$	250,000			\$	250,000		1
Program Evaluations (& savings verification)			\$	549,524			\$	259,662		-
Potential study update/analysis			\$	120,115			\$	15,368		ı
System Support			\$	166,735			\$	157,543		-
End use load research & RTF funding			\$	109,500			\$	65,500		
Total Portfolio-Level Expenses				1,260,397				812,596		-
Total PacifiCorp Conservation	36,534,588	39,355,310	\$	17,867,590	45,580,828	49,035,577	\$	22,167,473	82,115	88,391
Total System Benefit Charge Conservation	39,612,703	42,668,892		18,729,690	49,276,483	53,012,769	\$	23,029,573		95,682
Total Conservation	39,612,703	42,668,892	\$	18,729,690	49,276,483	53,012,769	\$	23,029,573		95,682
					EIA penalty th	nreshold (EIA target 1	ninu	s NEEA savings)	87,436	93,892
2022 Total PacifiCorp Conservation Forecast % of plan	7 5%	75%		81%	2022 + 2023 For	recast % of EIA p	e na	alty threshold	94%	94%
2022 Total Conservation Forecast % of plan				82%						

2022-2023 Forecast

- Values highlighted in green are updated
- Other values are from the Biennial Conservation Plan
- 2022 savings ~75% of plan
 - Up from February meeting, still very early look
 - Roll-up of implementer forecasts, best estimate for 2022
 - Target exceeds 2020-2021 performance
 - Supply chain issues, etc. continue
 - Increased incentives in place 1/1/2022, takes time for this show in forecast
- 2022 Pac \$ ~81% of plan

Condition 3d

• Providing the forecast at DSM Advisory Group meetings to meet this condition:

Docket UE-210830 Order 01			PacifiCorp must inform the Advisory Group members when its projected expenditures indicate that
Attachment A	3d	DSM Advisory Group	PacifiCorp will spend more than 120 percent or less than 80 percent of its annual conservation budget.















2021 Actuals (revenue is negative, account over-collected as of 12/2021)

	Monthly Conservation Costs	SBC Recovery	Cash Basis Accumulative Balance	Accrued Costs	Accrual Basis Accumulative Balance
January	789,852	(1,043,805)	(4,925,566)	(13,449)	(3,858,135)
February	321,717	(961,785)	(5,565,634)	(136,492)	(4,634,695)
March	1,022,703	(876,929)	(5,419,859)	(165,382)	(4,654,303)
April	629,520	(773,083)	(5,563,422)	406,495	(4,391,371)
May	874,996	(725,480)	(5,413,906)	(31,470)	(4,273,325)
June	1,411,633	(811,492)	(4,813,766)	(379,851)	(4,053,035)
July	616,859	(1,043,368)	(5,240,274)	132,736	(4,346,808)
August	1,225,441	(1,045,887)	(5,060,721)	(29,330)	(4,196,584)
September	1,229,731	(869,071)	(4,700,061)	120,131	(3,715,794)
October	219,831	(794,119)	(5,274,350)	299,330	(3,990,752)
November	1,511,645	(861,934)	(4,624,639)	(432,991)	(3,774,032)
December	1,249,849	(980,973)	(4,355,762)	189,620	(3,315,536)
2021 Totals	11,103,776	(10,787,926)		(40,653)	

2022 & 2023, Actuals + Forecast (revenue is negative)

With no change to current annual SBC collection rate

- 2022
 - Account forecast to be in balance as of 7/2022
 - Account forecast to be under-collected as of 12/2022

	Monthly Conservation	CDC Deserver	Cash Basis Accumulative	Accrued	Accrual Basis Accumulative	
	Costs	SBC Recovery	Balance	Costs	Balance	
January	1,218,611	(1,169,025)	(4,306,176)	(175,748)	(3,441,698)	
February	474,721	(1,018,030)	(4,849,485)	332,430	(3,652,577)	Actuals
March	1,725,081	(852,388)	(3,976,793)		(2,779,884)	Forecast
April	1,061,865	(751,449)	(3,666,376)		(2,469,467)	
May	1,475,930	(705,177)	(2,895,624)		(1,698,715)	
June	2,381,122	(788,783)	(1,303,285)		(106,376)	
July	1,040,509	(1,014,170)	(1,276,945)		(80,036)	
August	2,067,055	(1,016,619)	(226,508)		970,401	
September	2,074,292	(844,750)	1,003,033		2,199,942	
October	370,808	(771,896)	601,945		1,798,853	
November	2,549,821	(837,813)	2,313,952		3,510,861	
December	2,108,228	(953,521)	3,468,659		4,665,568	
2022 Totals	18,548,043	(10,723,622)		156,682		

