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resources on its system this target is expected to trend upward until achieving GHG neutrality by 2030 and 100 percent renewable and non-emitting energy for Washington customers by 2045.

In 2020, the ratio of Washington retail sales served by renewable and non-emitting energy resources was 21.9 percent. Based on the 2021 IRP preferred portfolio, the interim target for this CEIP is 50 percent, to be achieved by 2025, increasing to 81 percent by 2030 and 94 percent by 2040, which is the last year of the 2021 IRP's 20-year planning horizon. Beyond 2040, the company will continue its trajectory to 100 percent clean energy for Washington customers by 2045.

Providing Benefits

Aligned with CETA objectives, Chapter 2 – Development of Customer Benefit Indicators, describes how PacifiCorp has worked in partnership with stakeholders and advisory groups to identify the highest priority benefits for customers, and to identify potential barriers and burdens that may prevent some customers from gaining those benefits.

These efforts have resulted in nine customer benefit indicators (CBIs) and associated weighting factors to evaluate the equitable distribution of these benefits, allowing the company to assess and monitor the impacts of each specific proposed program, action, and investment. The CBIs are attributable to and inform utility actions and tactics described in Chapter 3 – Specific Actions.

In addition, CETA requires that certain benefits target communities facing particularly challenging circumstances. These communities are referred to as highly impacted communities and vulnerable populations, which are collectively referred to as named communities.

Taking Action

PacifiCorp is taking action to meet CETA targets identified in Chapter 1 - Interim and Specific Targets. In this CEIP, specific actions to achieve targets in the years 2022 through 2025 are grouped into four key areas:

1. Supply-Side Resources
2. Energy Efficiency
3. Demand Response
4. Community Outreach and Engagement

In the longer term, company actions are forecast to be consistent with the 2021 IRP, and include the addition of renewable and non-emitting resources, retirement of renewable energy credits (RECs) associated with renewable generation, and the ongoing pursuit of both energy efficiency and demand response.

Assessing Costs

The incremental cost of the CETA-compliant resource portfolio was assessed in the company's 2021 IRP and refined for the CEIP covering the years 2022 through 2025, as defined in rule, resulting in an estimated modeled incremental ~~cost of approximately $2.3 millionbenefit~~ cost reduction of $2.66 million annually on a present-value revenue requirement (PVRR) basis~~.~~ In addition to the IRP-modeled resource portfolio costs, there are non-modeled costs including

increased energy efficiency implementation costs and Equity Advisory Group (EAG) and public engagement costs amounting to approximately $2.4 million annually. Together, costs in the years 2022-2025 amount to roughly a~~about~~ cost reduction of $0.23~~$4.7~~ million annually.

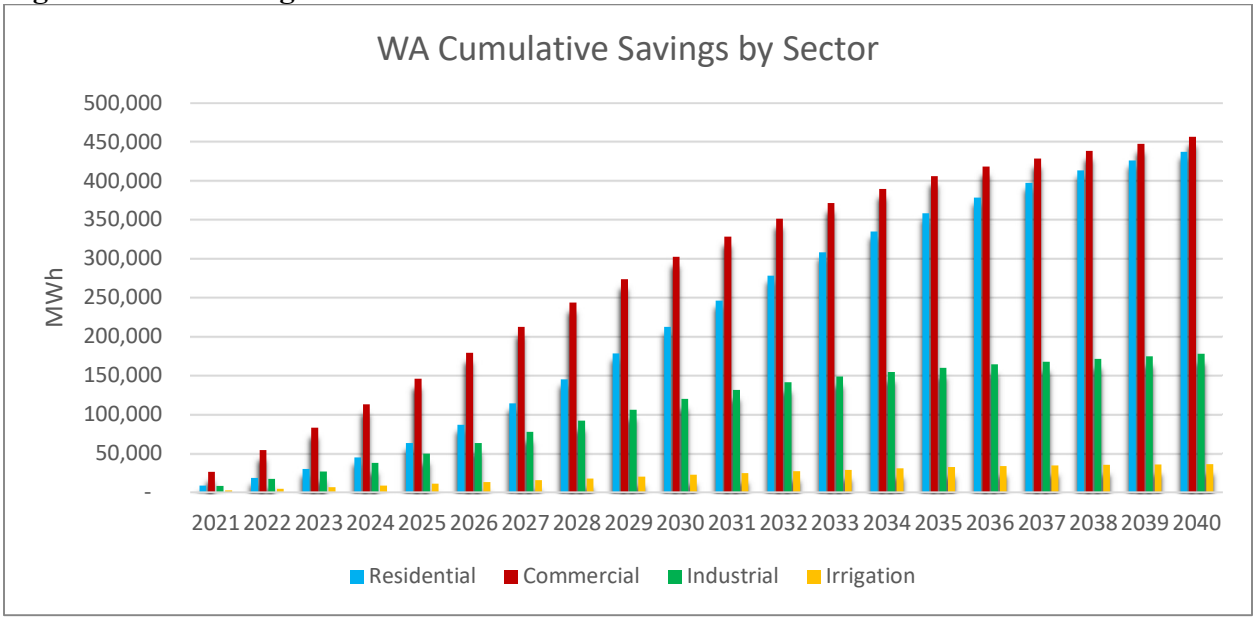
These values are calculated by comparing the system-wide CETA-compliant resource portfolio costs plus the additional non-modeled costs to the costs of a hypothetical future in which CETA legislation did not exist, using an alternative portfolio developed in the 2021 IRP. This exercise is indicative of, but separate~~,~~ from rate making.

