FY 2022-2023

DRAFT
AVERAGE SYSTEM COST REPORT

PacifiCorp

December 2020

FY 2022-2023

DRAFT
AVERAGE SYSTEM COST REPORT

FOR

PacifiCorp

Docket Number: ASC-22-PA-01

PREPARED BY
BONNEVILLE POWER ADMINISTRATION
U.S. DEPARTMENT OF ENERGY

December 2020

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1 FILING DATA

Utility: **PacifiCorp**
825 NE Multnomah Street
Portland, Oregon 97232
http://www.pacificorp.com

Parties to the Filing:

Investor-Owned Utilities ("IOUs"):
Avista Corporation ("Avista")
Idaho Power Company ("Idaho Power")
Puget Sound Energy ("Puget")

Consumer-Owned Utilities ("COUs"):
Clark Public Utilities ("Clark")
Public Utility District No. 1 of Snohomish County ("Snohomish")

Average System Cost Base Period: Calendar Year ("CY") 2019

Effective Exchange Period: Fiscal Years 2022-2023, October 1, 2021 – September 30, 2023

Statement of Purpose:

Section 5(c) of the Pacific Northwest Electric Power Planning and Conservation Act ("Northwest Power Act" or "Act"), 16 U.S.C. § 839c(c), established the Residential Exchange Program ("REP"). Under the REP, any Pacific Northwest utility interested in participating in the REP may offer to sell power to Bonneville Power Administration ("BPA") at the average system cost of the utility's resources. In exchange, BPA offers to sell an "equivalent amount of electric power to such utility for resale to that utility's residential users within the region" at a rate established pursuant to sections 7(b)(l) and 7(b)(3) of the Act. 16 U.S.C. §§ 839e(b)(1), 839e(b)(3); H.R. Rep. No. 976, Pt. I, 96th Cong., 2d Sess. 60 (1980). The cost benefits established by the REP are passed through directly to the exchanging utilities' residential and farm consumers. 16 U.S.C. § 839c(c)(3). A utility participating in the REP will hereinafter be referred to as a "Utility" or "Exchanging Utility."

The Northwest Power Act grants to BPA's Administrator the authority to determine Utilities' average system cost(s) ("ASC") based on a methodology established in a public consultation proceeding. 16 U.S.C. § 839c(c)(7). The Act specifically requires the Administrator to exclude from ASC three categories of costs:

> (A) the cost of additional resources in an amount sufficient to serve any new large single load[1] of the Utility;
>
> (B) the cost of additional resources in an amount sufficient to meet any additional load outside the region occurring after the effective date of this Act; and
>
> (C) any costs of any generating facility which is terminated prior to initial commercial operation.

Id.

The Act limits eligibility for the REP to utilities and load located within the geographical area defined as the "Pacific Northwest" or "region." *See* 16 U.S.C. § 839a(14)(A)-(B). Specifically, "region" is defined as follows:

> the area consisting of the States of Oregon, Washington, and Idaho, the portion of the State of Montana west of the Continental Divide, and such portions of the States of Nevada, Utah, and Wyoming as are within the Columbia River drainage basin; and
>
> any contiguous areas, not in excess of seventy-five air miles from the area referred to in subparagraph (A), which are a part of the service area of a rural electric cooperative customer served by the Administrator on December 5, 1980, which has a distribution system from which it serves both within and without such region.

Id.

BPA has conducted an ASC review to determine PacifiCorp's ASC for fiscal years ("FY") 2022-2023 based on BPA's 2008 ASC Methodology ("2008 ASCM"). *See* 18 C.F.R. Part 301, *Sales of Electric Power to the Bonneville Power Administration, Revisions to Average System Cost Methodology*, 74 Fed. Reg. 47,052 (2009).

This Draft Average System Cost Report ("Draft ASC Report") describes BPA's ASC review process and evaluation used to implement the 2008 ASCM and the results of BPA's ASC Filing review.

For more information regarding the 2008 ASCM, please refer to the Federal Energy Regulatory Commission's (FERC) final ruling and the *2008 ASCM*, available at [Federal Energy Regulatory Commission's Final Ruling and the 2008 ASCM], and the *Average System Cost Methodology Final Record of Decision ("2008 ASCM ROD"),* June 30, 2008, available at [BPA's Residential Exchange Program] website.

[1] A new large single load (NLSL) is defined in section 3(13) of the Northwest Power Act, and determined by BPA as specified in power sales contracts with its Regional Power Sales customers. 16 U.S.C. § 839a(13). See section 2.6 of this report for more details.

General information regarding the ASC Review Process can be found at [BPA's Residential Exchange Program]() website.