• 2023

 Account forecast to be significantly under-collected by 12/2023

Monthly		Cash Basis		Accrual Basis
Conservation		Accumulative	Accrued	Accumulative
Costs	SBC Recovery	Balance	Costs	Balance
1,638,177	(1,014,594)	4,092,242		5,132,468
667,252	(934,870)	3,824,623		5,178,215
2,121,118	(852,388)	5,093,353		6,446,944
1,305,644	(751,449)	5,647,548		7,001,139
1,814,768	(705,177)	6,757,138		8,110,730
2,927,769	(788,783)	8,896,125		10,249,716
1,279,385	(1,014,170)	9,161,340		10,514,931
2,541,601	(1,016,619)	10,686,323		12,039,914
2,550,499	(844,750)	12,392,071		13,745,663
455,936	(771,896)	12,076,111		13,429,703
3,135,198	(837,813)	14,373,496		15,727,088
2,592,226	(953,521)	16,012,201		17,365,793
23,029,573	(10,486,031)		-	
	Conservation Costs 1,638,177 667,252 2,121,118 1,305,644 1,814,768 2,927,769 1,279,385 2,541,601 2,550,499 455,936 3,135,198 2,592,226	Conservation SBC Recovery 1,638,177 (1,014,594) 667,252 (934,870) 2,121,118 (852,388) 1,305,644 (751,449) 1,814,768 (705,177) 2,927,769 (788,783) 1,279,385 (1,014,170) 2,541,601 (1,016,619) 2,550,499 (844,750) 455,936 (771,896) 3,135,198 (837,813) 2,592,226 (953,521)	Conservation Costs SBC Recovery SBC Recovery Accumulative Balance 1,638,177 (1,014,594) 4,092,242 667,252 (934,870) 3,824,623 2,121,118 (852,388) 5,093,353 1,305,644 (751,449) 5,647,548 1,814,768 (705,177) 6,757,138 2,927,769 (788,783) 8,896,125 1,279,385 (1,014,170) 9,161,340 2,541,601 (1,016,619) 10,686,323 2,550,499 (844,750) 12,392,071 455,936 (771,896) 12,076,111 3,135,198 (837,813) 14,373,496 2,592,226 (953,521) 16,012,201	Conservation Costs SBC Recovery SBC Recovery Accumulative Balance Accrued Costs 1,638,177 667,252 (1,014,594) (934,870) 4,092,242 3,824,623 2,121,118 (852,388) 5,093,353 5,093,353 1,305,644 (751,449) 5,647,548 5,647,548 1,814,768 (705,177) 6,757,138 6,757,138 2,927,769 (788,783) 8,896,125 8,896,125 1,279,385 (1,014,170) 9,161,340 9,161,340 2,541,601 2,550,499 (844,750) 12,392,071 12,392,071 455,936 (771,896) 455,936 (771,896) 12,076,111 13,135,198 (837,813) 14,373,496 14,373,496 16,012,201

- Propose to increase System Benefits Charge (Schedule 191)
- 2022 forecast expenditures: \$18.7 million
 - Same as in forecast slide reviewed earlier
 - Best available info from implementers as of early April
 - \$ to achieve 82% of 2022 kWh savings in Business Plan
- Options for 2023 forecast expenditures:
 - \$23 million from 2022-2023 DSM Business Plan
 - \$ to achieve 100% of 2023 kWh savings in Business Plan
 - \$18.7 million, same as 2022 forecast
 - Not enough to achieve savings target
- Options for timing
 - Balance by 12/31/2023, balance by 7/31/2023

Options for 2023 DSM expenditure assumption	2023 DSM kpenditures	System Benefits Charge account projected to be in balance by	C				Increase	Overall % increase
2023 \$ from Business Plan	\$ 23,029,573	12/31/2023	\$	10,604,446	\$	22,690,000	\$ 12,085,554	3.1%
2023 \$ set = 2022 \$	\$ 18,729,690	7/31/2023	\$	10,604,446	\$	18,750,000	\$ 8,145,554	2.1%

2022 & 2023, Actuals + Forecast (*revenue is negative*)
With **proposed change** to annual SBC collection rate

• 2022

- Proposed increase takes effect 8/2022
- Account forecast to be close to in balance as of 12/2022