Engaging the Public

PacifiCorp is grateful to participants in its advisory groups and the EAG, technical workshops and public meetings, each of which serves to illuminate equity challenges and public interest as well as ground the CEIP in the pressing concerns of Washington named communities. Their engagement was essential to the development of this CEIP. Input and comments that were received through the public participation process are outlined in Appendix A of this document. Appendix A also documents PacifiCorp's responses to these comments.

next 20 years. Several measures include quantified non energy impacts netted against measure cost. Examples include health benefits from avoided woodsmoke with installation of ductless heat pumps, operations and maintenance cost savings with new lighting, and water savings for measures which conserve water use as well as electricity use. For the past several IRP cycles, PacifiCorp has contracted with Applied Energy Group (AEG) to conduct this assessment. A comprehensive description of the study methodology, underlying assumptions, and results can be found on PacifiCorp's website.[25] Figure 1.6~~Figure 1.6~~ shows cumulative technical achievable potential results from the CPA for the Washington service territory.

Figure 1.6 – Washington CPA Technical Achievable Potential



The study results in over 3,000 individual efficiency measures which are then bundled into 27 groups for each of PacifiCorp's six states. The output from the CPA serves as an input to the PLEXOS model which selects the optimal mix of resources from the defined bundles to provide system adequacy in a least cost least risk manner. The conservation resources which are selected in the preferred portfolio become the cost-effective conservation potential, informing acquisition of energy efficiency.

Demand Response and Load Management Programs

Cost-effective demand response and load management resources are identified with resources from the CPA as well as the 2021 demand response RFP and are selected in a manner similar to conservation resources. The scope of the CPA includes identification of the technical potential for DLC demand response opportunities and for potential new pricing programs. The methodology and all underlying assumptions and results for CPA resources can also be found on PacifiCorp's website.

DLC resources are differentiated by customer, technology, and duration. Sustained duration resources are available for more than 20 minutes while short duration reflects load which can be

[25] Available online at https://www.pacificorp.com/energy/integrated-resource-plan/support.html

6. **Incorporate stakeholder input on CBIs:** PacifiCorp completed a comprehensive review of the July 30, 2021 Joint Comments on CBIs on behalf of The Energy Project, Front and Centered, NW Energy Coalition, and the Washington State Office of the Attorney General, Public Counsel Unit (Joint Advocates). PacifiCorp compared the Joint Advocate CBIs and metrics to those being considered by PacifiCorp. This mapping exercise resulted in refinements to several of PacifiCorp's CBIs and the adoption of additional metrics as reflected in Table 2.3 above. PacifiCorp's comparative analysis was transmitted to the Joint Advocates on October 25, 2021. PacifiCorp initiated and participated in a conference call with the Joint Advocates on November 19, 2021 to respond to comments from the Joint Advocates on the draft CBIs contained in the November 1, 2021 draft CEIP as well as PacifiCorp's mapping exercise. The Energy Project also completed a comparative analysis of the CBIs and metrics proposed by the Joint Advocates to those proposed by PacifiCorp. Copies of the CBI comparative analyses prepared by PacifiCorp and The Energy Project are found in Appendix B of the final CEIP.