NOTE: If a filing Utility or an intervener wishes to preserve any issue related to an ASC Filing for subsequent administrative or judicial appeal, it must raise such issue in its comments on the Draft ASC Report covering that ASC Filing. If a party fails to do so, the issue is waived for subsequent appeal. *See* Rules of Procedure for BPA's ASC Review Processes ("Rules of Procedure"), § 3.6.1.3.

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2 AVERAGE SYSTEM COST SUMMARY

2.1 PacifiCorp Background[2]

PacifiCorp, which includes PacifiCorp and its subsidiaries, serves approximately 1.8 million retail customers, including residential, commercial, industrial, and other customers in a 136,000-square-mile service territory in portions of the states of Utah, Oregon, Wyoming, Washington, Idaho, and California. PacifiCorp owns, or has interests in, a number of thermal, hydroelectric, wind-powered, and geothermal generating facilities, as well as electric transmission and distribution assets. PacifiCorp also buys and sells electricity on the wholesale market with public and private utilities, energy marketing companies, and incorporated municipalities. PacifiCorp is subject to state and Federal regulation. PacifiCorp's subsidiaries support its electric utility operations by providing coal-mining and environmental remediation services. PacifiCorp is an indirect subsidiary of MidAmerican Energy Holdings Company ("MEHC"), based in Des Moines, Iowa, that owns subsidiaries principally engaged in energy businesses. MEHC is a consolidated subsidiary of Berkshire Hathaway Inc.

PacifiCorp owns 16,300 miles of transmission lines and 62,930 miles of distribution lines. In 2019, PacifiCorp's 80 generating plants had nameplate generation capacity of approximately 11,874 megawatts ("MW"), and produced 51,749,332 megawatt hours ("MWh"). The focus of the report includes the generation and transmission for the states of Oregon, Washington, and Idaho only. Generation statistics for 2019 are shown in the table below.

PacifiCorp 2019 Total System Capacity and Energy[3]				
Type	**Capacity (MW)**	**Percent**	**Energy (MWh)**	**Percent**
Hydro	1,065	13.79	2,839,382	4.45%
Steam	6,620	85.70	38,283,488	59.96%
Other	40	0.52	10,626,462	16.64%
Purchases			12,097,791	18.95%
Total	**11,874**	**100**	**63,847,123**	**100**

PacifiCorp, 2019 FERC Form No. 1, December, 31, 2019.

2.2 Base Period ASC

The 2008 ASCM requires Utilities participating in the ASC Review Process, both IOUs and COUs, to submit to BPA Base Period financial and operational information. The Base Period is defined as the calendar year of the most recent FERC Form 1 data for IOUs, or the most recent

[2] Information stated in this section was sourced from PacifiCorp's website and FERC Form 1.
[2] Excludes net power exchanges.

audited financial statements (Annual Reports) for COUs. For purposes of the FY 2022-2023 filing period, the Base Period is CY 2019. Utilities submit Base Period data by individually populating an "Appendix 1," which is an Excel-based workbook used to calculate each Utility's Base Period ASC. Additionally, a Utility's ASC Filing consists of its Appendix 1, ASC Forecast Model (described in section 2.4 below), and supplemental information as required.
Table 2.2-1 summarizes PacifiCorp's CY 2019 Base Period ASC based on (1) the information contained in PacifiCorp's July 1, 2020[4] , ASC Filing ("As-Filed"), and (2) as adjusted by BPA Staff proceeding its review (including errata filed by PacifiCorp). This table does not reflect the Exchange Period ASC, which is noted in subsequent tables.

Table 2.2-1: CY 2019 Base Period ASC
(Results of Appendix 1 calculations)

	July 1, 2020 As-Filed	**December 7,2020 Draft ASC Report**
Production Cost	$1,444,935,151	$1,444,935,151
Transmission Cost	$283,484,444	$283,484,444
(Less) NLSL Costs	$0	$0
Contract System Cost ("CSC")	**$1,728,419,595**	**$1,728,419,595**
Total Retail Load (MWh)	20,718,729	20,718,729
(Less) NLSL	-	-
Total Retail Load (Net of NLSL)	20,718,729	20,718,729
Distribution Losses	801,001	774,066
Contract System Load ("CSL")	**21,519,730**	**21,492,795**
CY 2019 Base Period ASC (CSC/CSL)	**$80.32/MWh**	**$80.42/MWh**

2.3 FY 2022-2023 Distribution Loss Factor

The 2008 ASCM requires a Utility to include with its ASC Filing a current distribution loss analysis as described in Endnote e. *See* 18 C.F.R. § 301, End. e.

Losses are the distribution energy losses occurring between the transmission portion of the Utility's system and the meters measuring firm energy load. *Id*. The distribution loss can be measured using one of the three methods outlined in Endnote e of the 2008 ASCM: (1) a loss study, (2) revenue grade meter readings, or (3) calculating a five-year average total system loss factor using data from the FERC Form 1 or a comparable data source. *Id*.