	Monthly		Cash Basis		Accrual Basis		Annual
	Conservation		Accumulative	Accrued	Accumulative		collection
	Costs	SBC Recovery	Balance	Costs	Balance		rate
January	1,218,611	(1,169,025)	(4,306,176)	(175,748)	(3,441,698)		
February	474,721	(1,018,030)	(4,849,485)	332,430	(3,652,577)	Actuals	
March	1,725,081	(852,388)	(3,976,793)		(2,779,884)	Forecast	\$10,486,031
April	1,061,865	(751,449)	(3,666,376)		(2,469,467)		\$10,486,031
May	1,475,930	(705,177)	(2,895,624)		(1,698,715)		\$10,486,031
June	2,381,122	(788,783)	(1,303,285)		(106,376)		\$10,486,031
July	1,040,509	(1,014,170)	(1,276,945)		(80,036)		\$10,486,031
August	2,067,055	(2,199,791)	(1,409,681)		(212,772)		\$22,690,000
September	2,074,292	(1,827,897)	(1,163,286)		33,623		\$22,690,000
October	370,808	(1,670,253)	(2,462,731)		(1,265,823)		\$22,690,000
November	2,549,821	(1,812,886)	(1,725,796)		(528,887)		\$22,690,000
December	2,108,228	(2,063,258)	(1,680,827)		(483,918)		\$22,690,000
2022 Totals	18,548,043	(15,873,108)		156,682			

• 2023

- Proposed collection rate increase in place all year
- Account is projected to be in balance as of 12/2023

	Monthly		Cash Basis		Accrual Basis	Annual
	Conservation Costs	SBC Recovery	Accumulative Balance	Accrued Costs	Accumulative Balance	collection rate
January	1,638,177	(2,195,411)	(2,238,061)	COSCS	(1,197,834)	\$22,690,000
February	667,252	(2,022,901)	(3,593,710)		(2,240,119)	\$22,690,000
March	2,121,118	(1,844,424)	(3,317,016)		(1,963,425)	\$22,690,000
April	1,305,644	(1,626,009)	(3,637,381)		(2,283,790)	\$22,690,000
May	1,814,768	(1,525,885)	(3,348,498)		(1,994,907)	\$22,690,000
June	2,927,769	(1,706,793)	(2,127,522)		(773,931)	\$22,690,000
July	1,279,385	(2,194,492)	(3,042,629)		(1,689,038)	\$22,690,000
August	2,541,601	(2,199,791)	(2,700,818)		(1,347,227)	\$22,690,000
September	2,550,499	(1,827,897)	(1,978,217)		(624,625)	\$22,690,000
October	455,936	(1,670,253)	(3,192,534)		(1,838,942)	\$22,690,000
November	3,135,198	(1,812,886)	(1,870,221)		(516,630)	\$22,690,000
December	2,592,226	(2,063,258)	(1,341,254)		12,337	\$22,690,000
2023 Totals	23,029,573	(22,690,000)				

- Draft filing to DSM Advisory Group by Monday, 5/2/2022
- Comments requested by 5/16/2022
- File by 6/1/2022
- Requested effective date of 8/1/2022
- Re-analyze no later than April 2023

Condition 12d

Docket UE-210830 Order 01 Attachment A		•	PacifiCorp must file revisions to its cost recovery tariff (Schedule 191) by June 1 each year, with requested effective date of August 1 of that same year. If PacifiCorp files its cost recovery tariff early, a Draft Annual Report with completed savings evaluations (see section 6(d)) must accompany the filing.
WAC 480-109-130			(2) A utility must make a conservation cost recovery filing no later than June 1st of each year, with a requested effective date at least sixty days after the filing.
WAC 480-109-130	2	recovery adjustment	(2) If the utility believes that a filing is unnecessary, then it must file a request for exception and supporting documents no later than May 1st of each year demonstrating why a rate change is not necessary.

POWERING YOUR GREATNESS

Conservation Potential Assessment and Non-Energy Impacts















Questions from DSM Advisory Group

Feedback on the draft measure list and CPA:

- 1. What is the difference between the exclusion and removal of a measure?
 - Removals are measures that were included in the 2021 CPA but removed for this study.
 - Exclusions are measures that were not included in the 2021 CPA, that were re-evaluated for the current CPA and after consideration were not included in the 2023 CPA.
- 2. It's great to see a cool/green roof measure referring to the Commercial Building Shell, vegetated roof I am curious to know if this was considered as an option for industrial and/or irrigation customers?
 - The savings associated with Cool / Green Roof measures are associated with HVAC end uses. These end uses represent a smaller amount of
 total consumption in the industrial sector and given the limited applicability and data on adoption of this measure for the industrial sector,
 AEG did not recommend assessing it in the industrial sector. Irrigation sector consumption is entirely associated with pumps, so the cool
 roof measure is not applicable to that sector.
- 3. Do you plan to share stakeholder feedback with the IRP and DSM Advisory Groups?
 - We plan to share feedback with the IRP and DSM Advisory Groups during public meetings.
- 4. Could you provide a bit more explanation of how the NWPCC 10% credit is applied?
 - We bundle our energy efficiency measures into levelized cost bins on a \$/MWh basis. The 10% credit is applied as a cost deduction to the overall levelized cost of a given energy efficiency measure bundle. For example, if the TRC cost of an energy efficiency measure is \$10/MWH and the energy efficiency credits are \$5/MWh, then the net cost of energy efficiency in the model becomes \$4.50 instead of \$5.
- 5. I noticed PAC has several existing commercial EV charger measures. Slide 26 describes a program where level 2 EV chargers are used as direct load control. As this is not a current offering, is this something you are evaluating potential for in this CPA? What is the timeline for a pilot offering for this program?
 - We are evaluating the potential of this program for demand response in the CPA. We do not have plans for an offering associated with an EV charger direct load control pilot/program at this time, instead the Company is encouraging EV customers to enroll in TOU rates to encourage off-peak charging.
- 6. Does the Residential HEMS measure include retrofitting water heaters with DR switches/controls? Something like this is mentioned in the emerging technologies tab but I wasn't sure if it was the same technology.
 - Yes, the HEMS measure does include retrofitting water heaters to enable control for demand response.