   Additionally, PacifiCorp reviewed CEIP documents produced by other peer utilities in Washington: Avista and Puget Sound Energy. One update PacifiCorp adopted as a result was to change from a one-CBI-for-one-benefit category mapping, as shown in Table 2.5, to a one-to-many CBI benefit category mapping, as shown in the final version in Table 2.3. This means that each CBI can be associated with one *or more* benefit categories, which more comprehensively reflects the interweaving impacts that CBIs can have. As seen in Table 2.7~~Table 2.7~~, on average each benefit category is associated with more than two CBIs and leverages more than four metrics for measurement.[37]

Table 2.7 – CBI to Benefit Category Mapping

Benefit Category / Statutory Element	Customer Group to Which Benefit Category Flows	Number of Associated CBIs	Number of Associated Metrics
Reduction of Burdens	Named communities	4	9
Cost Reduction	All customers[1]	2	4
Environment	All customers	1	2
Resiliency	All customers	1	1
Non-Energy Benefits	Named communities	4	10
Energy Security	All customers	1	1
Public Health	All customers	2	5
Energy Benefits	Named communities	3	6
Average Number of CBIs per Category		**2.3**	**4.8**

[1] Note that benefit categories which flow to all customers also include customers in named communities.

Another update PacifiCorp adopted after reviewing peer utilities' draft CEIPs was to remove directionality from the move-forward CBIs and metrics, to allow tracking and measurement to be more objective and easier to interpret.

[37] The source data and table can be found in confidential workpaper "210829-PAC-WP-CBIWeights 12.31.21 (C).xlsx".

Table 2.12 – Headcount of Staff Supporting Program Delivery in Washington

	All Employees/Staff
Women	17
Minority	3
Can show disadvantage in some other way	1
Total	**21**

PacifiCorp will support the installation of public electric vehicle (EV) charging stations in the service area, with a focus on highly impacted communities. The installation of EV charging stations will promote fewer emissions from fossil fuel transportation alternatives.

Table 2.13 – Public Charging Stations in Washington Service Area[42]

	HIC	Total Service Territory
	Count	Count
Public Charging Stations	5	41

Source: US. Department of Energy, Alternative Fuels Data Center, https://afdc.energy.gov/fuels/electricity_locations.html#/analyze?fuel=ELEC. October 2021.

Participation in Company Energy and Efficiency Programs and Billing Assistance Programs
PacifiCorp has existing programs designed to lower customer energy costs and reduce energy burden, and they also provide energy and non-energy benefits (see Chapter 3, Demand-Side Actions). Through CETA and this CEIP, PacifiCorp commits to increasing funding or expanding programs to address issues raised by the EAG, such as the availability of repair funding under the Low-Income Weatherization Program.

The success of these programs relies on customer participation. PacifiCorp will track the number of participants and participation rates of these programs. Program participation rates and energy efficiency expenditures from 2020 are included in Table 2.14~~Table 2.14~~ and Table 2.15~~Table 2.15~~.[43] Where possible, these metrics are split out for customers in highly impacted communities.

[42] The source data can be found in workpaper "210829-PAC-WP-PublicChargingStations 12.31.21.xlsx".
[43] The source data can be found in workpaper "210829-PAC-WP-ProgramParticipationExpenditures 12.31.21 (C).xlsx".

Table 2.14 – Number of Households and Businesses Who Participate in Energy / Efficiency Programs & Energy Efficiency Expenditures, 2020

Energy / Efficiency Program	HIC		All Customers	
	Count[c]	Expenditures[d]	Count[c]	Expenditures[d]
Low-income Weatherization	11	$78,756	40	$295,907
Home Energy Savings[a]	103	$83,968	976	$855,941
Wattsmart Business[b]	61	$892,458	221	$2,485,993
Small Business Lighting	22	$105,182	43	$228,158
"Very small": <30,000 kWh annual usage	10	--	19	--
"Small": 30,000+ kWh annual usage	12	--	24	--

[a] Includes all installed measure categories except for energy kits and the lighting buy-down.
[b] The Wattsmart Business program listed includes midstream lighting (Lighting Instant Incentive).
[c] This number represents the count of unique participants at the site-level.
[d] Energy efficiency expenditures include the sum of customer and partner incentives.

Table 2.15 – Number of Households and Businesses Who Participate in Demand Response, Load Management, and Behavioral Programs, 2020

Program	HIC		All Customers	
	Count	Expenditures	Count	Expenditures
Behavioral (Home Energy Reports)[a]	14,652	n/a	53,102	n/a
Demand Response / Load Management[b]	0	$0	0	$0

[a] The Home Energy Reports program does not offer direct customer incentives.
[b] Note that as of 2020, PacifiCorp was not offering Demand Response or Load Management programs within Washington.