In BPA's FY 2022-2023 Rate Case Proceedings (BP-22) Initial Proposal, BPA adjusted its Transmission Loss Factor from 1.9% to 2.03%. See the Transmission Rates Study BP

[4] BPA extended the filing date for Utilities to July in consideration of the affect the COVID-19 pandemic has had on workplace operations.

22-E-BPA-08 for more information. Accordingly, BPA Staff incorporated this change by adjusting PacifiCorp's As-Filed Appendix 1 Distribution Loss Factor calculations from 3.87 percent to 3.74 percent. For purposes of this Draft ASC Report, BPA used a Distribution Loss Factor of 3.74 percent.

2.4 FY 2022-2023 Exchange Period ASC

BPA and interveners had the opportunity to review, evaluate, and comment on each Utility's Appendix 1 historical costs and forecast loads submitted in the ASC Review Process. Once the Base Period ASC was determined, the cost data were escalated forward using the "ASC Forecast Model," an Excel-based macro model, to the midpoint of the Exchange Period, which in this instance is October 1, 2022. For purposes of the FY 2022-2023 ASC Review Period, the Exchange Period is October 1, 2021, to September 30, 2023 ("Exchange Period").

A Utility's As-Filed Exchange Period ASC may increase or decrease by the time of the Draft ASC Report because of adjustments made during the ASC Review Process, such as updates to BPA's natural gas and market price forecasts, errata corrections, or other changes made by BPA Staff. For all Utilities, BPA Staff updated natural gas and market price forecasts to match natural gas and market price forecasts in the BP-22 Initial Proposal. See the "Input" tab of the ASC Forecast Model for additional details. All other adjustments, if any, made during the review are explained in section 4 of this Draft ASC Report.

Table 2.4-1 identifies PacifiCorp's As-Filed and adjusted Exchange Period ASCs; the latter will be PacifiCorp's ASC for the entire Exchange Period. The 2008 ASCM permits a Utility's Exchange Period ASC to be adjusted if it (1) acquires or loses a major resource, as discussed in section 2.5, (2) gains or loses service territory, or (3) is subject to NLSL adjustments, as discussed in section 2.6.

Table 2.4-1: Exchange Period FY 2022-2023 ASC ($/MWh) With No Major Resource Additions or Removals

Date	July 1, 2020 As-Filed	January 14, 2019 Draft ASC Report
FY 2022-2023	$76.07	$77.47

2.5 ASC Major Resource Additions or Removals

Under the 2008 ASCM, a Utility's ASC may be adjusted to reflect the addition or loss of a major resource if such resource meets (1) the criteria outlined in Section 301.4(c)(3)of the 2008 ASCM, (2) the materiality requirements, and (3) commences commercial operation (or ceases production) at any point between the end of the Base Period and the end of the Exchange Period. Such new or existing resource must be used to meet a Utility's retail load during the Exchange Period.

Although the 2008 ASCM permits a Utility's ASC to be adjusted to reflect major resources that come on-line during the Exchange Period, as part of the 2012 Residential Exchange Program Settlement Agreement, BPA Contract No. 11PB-12322 ("2012 REP Settlement"), all six regional IOUs agreed to waive this right: "Each IOU waives . . . the right to include in its ASC . . . the cost of any major resource addition forecasted to occur during the Exchange Period as allowed by the ASC Methodology." 2012 REP Settlement, § 6.4. As a result of this waiver, the ASC reports do not include major resource additions that are scheduled to come on line during the Exchange Period for any IOU. [5]

A Utility must demonstrate that the proposed resource meets the materiality requirements set forth in the 2008 ASCM for a resource to be considered a major resource. Section 301.4(c) of the 2008 ASCM provides that only a resource that affects a Utility's Base Period ASC by two and one-half percent (2.5%) or more will be considered a major resource. 18 C.F.R. § 301.4(c)(4). This is the materiality threshold. The 2008 ASCM also allows Utilities to submit stacks of individual resources that, when combined, meet the materiality threshold. Id. However, each individual resource in the stack must affect the Utility's Base Period ASC of one-half percent (0.5%) or more. *Id. , see also* § 3.2.14 of this Draft ASC Report.

For Utility's with a major resource(s) projected to become commercially operational (or ceases production) after the Base Period but before the Exchange Period begins, BPA staff calculates different sets of ASCs; one without inclusion of the Utility's major resource(s), and another set reflecting the major resource(s). In order for the Utility's Exchange Period ASC to include major resource adjustments at the commencement of the Exchange Period the Utility must submit to BPA a Major Resource Attestation by no later than the tenth (10th) business day after the Exchange Period begins.