Conservation Potential Assessment – Milestones



Received feedback on draft measures list April 18, 2022.

IRP public input meeting (5/12) will share updates on baseline assumptions and key drivers of potential We will share Washington specific draft results in subsequent DSM AG meeting.

Timeframe	Milestone	Input Request
February 22, 2022	Share Work Plan	Provide input on scope
February 25, 2022	Present on Scope of Work	Additional input on scope
April 1, 2022	Share Draft EE & DR Measure List	Provide feedback on included measures
April 7, 2022	Present on Measure List	Ask questions and provide feedback by April 18.
April 22, 2022	Finalize Measure List	n/a – feedback incorporated
May 12, 2022	Share Key Drivers of Potential and Assumptions	Participate in meeting, provide input on key drivers
September 1/2, 2022	Present Draft Results and Share Measure Data	Review materials and provide feedback
October 13/14, 2022	Present Final Supply Curves	Review changes made due to feedback
November 2022	Draft CPA for Review	Provide input on draft report
January 2023	Publish Final Report	n/a – feedback incorporated

Condition 11a - Non-Energy Impacts Research

11) Equitable Distribution of Nonenergy Benefits

a) During this biennium, PacifiCorp must continue to demonstrate progress towards identifying, researching, and properly valuing nonenergy impacts. The nonenergy impacts considered must include the costs and risks of long-term and short-term public health benefits, environmental benefits, energy security, and other applicable nonenergy impacts. In consultation with the Company's conservation, equity, and resource planning advisory groups, nonenergy impacts and risks must be included in the next Biennial Conservation Plan and Conservation Potential Assessment.

Demand Response NEIs

As part of the 2021 CPA, PacifiCorp had AEG conduct a literature review on NEIs. While the review did not find any monetized NEIs, some sources did describe potential non-energy impacts, which were assigned to three categories: Societal, Utility, and Participant NEIs.

For the 2023 CPA, we have asked AEG to continue to search for and investigate if any additional literature is available that applies or monetizes NEIs for demand response.

We'd like feedback from the DSM advisory group on potential NEIs to monetize and apply to demand response for the 2023 CPA, particularly if the forthcoming literature review does not find any \$ values for application.

Demand Response NEIs

Societal Non-Energy Impacts	Utility Non-Energy Impacts	Participant Non-Energy Impacts
Employment above the job creation benefits of manufacturing a combustion turbine or constructing T&D upgrades	Improved customer relations	Satisfaction/pride from preventing outages and being "green"
Economic development (e.g., changes in gross domestic product)	Reduced marketing and administrative costs due to demand response customer participation in multiple distributed energy resource programs	Improved ability of integrated load management solutions to manage energy use (e.g., demand response -enabled thermostat)
Improved air quality (avoiding criteria pollutants above and beyond the level of existing environmental regulations)		Economic well-being (e.g., fewer bill-related calls, fewer power shut-offs/reconnects, reduced foreclosures)
Additional greenhouse gas (GHG) mitigation benefits (beyond avoided GHG cost embedded in the energy price and criteria pollutants included in the generation		Better public image for commercial enterprises
cost) Environmental justice improvements Biological impacts		
Land use, including impacts of energy infrastructure on local ecosystems (fewer power plants)		
Improved energy security/resilience (e.g., reduced dependence on imported fossil fuels)		

Energy Efficiency NEIs - Adjustments

Confidence Factors = DNV assigned a Confidence Factor (CF) to each study to reflect how well the study follows research best practices.

Plausibility Factors = DNV developed a Plausibility Factor (PF) for each study to further account for nuances in NEI research outside of the actual study methodology. The PF is also used in conjunction with the CF for discounting NEI values and for identifying best-fit values in the event of multiple measure-by-NEI matches.

Estimate economic adjustment factors = DNV used publicly available data to develop factors that adjust NEI's based on the economic activity of the original jurisdictions to PacifiCorp's service territory.