In Table 2.16~~Table 2.16~~, the percent of eligible household's represents the count of participating households divided by the count of households eligible for Low-Income Bill Assistance (LIBA) (i.e. those households who are at or below 200 percent of the federal poverty level or 80 percent of area median income), across all census tracts within PacifiCorp Washington service territory.[44]

Table 2.16 – Percentage of Households Who Participate in Low-Income Bill Assistance Programs, 2020

	HIC		All Customers	
	Count	Percent of Eligible	Count	Percent of Eligible
Total Active Participating Households	2,538	20.4%	5,954	20.2%

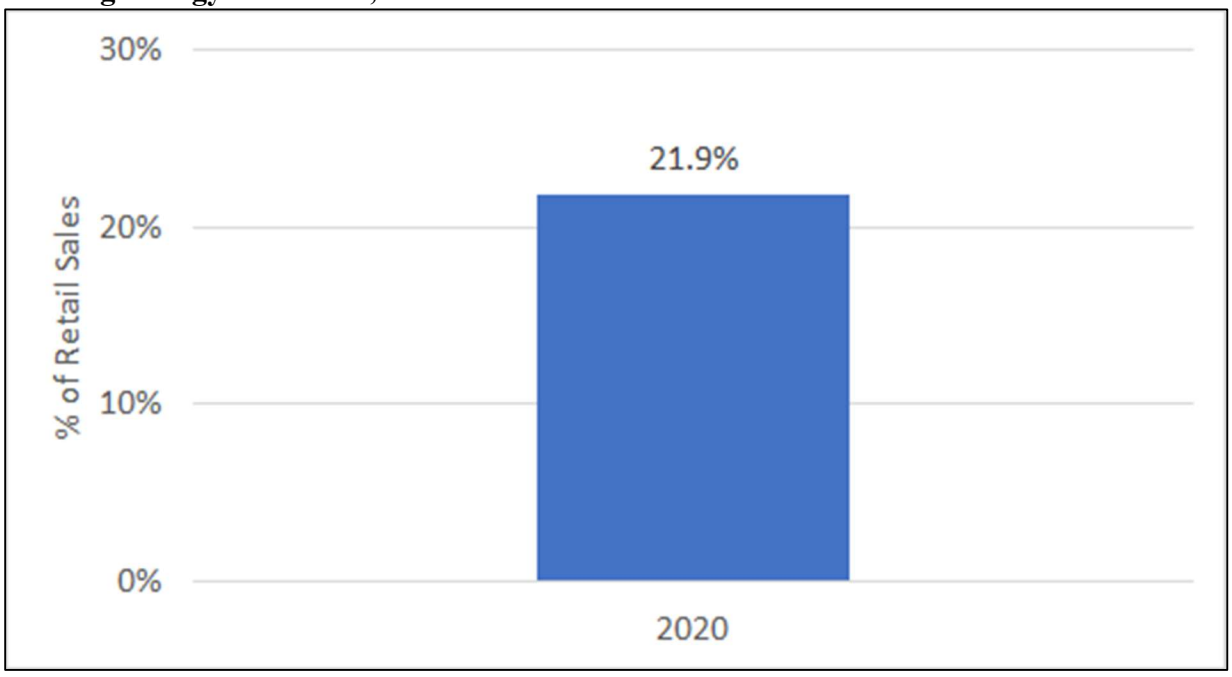
Table 2.17~~Table 2.17~~ shows the percent of customers within each vulnerable population who participated in an energy efficiency or bill assistance program in 2020, including Home Energy Savings, Low-Income Weatherization, Behavioral (Home Energy Reports), and LIBA.[45] Impacts vary by program type. Home Energy Savings and Low-Income Weatherization participation

[44] The source data can be found in workpaper "210829-PAC-WP-ProgramParticipationExpenditures 12.31.21 (C).xlsx".
[45] The source data can be found in workpaper "210829-PAC-WP-SurveyOutputs 12.31.21 (C).xlsx".