Table 2.5-1 summarizes the major resource additions, prior to any NLSL adjustments, that are projected to become commercially operational, and major resources that will cease to be commercially operational, prior to the beginning of the Exchange Period (January 1, 2020 − September 30, 2021).

PacifiCorp has no new major resources coming on line or being removed prior to the Exchange Period.

[5] The exchanging COUs did not make such a waiver and will be permitted to include major resource additions or removals during the Exchange Period under the rules of the 2008 ASCM.

Table 2.5-1: Major Resources Coming On Line or Being Removed *Prior to* the Exchange Period

As-Filed FY 2022-2023 Exchange Period ASC ($/MWh)				
Resource	**N/A**	**N/A**	**N/A**	**N/A**
Expected On Line or Removal Date				
Delta*				

Draft ASC Report FY 2022-2023 Exchange Period ASC ($/MWh)				
Resource	**Group 1**	**N/A**	**N/A**	**N/A**
Expected On Line or Removal Date				
Delta*				

* The Delta is the incremental change in the ASC as major resources come on line or are removed.

2.6 NLSL Adjustment

An NLSL is any load associated with a new facility, an existing facility, or an expansion of an existing facility that was not contracted for or committed to ("CF/CT") prior to September 1, 1979, and which will result in an increase in power requirements of ten average megawatts ("aMW") or more in a consecutive 12-month period. 16 U.S.C. § 839a(13)(A)-(B).

By law, NLSLs and associated resource costs in an amount sufficient to serve them are not included in Utilities' ASCs. *See* 16 U.S.C. § 839c(c)(7)(A). NLSLs are not determined in the ASC Review Process. Instead, NLSLs are identified through a separate process conducted by BPA's NLSL Staff, which is tasked with implementing BPA's NLSL policy. The ASC Review Process determines the cost of resources in an amount sufficient to serve the Utility's NLSL, in accordance with Endnote d of the 2008 ASCM and section 2.7 of this Draft ASC Report, and then excludes these costs from the Utility's ASC.

As of 2019, PacifiCorp has an NLSL on record. However, because the cost to serve PacifiCorp's NLSL is less than PacifiCorp's ASC, removing the NLSL (and its associated cost) would increase PacifiCorp's ASC. The 2008 ASCM does not allow an ASC to increase due to the addition or removal of an NLSL; as such, BPA will not remove the NLSL and associated costs in PacifiCorp's Exchange Period ASC. PacifiCorp has no other NLSLs currently under review.

Table 2.6-1: New Large Single Loads Under Review

As-Filed FY 2022-2023 NLSL Load Amount (MWh)	
NLSL(s)	**Load**
N/A	N/A

Draft ASC Report FY 2022-2023 NLSL Load Amount (MWh)	
NLSL(s)	**Load**
N/A	N/A

Table 2.6-2: New Large Single Loads that Begin Taking Power *Prior to* the Exchange Period

As-Filed FY 2022-2023 Exchange Period ASC (MWh)				
Customer	**N/A**	**N/A**	**N/A**	**N/A**
Expected Start Date				

Draft ASC Report FY 2022-2023 Exchange Period ASC (MWh)				
Customer	**N/A**	**N/A**	**N/A**	**N/A**
Expected Start Date				

Table 2.6-3: New Large Single Loads that Begin Taking Power *During* the Exchange Period

As-Filed FY 2022-2023 Exchange Period ASC (MWh)				
Customer	**N/A**	**N/A**	**N/A**	**N/A**
Expected Start Date				

Draft ASC Report FY 2022-2023 Exchange Period ASC (MWh)				
Customer	**N/A**	**N/A**	**N/A**	**N/A**
Expected Start Date				

2.7 NLSL Formula Rate

Beginning with the FY 2014–2015 Exchange Period, BPA and Utilities agreed to use a formula rate calculation to remove resource costs from a Utility's ASC when an NLSL occurs after the

Base Period. The reason was to alleviate additional administrative and calculation issues surrounding NLSLs taking power during an Exchange Period.

Base Period NLSLs will remain constant throughout the duration of the Exchange Period (*see* FY 2012-2013 Final ASC Report, section 5.2.2).

For purposes of this Draft ASC Report, no Utility identified potential new NLSLs taking power prior to or during the FY 2022-2023 Exchange Period. However, in the event a Utility learns it will begin to serve an NLSL during this period, even though the NLSL is not identified herein, BPA Staff will review and evaluate the NLSL and, as necessary, calculate a new ASC using the inputs and formula method as defined below:

$$ASC = \frac{\text{Contract System Cost} - (\text{Cost of Serving New NLSL} * \text{Actual New NLSL MWh})}{\text{Contract System Load MWh} - \text{Actual New NLSL MWh}}$$

Tables 2.7-1 and 2.7-2 show the inputs necessary to calculate a Utility's Exchange Period ASC using the above NLSL Formula Rate. The tables include the inputs Contract System Cost ($), Cost of Serving NLSL ($/MWh), and Contract System Load (MWh). A Utility's Contract System Cost and Cost of Serving NLSL will change with each new major resource addition.