Equation: PacifiCorp Specific NEI $NEIValue_{Original\ Juristiction}*CF*PF*Economic\ Adjustment_{PacifiCorp}=NEI\ Value_{PacifiCorp}$

*Confidence and plausibility factors are used to account for the transferability of NEIs from one study and jurisdiction to another.

Energy Efficiency NEIs – Confidence Factors

Confidence factors were assigned to each study to reflect how well the study follows research best practices.

Asks 5 questions with scores of 1 through 3. Each question was weighted equally. The lowest possible score a study could receive was 50%.

- 1. Is the study measure specific?
- 2. Is the study segmented by sector?
- 3. Was the sample drawn using a statistical method?
- 4. Does the study incorporate identifiable economic factors?
- 5. Does the study consider and account for open ended questions? Additivity? Double Counting?

Study_ID	Q1	Q2	Q3	Q4	Q5	Weighted	CF
Study_ID	Score	Score	Score	Score	Score	Total Score	(Percent of Max)
Q Weight (0-1)	4	4	4	4	4	Max = 15	CF Max = 100%
Q Weight (0-1)			•	"		Min = 5	CF Min = 50%*
Study0001	3	3	3	3	3	15	100%
Study0002	2	3	3	3	3	14	93%

Energy Efficiency NEIs – Plausibility Factors

Plausibility factors were assigned to account for how well a study matches a particular measure today.

Three variables are considered with equal weights, the lowest possible score was 50%:

1. Level of matching (6 to 1) represents how specifically the measures in the study match to PacifiCorp's measures

Match Level	Match Level Description	Example	Score
Level 6 Match	Detailed Measure	Air Source Heat Pump	6
Level 5 Match	Broad Measure	Heat Pump	5
Level 4 Match	End-Use	HVAC	4
Level 3 Match	Prescriptive/Custom	Prescriptive	3
Level 2 Match	Program	Retrofit	2

2. Age of the study (4 to 1)

Age of Study	Score
Five years or less	4
Six to ten years	3
11-15 years	2
Greater than 15	1

- 3. Changes in energy consumption within an end-use category over time. Based on EIA end-use datasets over time (3 to
- 1) Propose leaving this portion of the plausibility factor calculation the same, given that it's more objective in its assessment.

Energy Efficiency NEIs – Example

1. Start with the unadjusted NEI from the original study. WA low-income NEB for reductions in debt write-offs.

NEI Value _{Original Juristiction} =
$$\frac{\$10,024}{339,561 \text{ kWh}} = \$0.03/\text{kWh}$$

2. Multiply the unadjusted NEI value by the CF and PF and convert to present day dollars. The CF for this study is 0.933, and the PF was a Level 5 match (broad measure), 5 year or less study, with a 1 for changes in consumption ((5+4+2)/13) = 0.846.

$$\frac{\$0.03}{kWh} * 0.933 * 0.846 = \frac{\$0.024}{kWh} = Adjusted NEI Value$$

3. Apply the economic adjustment factor. If there is more/less bad debt write offs relative to the jurisdiction in the study. Since this study took place in WA the value = 1 for the state adjustment. For the intrastate adjustment, DNV calculated a PacifiCorp utility cost of \$7,650 per customer. For all of Washington, this value is \$8,820.

 $Adjusted\ NEI\ Value*Economic\ Adjustment\ _{All\ Washington}*Economic\ Adjustment\ _{PacifiCorp}=NEI\ Value\ _{PacifiCorp}$

$$\frac{\$0.024}{kWh} * 1 * \frac{\$7,650}{\$8,820} = \frac{\$0.02}{kWh}$$

Energy Efficiency NEIs – Proposed approach

<u>Today</u>

- 1. Revisit assumptions and concepts.
 - a. Is 50% minimum threshold appropriate?
 - b. Are the questions reasonable?
 - c. Is a 1-point variation in score appropriate?
 - d. Should non-equal weighting be used for various questions?
 - e. Are match scores appropriate (2-6)?

Looking forward

- 1. Make changes to assumptions and concepts and assess differences.
- 2. Share impacts at the next DSM advisory group meeting.
- 3. If further refinement is warranted, prioritize high-value and high impact NEIs from the most recent biennial conservation plan and assess line item by line-item values.
- 4. Incorporate new NEI values into the 2023 CPA, by June/July.

Demand Response Preview















Irrigation Load Control

Draft Program Details: Irrigation Load Control		
Season	May 1 to Sept 15	
Eligible event hours	12 PM - 10 PM	
Maximum event duration	4 hours	
Maximum number of events per year	20	
Total event hours per season	52	
Event notification	Day ahead or hour ahead	
Customer incentives	\$18 - \$30 per kW reduction	
Incentive calculation	Payment is calculated at the end of the season based on average kW delivered during events.	