Efficiency of Housing Stock and Small Businesses, including Low-income Housing
Energy efficiency is an important non-emitting resource available to PacifiCorp, allowing customers to lower bills and gain non-energy benefits, such as a more comfortable home environment. In addition to increased participation rates, PacifiCorp will track expenditures on energy efficiency programs for qualified candidates in the programs listed in the "Participation in company energy and efficiency programs and billing assistance programs" CBI. See Table 2.14~~Table 2.14~~ and Table 2.15~~Table 2.15~~. above.

Renewable Energy Resources and Emissions
To achieve the renewable and non-emitting resource goals of CETA, PacifiCorp's IRP adds approximately 3,294 MW of renewable and energy storage resources to the existing system over the next four years. These supply-side energy resources meet customer demand and offset fossil fuel resources that currently power Washington's grid, leading to environmental benefits.

Figure 2.10 – Washington Percentage of Retail Sales served by Renewable and Non-emitting Energy Resources, 2020[46]



[46] The source data can be found in workpaper "210829-PAC-WP-RenewableResources 12.31.21 (C).xlsx".

Table 2.18 – Energy Burden for Washington Service Area, 2020

Population	Mean Energy Burden[a] (%)	Number of Customers Experiencing High Energy Burden	Percent of Customers Experiencing High Energy Burden
Highly Impacted Communities	5.0%	6,671	22.0%
Low Income Bill Assistance[b]	5.7%	1,676	28.1%
Low-income Weatherization[b]	7.8%	20	51.2%
All Customers	3.7%	14,750	13.2%

[a] Sources: PacifiCorp Residential Survey (2021) for self-reported 2020 household income; customer billing records from 2020.
[b] Implementation agencies for LIWx and LIBA provided PacifiCorp with a sample of participants' 2020 verified household income levels. PacifiCorp also used customer billing records from 2020.

In Table 2.19~~Table 2.19~~, the percent of customers within the vulnerable population experiencing high energy burden provided in the final column is expressed as the proportion of customers experiencing high energy burden within each respective vulnerable population.[52]

[52] The source data can be found in workpaper "210829-PAC-WP-SurveyOutputs 12.31.21 (C).xlsx".

communities. Baseline disconnection data has been provided for 2019, which is attributable to PacifiCorp's disconnection policy during 2020.[56]

Table 2.23 – Washington Residential Customers Experiencing a Disconnection, 2019

	Highly Impacted Communities		All Customers	
	Count	Percent	Count	Percent
Number of Residential Disconnections	663	2.2%	1,375	1.2%

Relationship between Specific Actions, CBIs and Metrics

This section provides additional detail regarding the relationship between specific actions, CBIs and the metrics the company will track to measure progress for the CEIP.

PacifiCorp understands CBIs to be the outcomes resulting from actions taken by the company to address customer challenges. As a result of the actions put forth in the CEIP, it is expected that improvements in the CBI metrics will be evident over time. In this inaugural CEIP, PacifiCorp is assembling its baseline of data that will continue to be refined, measured, and tracked over time. PacifiCorp will analyze this track record of data to determine future targets for improvement.

Per WAC 480-100-640, each utility must explain the association of each action with at least one CBI. PacifiCorp offers a detailed review of that relationship in Chapter 3 and in Appendix C. In summary, there are 42 individual actions across four action categories with a total of 65 CBI "tags" or "associations." On average, each CBI has seven CBI-action tags, meaning that there are on average seven actions designed to "move the needle" for every CBI.

As mentioned above, if a utility is required to offer a program or take an action by a different law, then that program or action is not identified in the CEIP as a utility action even if it is consistent with CETA. This is the case for actions associated with CBIs eight and nine; the actions support CETA objectives but are not included in the CEIP as a "utility action" because they are required by a different law.

Table 2.24~~Table 2.24~~ shows the count of action tags for each CBI across the four action types and overall.

Table 2.24 – CBI-to-Action Mapping

CBIs		Supply-Side Action Tags	Energy Efficiency Action Tags	Demand Response Action Tags	Community Outreach Action Tags	Total Action Tags
1	Culturally and linguistically responsive outreach and program communication	0	0	0	4	4
2	Community-focused efforts and investments	0	11	0	1	12

[56] The source data can be found in workpaper "210829-PAC-WP-Disconnects 12.31.21 (C).xlsx".