Table 2.7-1: NLSL Formula Rate Inputs:
Contract System Cost and Cost of Serving NLSL

Inputs for both *Prior to* and *During* the Exchange Period			
	Timing of New Resource	**Contract System Cost ($)**	**Cost of Serving NLSL ($/MWh)**
None	No new resources coming on line	$1,728,419,595	N/A[6]
Prior to	N/A	N/A	N/A
During	N/A[7]	N/A	N/A

[6] During the Exchange Period, PacifiCorp's average cost to serve an NLSL ($57.47 MWh) would be less than its ASC ($77.47.MWh). Therefore, removing the costs of serving new NLSLs would raise PacifiCorp's ASC. The ASCM does not permit a Utility's ASC to increase as a result of excluding the cost of resources used to serve NLSLs. See 2008 Average System Cost Methodology, Final Record of Decision, at 93.

[7] Under the 2012 REP Settlement Agreement, IOUs no longer include major resource additions or removals during the Exchange Period. COUs will continue to include major resource additions or removals during the Exchange Period under the rules of the 2008 ASCM.

Table 2.7-2: Formula Rate Input: Contract System Load

FY 2022-2023 Contract System Load (MWh)
21,492,795

3 FILING REQUIREMENTS

3.1 ASC Review Process – FY 2022-2023

Utilities' ASCs are established in BPA's ASC Review Processes. The ASC Review Processes for FY 2022-2023 began on July 1, 2020, with the submittal of ASC Filings by the following eight Utilities: Avista, Clark PUD, Idaho Power, NorthWestern, PacifiCorp, Portland General, Puget, and Snohomish PUD. An "ASC Filing" consists of two Excel-based models developed by BPA (the Appendix 1 workbook and the ASC Forecast Model), which are populated with supporting data and documentation provided by the Utility.

Notice of the ASC Review Processes was provided on BPA's REP public website, BPA's REP Secure website and via email. The Utilities posted ASC Filings on BPA's REP Secure website by the July 1, 2020, filing deadline. BPA released the FY 2022-2023 ASC Forecast Model in mid-June, 2020; the model included updated data to be consistent with the BP-22 Initial Proposal (see section 3.4). Each Utility was then required to run the Forecast Model with its associated As-Filed Appendix 1 to develop its As Filed Exchange Period ASC; the Forecast Model was then uploaded to the REP Secure website. PacifiCorp posted its ASC Forecast Model on July 1, 2020.

Parties interested in reviewing a Utility's ASC had the opportunity to request access to the Utility's ASC Filing by contacting BPA. Parties wishing to formally intervene in a Utility's ASC proceeding could file an intervention by the date identified in BPA's ASC Review Process schedule. Interveners were afforded the opportunity to request data, submit comments, and raise issues with the Utilities' ASCs throughout a three month period; the filing Utilities, in turn, were afforded the opportunity to respond to requests for data, raise and respond to issues, and answer any questions relative to the ASC Filings. BPA engaged in the discovery process through the entire period leading up to the publication of the Draft ASC Reports.

This Draft ASC Report reflects BPA Staff's findings following its initial review of PacifiCorp's ASC Filing and addresses, preliminarily, the issues and questions raised by the Utility, interveners, and/or BPA Staff during the first phase of the ASC Review Process. BPA's final decisions and determinations, including supporting justification, will be published in the Final ASC Report in July, 2021 for each participating Utility.

For details of the ASC Review Period and guidelines, please see the Rules of Procedure available at BPA's Residential Exchange Program website.

For details of the ASC Review Period and guidelines, please see the Rules of Procedure available

3.2 Explanation of Appendix 1 Schedules

The Appendix 1 consists of a series of seven schedules and other supporting information that present the data necessary to calculate a Utility's ASC. The schedules and supporting data include the following:

1. Schedule 1 – Plant Investment/Rate Base ("Rate Base")
2. Schedule 1A – Cash Working Capital Calculation ("Cash Working Capital")
3. Schedule 2 – Capital Structure and Rate of Return ("Rate of Return")
4. Schedule 3 – Expenses
5. Schedule 3A – Taxes
6. Schedule 3B – Other Included Items ("Other Items")
7. Schedule 4 – Average System Cost
8. Purchased Power and Sales for Resale ("3-Year PP & OSS Worksheet")
9. Load Forecast
10. Distribution Loss Calculation ("Distribution Loss Calc")
11. Distribution of Salaries and Wages ("Salaries")
12. Ratios
13. New Resources – Individual and Grouped
14. Materiality – Individual and Grouped
15. New Large Single Loads ("NLSL Base New-Calc")
16. Tiered Rates
17. Above-RHWM Base Calculation