- Aim to file draft program in May. Program design is based on experience in other states and is similar to what was filed in Oregon and expected to be approved on May 5th.
- **Eligibility**: Customers receiving service for agricultural irrigation and agricultural soil drainage pumping.
- Marketing and outreach is expected to use existing business manager relationships with customers, emails, postal mailing, telephone, face-to-face meetings, and industry events.
- Incentive: Incentive per site is calculated at the end of the irrigation season and paid to each participant by either a check or bill credit. Incentives will be determined by multiplying the average load (kW) a customer can shut-off during the dispatch period by the incentive rate, adjusted for opt-outs.

Draft Demand Response Filing - Overview

Flexible tariff filing

- File demand response tariff that allows for demand response programs or pilots to be filed under one tariff sheet.
- <u>Adaptative and nimble</u> creates change process that is consistent with energy efficiency. No changes to the tariff are needed unless the program is cancelled, or a new program is added.
- Website displays program details for participation, rules, and if applicable any upcoming changes.

Stakeholder involvement

Stakeholder engagement regarding demand response has been ongoing, the Company has communicated its plans in the following meetings.

IRP public input meetings – The company has discussed planning for demand response in several IRP and CPA meetings since 2020.

- RFP outreach Included RFQ to bidders and WA non-bidder stakeholder meeting on 10/14/2020.
- Equity advisory group (EAG) Discussed during April 4th meeting and as part of CEIP agenda items.
- Farmer's conservation alliance (FCA) Met with FCA staff in February 2022 to discuss program design and coordination opportunities.

Cost effectiveness, reporting, cost recovery

- Place program costs in deferral account for recovery.
- Program is non-cost-effective in year one but is expected to improve over time. Program is cost-effective over 5-10 year time horizon.
- Pacific Power will conduct an evaluation and annual report on the program after a minimum of one full irrigation season (May Sept.)
- Intend to provide reporting of program accomplishments in CEIP updates, WA DSM advisory group, and EAG meetings.

Phase	Pacific Power	Commission Staff / WA DSM Advisory Group
Planning Comment Period	Prepare program change proposal Program definitions Program definitions Program definitions Program definitions Program details with marked changes Explanation for changes Cost effectiveness analysis (if changes impact cost effectiveness) Provide proposal, supporting documents and request comments Provide program change proposal Request comments from Commission staff and Washington DSM advisory group Define comment period	Review proposal, provide comments Request a meeting to discuss the proposal (if needed) Provide any questions Provide any comments
Resolve	Comment resolution	
comments	Incorporate comments as appropriate, prepare final program details and explanation for changes Provide response to comments to advisory group members or post on the website (If no comments or all comments have been resolved the Company will proceed with the proposed changes)	
Noticing Period	Post change notice on website Post change notice on website including final program details with marked changes and explanation for changes Communicate changes Changes effective 45 days from posting date	Receive final changes • Link to notice on the website • Final program details with changes marked and explanation for changes • Response to any comments • Effective date for changes

Program Change Process

Program change process for programs filed under the demand response tariff follows the procedures used for changes to energy efficiency programs in Washington.

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Procurement Update















Home Energy Reports Business Energy Reports

- The Company is considering extending the Home Energy Reports and Business Energy Reports contract as we work to:
 - Assure uninterrupted continuation of services provided to customers knowing any change to vendor would include a significant IT transition
 - Consider how Spanish and other equity related changes to the reports might be further needed and developed in the future
 - Continue the delivery of over 50K HERs, resulting in over 3.3kwh of savings in 2021
 - Stand up Business Energy Reports which we anticipate to launch September 2022 and continue monthly
 - Business Energy Reports only available through current vendor

Updates















Updates

- Follow-up from 2/28/2022 meeting Charity
 - Idea on community-based outreach (from Shawn Collins)
- CETA: Equity Advisory Group, Clean Energy Implementation Plan Cory
- Clean Energy Implementation Plan utility actions Nancy
- On-Bill financing, amendments requested by Craft3 Nancy
- Upcoming drafts due to the DSM Advisory Group Nancy
- DSM Advisory Group meetings for balance of 2022 Nancy