3	Participation in company energy and efficiency programs and billing assistance programs	0	11	5	0	16
4	Efficiency of housing stock and small businesses, including low-income housing	0	3	0	0	3
5	Renewable energy resources and emissions	21	0	0	0	21
6	Households experiencing high energy burden	0	8	0	0	8
7	Indoor air quality	0	1	0	0	1
8	Frequency and duration of energy outages	0	0	0	0	0
9	Residential customer disconnections	0	0	0	0	0

Table 2.25~~Table 2.25~~ shows the CBI-action mapping in a different summary view, aggregated by each of the four action types. The count of total CBI tags represents how many times the CBIs were associated with actions within the action type. The 11 actions within the Energy Efficiency action type had the most CBI tags, at 34.

Table 2.25 – CBI Impacts by Action Type

Action Type	Total Actions	Total CBI Tags
Supply-Side Resources	21	21
Energy Efficiency	11	34
Demand Response	5	5
Community Outreach	5	5
Total	42	65

While the first of these comparisons is the basis of PacifiCorp's official incremental cost calculation for the purposes of RCW 19.405.060(5) and WAC 480-100-660, the company is presenting the other two calculations because they may be valuable for some stakeholders.

The forecasted incremental costs in the compliance years 2022 through 2025 reflect both IRP derived incremental costs and non-modeled incremental costs. ~~The average annual costs based on current estimates~~Having strictly applied the outcome of the incremental cost calculation as laid out in rule, ~~is approximately negative~~there is an estimated cost reduction of $0.23~~4.7~~ million per year.[90] ~~An average $0.234.7 million decrease increase in revenue requirement would result in customer rate impacts of approximately XX1.4 percent on average.~~ An average $0.23 million decrease in revenue requirement would result in customer rates impact of approximately -0.07 percent and is well ~~This average annual forecasted costbenefit is well~~ below the annual threshold for alternative means of compliance per RCW 19.405.060(3). As such, the company will not seek alternative compliance under this provision for the four-year compliance window documented in this CEIP.

Portfolio Analysis

Chapter 1 described the 2021 IRP development process used to determine the CEIP Portfolio. In summary, to ensure the 2021 IRP and the Washington Clean Energy Action Plan included as an appendix to the 2021 IRP complied with WAC 480-100-660(1), PacifiCorp used the PLEXOS Long-Term (LT model), Medium-Term schedule (MT model) and Short-Term model (ST model) to optimally develop a range of least-cost least-risk portfolios under various policy and cost environments. The policy and cost environments include:

- Low, medium and high natural gas prices
- Zero, medium and high carbon dioxide prices
- An additional scenario including the SCGHG.

Evaluation of the resulting set of portfolios informed the selection of the 2021 IRP preferred portfolio: the top-performing portfolio over a range of metrics including expected cost, low-probability high-cost outcomes, reliability, and carbon dioxide emissions, which also demonstrates the ability to meet the requirements of RCW 19.405.040 19.405.050 in a least-cost least-risk manner.

The Alternative Portfolio

PacifiCorp's Alternative Portfolio is P02-SCGHG-MM, developed during the company's 2021 IRP.[91] This portfolio best represents the actions the company would have taken but for CETA,

MMGR-SC ST Split Run Cost Data LT 5230 ST 20633 12-31-21 (C).xlsx". Additional workpapers supporting these files are the fixed costs: "210829-PAC-WP-5230 - P02-MMGR Fixed Costs 12-31-21 (C).xlsx" and the system-wide risk adjustment: "210829-PAC-WP-MT Cost Summary -P02-MMGR-SC MT Split Run Cost Data LT 5230 MT 17644 12-31-21 (C).xlsx".

[90] Supporting workpaper: "210829-PAC-WP-Rev Req-12-31-21.xlsx" which links in the IRP modeled costs from the ST Cost Summary Compare file: "210829-PAC-WP-Cost Summary Compare P02-MMGR-CETA less P02-SCGHG-MM 12-31-21 (C).xlsx".

[91] Supporting workpapers for P02-SCGHG-MM include the LT portfolio summary: "210829-PAC-WP-LT 29923 21IRP 20yr P02-SC 12-31-21 (C) .xlsx" and the ST cost summary: "210829-PAC-WP-ST Cost Summary -P02-

Incremental costs for these two informational views are given in the discussion that follows.

Revenue Requirement Methodology

Costs Included for Consideration

Incremental costs included for consideration in this CEIP can be broadly considered in two categories – IRP modeled incremental costs, and non-IRP modeled incremental costs. IRP modelled incremental costs were identified through the comparison of changes in investment costs between the CEIP Portfolio and the Alternative Portfolio, described above. Per rule WAC 480-100-660(1), the only differences in investment decisions between the two portfolios described are a direct result of CETA requirements, determined to be met in a least-cost least-risk manner. The cumulative impacts of CETA compliance are described in Table 4.2~~Table 4.2~~.