3.2.1 Schedule 1 – Plant Investment/Rate Base

Schedule 1 of the Appendix 1 establishes the Utility's Rate Base, which is the value of property on which the Utility is permitted to earn a specific rate of return (calculated in Schedule 2), in accordance with rules set by the state's Public Utility Commission or other regulatory agency. The Rate Base computation begins with a determination of the Gross Electric Plant-In-Service's historical costs for Intangible, General, Production, Transmission, and Distribution Plant.

For Exchanging Utilities that provide electric, natural gas, and water services, only the portion of common plant allocated to electric service is included. These values (and all subsequent values) are entered into the Appendix 1 as line items based on FERC's Uniform System of Accounts. Each line item ("Account") is functionalized to Production, Transmission, and/or Distribution/Other in accordance with the functionalizations prescribed in Table 1 of the 2008 ASCM.

The Net Electric Plant-In-Service is determined next by entering and functionalizing depreciation and amortization reserves in the Appendix 1 and adjusting the above-calculated Gross Electric Plant-In-Service for the depreciation and amortization reserves.

Total Rate Base is then determined by adjusting Net Electric Plant for Cash Working Capital (calculated in Schedule 1A), Utility Plant, Property and Investments, Current and Accrued Assets, Deferred Debits, Current and Accrued Liabilities, and Deferred Credits.

3.2.2 Schedule 1A – Cash Working Capital

Cash working capital is an estimate of investor-supplied cash used to finance operating costs during the time lag before revenues are collected. This approach (cash) ignores the lag in recovery of non-cash costs of service (depreciation), deferred taxes, and other items. The Cash Working Capital concept is widely used by State Commissions and is the basic premise of the Commissions' proposed working capital formula. The purpose of working capital is to compensate a Utility for funds used in day-to-day operations.[8]

Cash Working Capital is a ratemaking convention that is not included in FERC's Uniform System of Accounts, but is part of all electric utility rate filings as a component of Rate Base. To determine the allowable amount of Cash Working Capital in Rate Base for a utility, BPA allows one-eighth (1/8) of the functionalized costs of total production expenses, transmission expenses, and administrative and general expenses, less purchased power, fuel costs, and public purpose charges, into Rate Base. *See* 18 C.F.R. § 301, End. f.

3.2.3 Schedule 2 – Capital Structure and Rate of Return

Schedule 2 calculates the Utility's rate of return ("ROR") on the utility's Rate Base developed in Schedule 1.

The 2008 ASCM requires IOUs to use the weighted cost of capital ("WCC") from their most recent State Commission rate orders. The return on equity ("ROE") used in the WCC calculation is grossed-up for Federal income taxes at the marginal Federal income tax rate using the formula described in Endnote b of the 2008 ASCM. *See* 18 C.F.R. § 301, End. b. The 2008 ASCM requires a COU to use a rate of return equal to the COU's weighted cost of debt.

3.2.4 Schedule 3 – Expenses

This Schedule represents operations and maintenance expenses for the production, transmission, and distribution of electricity. Each expense item is functionalized as outlined in Table 1 of the 2008 ASCM. Also included in Schedule 3 are additional expenses associated with customer accounts, sales, administrative and general expense, conservation program expense, and depreciation and amortization expense associated with Electric Plant-in-Service. The sum of the items in Schedule 3 reflects the Total Operating Expenses for the Utility.

3.2.5 Schedule 3A – Taxes

This schedule presents allowable ASC costs for federal employment tax and certain non-federal taxes, including property and unemployment taxes. COUs are allowed to include state taxes paid "in lieu" of property taxes. State income taxes, franchise fees, regulatory fees, and city/county

[8] James C. Bonbright *et al.*, *Principles of Public Utility Rates* 244 (2d ed. 1998)

taxes are accounted for in this Schedule, but are functionalized to Distribution/Other and therefore not included in ASC. Taxes and fees for each state listed are grouped together and entered as "combined" line items for Appendix 1 purposes.

Federal income taxes are included in ASC and are calculated, as applicable, in Schedule 2 − Capital Structure and Rate of Return. For this FY 2022-2023 ASC Review Process, BPA used a federal Income Tax Rate of 21%, adjusted from 35%, in the passing of the Tax Cut and Job Acts on December 20th, 2017, and enacted on January 1st, 2018.