Clean Energy Transformation Act

Washington Equity Advisory Group Schedule and Updates















Equity Advisory Group Meetings	Topics (future meeting topics may be refined)	
January 19, 2022	 Clean Energy Implementation Plan (CEIP) updates Reflections of 2021 and ideas for 2022 	
February 16, 2022	 Energy efficiency programs (Wattsmart Business) Electric vehicle (EV) plan and transportation electrification grant program 	
March 16, 2022	 EAG member presentations Low-income bill assistance (LIBA) Transportation electrification grant program (continued) 	
April 13, 2022	 EAG member presentations (continued) Time of use (TOU) pilot Residential energy efficiency and agriculture demand response Transportation electrification grant program update 	
June 15, 2022	 Updates: TOU Pilot, Energy Efficiency (EE) Utility Actions, CEIP, DSM Advisory Group Energy Burden Assessment Non-Energy Impacts 	
July 13, 2022	 Updates: Transportation Electrification Grant Program Development, EE Utility Actions Wattsmart outreach and communications Utility Action Customer Benefit Indicators (CBI) 	
Sept 21 and Oct 19, 2022	TBD	
December 7, 2022	Reflections on 2022 and plan for 2023	

Clean Energy Implementation Plan

- PacifiCorp filed the CEIP with WUTC on December 30, 2021
- The CEIP is available at www.pacificorp.com/ceip
- WUTC published Notice of Opportunity to File Written Comments on January 7, 2022
 - Now in a 5-month comment period; Comments due by May 6, 2022
 - Submit written comments via Commission's web portal at http://www.utc.wa.gov/e-filing
 - Questions for PacifiCorp should be submitted to CEIP@PacifiCorp.com

Comments on Final

- Stakeholder opportunity to voice concerns to the Commission
- Comments due May 6, 2022

CEIP Approval Process

Open Meeting

- Commission discusses plan and comments, makes final decision or sets for hearing
- At least 30 days after comments due

Adjudication

- Only if there are significant unresolved issues
- Formal discovery, testimony, etc.
- Possible Brief Adjudicative Process

Commission Decision

 Approve, Reject, or Approve with Conditions

Updates – CEIP Utility Actions















Condition 9b – improved participation for Named Communities

b) PacifiCorp must consider how and whether existing conservation programs serve the highly impacted communities and vulnerable populations identified in its CEIP. In addition, PacifiCorp must adjust existing conservation programs or design new programs and offerings so that the portfolio of programs ensures an improvement in the equitable distribution of energy and nonenergy impacts to the same communities identified in its CEIP. See WAC 480-100-640(4).

CEIP Demand-side Utility Actions – Home Energy Savings

Copied from the Clean Energy Implementation Plan

Customer Benefit Indicator	Metric(s)
Participation in company energy and efficiency programs and billing assistance programs	 Number of households/businesses, including named communities, who participate in company energy/efficiency programs
Efficiency of housing stock and small businesses, including low-income housing	 Number of households and small businesses that participate in company energy/efficiency programs Energy efficiency expenditures

Copied from the Clean Energy Implementation Plan (Utility Actions), also in the 2022-2023 DSM Business Plan

Home Energy Savings:

- Enhanced incentives for windows in multi-family units on residential rate schedules.
 Initial focus on buildings in Highly Impacted Communities.
- Continue direct install residential lighting in multi-family units. Continue focus in Highly Impacted Communities.
- Maintain and expand if possible general purpose lamp buy down in "dollar stores" in Highly Impacted Communities. This will be the only retail lighting buy down offer.
- Continue manufactured home direct install duct sealing and lighting. Continue focus in Highly Impacted Communities.
- Continue promoting new construction offerings for multifamily and single family units.
 Continue focus in Highly Impacted Communities.
- Non-Electric, Non-Natural Gas Upgrades in Named Communities

Home Energy Savings CEIP Utility Actions Updates

Utility Action	Update
Continue direct install residential lighting in multi-family units. Continue focus in Highly Impacted Communities.	 473 LED bulbs installed across 5 complexes in Yakima since Sept. 2021 (about 200 units plus common areas) Effort is limited by UES values from RTF Not replacing CFLs, no RTF UES values for CFL baseline Not doing lamps in bedrooms, no RTF UES values for bedrooms Referring commercial lighting in common areas to Wattsmart Business Capturing info on the facilities for future weatherization upgrades Canvassing on the ground for smaller apartment complexes likely to have lower income or high % Hispanic community members
Maintain and expand if possible general-purpose lamp buy down in "dollar stores" in Highly Impacted Communities.	Program delivery contractor signing up "value retailers" serving customers in Highly Impacted Communities



- Yakima Habitat for Humanity store display
- Purchase price is 99 cents

https://wattsmartsavings.net/washingtonresidential/qualified-products-wa/wa-retail-lightingparticipating-retail-locations/

Participating "value retailers"