Incremental investments and expenses were identified from the comparison of the two portfolios and summarized on an annual, nominal and levelized basis, for the compliance years in this CEIP. Table 4.2~~Table 4.2~~ summarizes the resource-driven incremental expenses identified by the comparison of relevant portfolios as described in the above section:[97]

Table 4.2~~2~~ - Annual Impacts of CETA 2022-2025

	Compliance Year			
($million)	**2022**	**2023**	**2024**	**2025**
Fuel Costs	(0.31)~~(0.31)~~	1.36 ~~1.36~~	(2.35)~~(2.35)~~	(2.20)~~(2.20)~~
Other Variable Costs	0.02 ~~0.02~~	(0.01)~~(0.01)~~	(0.17)~~(0.17)~~	(0.10)~~(0.10)~~
Energy Efficiency	- -	- -	- -	- -
Net Market Purchase	0.29 ~~(1.26)~~	0.02 ~~(2.83)~~	0.09 ~~(2.70)~~	(0.30)~~26.58~~
Emissions	- -	- -	- -	(0.36)~~(0.36)~~
Deficiency	(0.60)~~(0.60)~~	1.05 ~~1.05~~	0.30 ~~0.30~~	(0.08)~~(0.08)~~
Fixed Costs	(0.65)~~(0.65)~~	(2.21)~~(2.21)~~	(2.53)~~(2.53)~~	(1.88)~~(1.88)~~
Total	(1.24)~~**(2.79)**~~	0.20 ~~**(2.66)**~~	(4.66)~~**(7.45)**~~	(4.92)~~**21.95**~~

Energy efficiency selections are the same between the alternative lowest reasonable cost portfolio and the CEIP portfolio, and are not therefore an incremental resource difference. This occurs because the SCGHG dispatch adder is required to be applied to the lowest reasonable cost portfolio, and thus drives energy efficiency bundle selections in both portfolios, making it appear as if the application of this cost in portfolio development is not due to CETA.

[97] Table 4.2 and supporting data can be found on workbook tab "IRP Modelled Costs" in the file "210829-PAC-WP-Rev Req-12-3**1**-21.xlsx" which are derived from the ST Cost Summary files for P02-MM-CETA and P02-SCGHG-MM and can also be found in the compare file.

Table 4.44 - Estimated Annual Revenue Requirement

	Compliance Year			
$-Millions	**2022**	**2023**	**2024**	**2025**
Revenue Requirement				
Fixed Costs [1,2]	(0.65)	(2.21)	(2.53)	(1.88)
Variable Costs				
Fuel Costs	(0.31)	1.36	(2.35)	(2.20)
Variable O&M	0.02	(0.01)	(0.17)	(0.10)
Energy Efficiency	-	-	-	-
Net Market Purchase	(1.26)	(2.83)	(2.70)	26.58
Emissions	-	-	-	(0.36)
Deficiency	(0.60)	1.05	0.30	(0.08)
Total Variable Costs	(2.15)	(0.44)	(4.92)	23.83
Administrative & General				
DSM Program Costs	1.24	1.26	1.29	1.32
Outreach Costs	0.40	0.37	0.38	0.39
Materials	0.01	0.01	0.01	0.01
Staffing	0.56	0.57	0.59	0.60
Data Support	0.17	0.17	0.18	0.18
Total Revenue Requirement [3]	**(0.42)**	**(0.26)**	**(5.00)**	**24.45**
Average Revenue Requirement	**4.69**			

Notes:

1. Incremental fixed costs represent fixed cost variance between the CEIP porfolio (P02-MM-CETA) and Alternative Portfolio (P02-SCGHG-MM)

2. Fixed costs compared are reported in the respective portfolios at a nominal and levelized basis, which reflects both a return on and return of component

3. Estimated revenue requirement is calculated based on incremental costs derived by comparing IRP portfolios. Therefore, the cost estimates derived from this exercise are based on MSP allocation assumptions applied to IRP portfolio outcomes. Actual cost recovery will ulitmately be determined by the prevailng cost allocation methodology approved in Washington at the time recovery is sought.