3.2.6 Schedule 3B – Other Included Items

This Schedule includes revenues from the disposition of plant, sales for resale, and other revenues, including electric revenues and revenues from transmission of electricity for others (wheeling). The revenues in this Schedule are deducted from the total costs of each Utility.

3.2.7 Schedule 4 – Average System Cost ($/MWh)

This Schedule summarizes the cost information calculated in Schedules 2 through 3B: Capital Structure and Rate of Return, Expenses, Taxes, and Other Included Items. The Schedule also identifies the Contract System Cost and Contract System Load, as defined below, and calculates the Utility's Base Period ASC ($/MWh).

<u>Contract System Cost ($)</u>
CSC includes the Utility's costs for production and transmission resources, including power purchases and conservation measures, which are includable in and subject to the provisions of the 2008 ASCM. CSC does not include distribution costs or the cost of serving a Utility's NLSLs. CSC is the numerator in the ASC calculation.

<u>Contract System Load (MWh)</u>
CSL is the total regional retail load of a Utility, adjusted for distribution losses and NLSLs. CSL is the denominator in the ASC calculation.

3.2.8 Purchased Power and Sales for Resale

Purchased Power is an Account in Schedule 3 – Expenses, and includes all power purchases the Utility made during the year, including power exchanges. Sales for Resale is an Account in Schedule 3B – Other Included Items, and includes power sales to purchasers other than ultimate consumers. Listed in the information for both accounts are the statistical classification codes for all transactions. *See* FERC Form 1, pages 310-311 for Sales for Resale, and pages 326-327 for Purchased Power, for identification of the classification codes.

3.2.9 Load Forecast

Each IOU is required to provide a four-fiscal-year forecast of its total retail load beginning October 1 of the Base Year, as measured at the meter. For COUs, the total retail loads for this time period are forecast by BPA with the net requirements being computed consistent with the Tiered Rate Methodology ("TRM"). *See* the Tiered Rates tab in Appendix 1.

Additionally, each COU is required to provide a four-fiscal-year forecast of its qualifying residential and farm retail load, as measured at the retail meter. However, due to the 2012 REP Settlement Agreement, the IOUs are no longer required to submit residential and farm load forecasts.

The total retail load forecasts for all Utilities, and residential and farm load forecasts for the COUs, are adjusted for distribution losses. In addition, the total retail load forecasts are adjusted for any NLSL. The resulting load forecasts are the Contract System Load forecast and Exchange Load forecast, respectively.

3.2.10 Distribution Loss Calculation

Each Utility is required to provide a current distribution loss factor as described in Endnote e of the 2008 ASCM. *See* 18 C.F.R. § 301, End. e. The total retail and residential and farm load forecasts are adjusted for distribution losses (and NLSLs when appropriate).

3.2.11 Distribution of Salaries and Wages

This supporting tab is used to determine the Labor Ratio calculations. It includes salaries and wages from relevant operations and maintenance of the electric plant.

3.2.12 Ratios

The Ratios tab calculates all functionalization ratios by assigning costs included in the Utility's FERC Form 1 on a pro rata basis using values taken from the gross plant data (Schedule 1) for Production, Transmission, and Distribution/Other functions, and data taken from the salary and wage tab for Labor functions. For COUs, comparable information comes from the detailed salaries and wages data used in the Utilities' financial reports.

3.2.13 New Resources – Individual and Grouped

The 2008 ASCM allows a Utility's ASC to adjust during the Exchange Period to reflect the addition or loss of a major resource, when adding or removing the resource results in a change of the Utility's Base Period ASC of two and one-half percent (2.5%) (the materiality threshold) or more. New resources are defined as any new production or new generating resource investments, new transmission investments, long-term generating contracts, pollution control and environmental compliance investments relating to generating resources, transmission resources or contracts, hydro relicensing costs and fees, and plant rehabilitation investments. *See* 18 C.F.R. § 301.4(c)(3)(i)-(vii). For major resource reductions, the change to ASC will become effective when the resource is sold, retired, or transferred. 18 C.F.R. § 301.4(c)(2)

See section 2.5 for a discussion of ASC Major Resource Additions or Removals.

To determine the effects of a major resource addition or reduction on a Utility's Exchange Period ASC, BPA performs one of the following calculations: (1) for major resources of all Exchanging Utilities that are expected to be on line, or be removed, prior to the start of the Exchange Period, BPA projects the costs of the resource forward to the midpoint of the Exchange Period; or (2) for major resources of COUs only that are expected to be on line, or be removed, during the Exchange Period, BPA calculates the resource cost as if the resource came on line, or was removed, at the midpoint of the Exchange Period. Under the REP Settlement, IOUs no longer include major resource additions that come on line during the Exchange Period. *See* section 2.5.