Store Name	Street Address	City
Dollar Tree Yakima (72nd)	140 5 72nd Ave	Yakima
Dollar Tree Yakima (Nob Hill)	703 W Nob Hill Blvd	Yakima
Dollar Tree Yakima (Fair Ave)	120 N Fair Ave	Yakima
Habitat For Humanity (Yakima, Mead Ave)	21 W Mead Ave Ste 104	Yakima
Habitat For Humanity (Yakima, 1st St)	2203 S 1st St	Yakima
Hometown Ace Hardware	3700 Tieton Dr	Yakima
Roy's Ace Hardware	405 W Yakima Ave	Yakima
C&H True Value Hardware	1403 Fruitvale Blvd	Yakima
Country Farm & Garden True Value	6 W Washington Ave	Yakima
Helms True Value Hardware	475 N Wenas Rd	Selah
Goodwill Selah	503 S 1st St	Selah
Goodwill Yakima	3710 Tieton Dr	Yakima
Roy's Ace Hardware	405 W Yakima Ave	Yakima
Helm's True Value Hardware	475 N Wenas Road	Selah
Dollar Tree Yakima (72nd)	140 S 72nd Ave	Yakima
Dollar Tree Yakima (Nob Hill)	703 W Nob Hill Blvd	Yakima
Dollar Tree Yakima (Fair Ave)	120 N Fair Ave	Yakima
Habitat For Humanity (Yakima, Mead Ave)	21 W Mead Ave Ste 104	Yakima
Habitat For Humanity (Yakima, 1st St)	2203 S 1st St	Yakima
Hometown Ace Hardware	3700 Tieton Dr	Yakima

Update on Workshops for Ag Workers

Customer Benefit Indicator	Metric(s)	Status Update
Community- focused efforts and investments	Workshop s on energy related programs	 Partnership with Fruit Packing Industries Use existing relationships with large business customers to engage in outreach to their employees 10-Minute Break Room Session Presentation provided by Spanish speaking outreach rep Handouts: Home Energy Savings program info Bill assistance info LED light bulb – this is new idea 11 businesses contacted 8 want in person presentations, some want multiple presentations 3 want handouts only First presentation was 4/25, 7 scheduled this week, as many as 100 attendees expected at some



Programa de Asistencia de Pago de Facturas para Hogares con Bajos Recursos (LIBA, por sus siglas en inglés)





Reduce your Pacific Power bills year-round. The Low Income Bill Assistance Program (LIBA) is available to income-eligible households and there are many benefits to participating:

- · Customers are estimated to see savings of approximately \$650 each year. LIBA credits are dependent on monthly electricity usage.
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Bill Assistance Handouts in English and Spanish

Handouts for Ag Worker Presentations



Home Energy Savings handouts in English and Spanish

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Updates — On-Bill Financing Drafts Coming soon Proposed meeting topics and dates















On-Bill Financing Update Craft3 requested amendment

Current	Amendment	Why
Financing is for cost of energy efficiency upgrades (net cost after Home Energy Savings incentives)	Expand financing to include cost of critical repairs tied to efficiency upgrades • Mold abatement • Asbestos removal • Leak repairs, including relevant wall and floor replacement • Roof repair/replacement • Rodent/pest removal and prevention • Electrical upgrades including panel replacement	Lack of financing for critical repairs can prevent participation • Barrier raised by Equity Advisory Group too
Financing is repaid on-bill	 Add option to pay Craft3 directly instead of on-bill repayment For existing loans and new loans 	 Customers are asking Some customers on Equal Pay want this option Some customers who want to pay more than the monthly repayment want this option

POWERING YOUR GREATNESS

On-Bill Financing Update Craft3 requested amendment

More additions that are **pending**:

Manufactured Home Energy Upgrade PILOT:

- Craft3 will modify property eligibility to include manufactured/mobile homes located in manufactured home communities
- Pilot size~ \$300K, then increasing if we can secure a loan loss reserve

PILOT Loans to Pacific Power customers who own homes on Tribal/Trust land:

- Craft3 to modify property eligibility to include homes on tribal or trust land.
- Pilot size: Assess after \$150,000 to determine demand.
- Collateral: Unsecured

Updates - Drafts to you by May 2, 2022

Filing	Draft to you	Comments requested by	Final due
System Benefits Charge adjustment Draft 2021 Annual Report	5/2/2022	5/16/2022	6/1/2022
 Draft 2020-2021 Biennial Conservation Report Appendix includes AEG's draft 2020-2021 Savings Verification Report (condition 6d) 			
Draft Irrigation Load Control program filing	Late May		

Proposed Meeting Topics and Dates

Tentative date	Potential Key Topics
#3, 6/23/2022 2-5pm	 NEI and CPA updates Adoption of air conditioning with low global warming potential refrigerants (condition 10b) Whether and how to research and evaluate opportunities for cool roof and tree planting conservation (condition 10c)
#4, 8/25/2022 9-noon? 1-4pm? 2-5pm?	 2023 Annual Conservation Plan, preview of planned program changes (condition 5b) CPA updates
#5, 12/1/2022 1-4pm? 2-5pm?	 2023 communications and outreach plan CPA results