The average annual incremental revenue requirement over the reporting period shows~~is~~ a net reduction of approximately ~~a benefit of~~ $0.234~~.7~~ million.[99] This average annual ~~incremental cost of $4.7benefi~~cost reduction~~t~~ of $0.23 million does not meet~~is less than~~ the average annual threshold amount for determining eligibility for reliance on RCW 19.405.060(3), as the next section of this document demonstrates. An average $0.234~~.7~~ million decrease~~increase~~ in revenue

[99] Table 4.4 can be found on workbook tab "Revenue Requirement" of file "210829-PAC-WP-Rev Req-12-31-21.xlsx".

requirement would result in customer rates impact of approximately ~~1.4XX~~ (0.07) percent. Calculations supporting this rate impact estimate can be found in the Revenue Requirements workpaper "210829-PAC-WP-Rev Req-12-30-21.xlsx".

Annual Threshold for Alternative Means of Compliance

Per WAC 480-100-660(2), a utility must calculate the average annual threshold amount for determining eligibility for reliance on RCW 19.405.050(3) as a means of compliance. RCW 19.405.505(3) states that an investor-owned utility must be considered to be in compliance with the standards under RCW 19.405.040(1) and 19.405.050(1), if over the four-year compliance period, the average annual incremental costs of meeting the standards exceed such annual threshold as defined under WAC 480-100-660(2). For a compliance period consisting of four years, the mathematical formula for the Annual Threshold Amount is as follows:

$$\text{Annual Threshold Amount} = \frac{(WASR_0 \times 2\% \times 4) + (WASR_1 \times 2\% \times 3) + (WASR_2 \times 2\% \times 2) + (WASR_3 \times 2\%)}{4}$$

Applying the company's forecasted weather-adjusted sales revenues for the applicable years to this compounding formula, the company's four-year cost threshold is $66.7 million. This translates to an Annual Threshold Amount of $16.7 million. Forecasted, weather-adjusted sales revenues were developed by applying approved rates ($/MWh) in Washington to weather-adjusted forecast sales (MWh) in Washington. Workpapers supporting forecasted Washington revenues used for the purpose of this annual threshold calculation can be found workpaper "210829-PAC-WP-Rev Req-12-31-21.xlsx".

Table 4.5 – Cost Thresholds

	($ million)	2021	2022	2023	2024	*Reference*
1	Forecasted WA Revenues	331,912	335,220	333,772	332,492	
2	2% of Revenues	6,638	6,704	6,675	6,650	*Line 1 x 2.0%*
3	Multiplier	4	3	2	1	
4	Threshold Amount	26,553	20,113	13,351	6,650	*Line 2 x Line 3*
5	Four-Year Threshold Amount	66,667				*Sum Line 4*
	Annual Threshold Amount	**16,667**				*Line 5 / 4*

Based on current forecasts, the estimated incremental costs identified for implementation of CETA from 2022 through 2025 are within the annual threshold amount. As such, the company will not rely on RCW 19.405.060(3) as a means of alternate compliance.

Revenue Requirement Comparison of Alternative Portfolios

Based on the incremental cost calculations from the additional portfolio analysis provided by the company for informational purposes, revenue requirement of the derived costs across all scenarios examined is compared in Table 4.6~~Table 4.6~~:

Table 4.6 - Revenue Requirement Comparison of All Incremental Cost Alternatives

	Portfolio Comparison		
	P02-SCGHG-MM vs. P02-MM-CETA	***(Informational)* P02-MM-CETA vs. P02-MM**	***(Informational)* P02-MM-CETA-SC vs. P02-MM-SC**
4-Year Average Annual Incremental Cost ($millions)	~~4.69~~ **(0.23)**	5.60	12.41
20-year System PVRR(d)	**($182)**	$164	$269

The methodology in calculating the revenue requirement impact of incremental costs in each scenario is the same. In each instance, non-IRP costs are held constant, but the IRP-modelled costs are substituted for each portfolio examined. Workpapers supporting the calculation of each alternative scenario analysis can be found in workpaper "210829-PAC-WP-Port Scenarios Costs-12-31-21.xlsx".[100]

[100] Additional supporting workpapers that include the source data for Table 4.6: "210829-PAC-WP-Cost Summary Compare P02-MM-CETA-SC less P02-MM-SC 12-31-21 (C).xlsx" and "210829-PAC-WP-Cost Summary Compare P02-MM-CETA less P02-MM 12-31-21 (C).xlsx".

Table 4.44 - Estimated Annual Revenue Requirement