Each resource that satisfies the minimum materiality threshold of one-half percent (0.5%) may be entered individually in the "New Resources – Individual" tab. Resources that do not meet the two and one-half percent (2.5%) materiality requirement independently may be grouped together with other resources within "New Resources – Grouped" tab to meet the two and one-half percent (2.5%) materiality requirement. The grouping and timing of materiality for new resource additions are discussed in section 3.2.14 of this Report.

3.2.14 Materiality for New Resource Additions – Individual and Grouped

The 2008 ASCM states:

> Major resource additions or reductions that meet the criteria identified in paragraph (c)(3) of this section will be allowed to change a Utility's ASC within an Exchange Period provided that the major resource addition or reduction results in a 2.5 percent or greater change in a Utility's Base Period ASC. Bonneville will allow a Utility to submit stacks of individual resources that, when combined, meet the 2.5 percent or greater materiality threshold, provided, however, that each resource in the stack must result in a change to the Utility's Base Period ASC of 0.5 percent or more.

18 C.F.R. § 301.4(c)(4)

Under the 2008 ASCM, a Utility may group or stack resources that individually result in a change in a Utility's Base Period ASC by one-half percent (0.5%) or more to meet the two and one-half percent (2.5%) materiality threshold. A stacked group of resources will not be added to the Utility's Base Year ASC until the last resource in that stack comes on line. The grouping of resources together, therefore, has a significant impact on the timing of when a Utility's ASC is changed as a result of a new resource addition.

BPA Staff made materiality determinations for all new resources submitted by each utility in its Draft ASC Report. To make these determinations, BPA used the following instructions:

- The Utility must include the costs and operating characteristics for each new resource addition.

- The Utility must submit the resource additions (individual and/or grouped) that meet the materiality test(s) given the Utility's Base Period costs.

- BPA Staff will review each new resource addition submitted by the Utility to determine the adequacy of costs and operating characteristics.

- BPA Staff will calculate the materiality of a Utility's resources using the Utility's adjusted Base Period ASC (per the Draft ASC Report) and forecast natural gas prices used in BPA's BP-22 Initial Proposal. BPA Staff will remove all resources and/or groups of resource additions that do not meet the materiality test(s).

- BPA Staff will not unilaterally re-group resources.

- The BP-22 Initial Proposal's natural gas price forecast will be the basis for the natural gas fuel costs used to calculate the materiality for new resource additions in both the Draft and Final ASC Reports.

- The Utility will have the option to recommend a "regrouping" of resource additions that meet the materiality test(s).

- Utilities must submit the regrouped resource additions in their comments on the Draft ASC Report.

- Only resources that were reviewed by BPA Staff and participants can be used in the regrouping process.

- BPA Staff will make a determination of the new resource additions for the Final ASC Report.

- For the Final ASC Report, BPA will calculate the materiality of the Utility's resources under the Utility's final Base Period ASC.

The final grouping of new resources will be determined after considering the filing Utility's and other parties' comments on the Draft ASC Report based on the foregoing instructions.

The materiality determinations provided in this Draft ASC Report are based on the Utility's final Base Period ASC and reflect the natural gas price forecast from the BP-22 Initial Proposal.

3.2.15 New Large Single Loads

This tab calculates the cost of resources in an amount sufficient to serve an NLSL, which BPA must exclude from a Utility's ASC pursuant to Northwest Power Act Section 5(c)(7). An NLSL is any load associated with a new facility, an existing facility, or an expansion of an existing facility which was not CF/CT prior to September 1, 1979, and which will result in an increase in power requirements of ten (10) aMW or more in a consecutive 12-month period. 16 U.S.C. § 839a(13)(A)–(B). By law, BPA must exclude from a Utility's ASC the load associated with an NLSL and an amount of resource costs sufficient to serve such NLSL. *See* 16 U.S.C. § 839c(c)(7)(A). To determine the amount of resource costs to exclude from a Utility's ASC, BPA follows the methodology described in Endnote d of the 2008 ASCM. *See* 18 C.F.R. § 301, End. d. Base Period NLSLs will remain constant throughout the duration of the Exchange Period (*see* FY 2012-2013 Final ASC Report, section 5.2.2).

3.2.16 Tiered Rates

All exchanging COUs have the right to purchase power at BPA's Tier 1 rate by executing Contract High Water Mark ("CHWM") Contracts with BPA. By signing the CHWM Contract, the Utility agrees to limit the resources it will exchange in the REP. Under the CHWM Contract, the COU agrees to exclude from its ASC the cost of resources necessary to serve the COU's Above-RHWM load. The CHWM Contracts require the cost of serving Above-RHWM loads to be calculated using a methodology similar to Endnote d of the 2008 ASCM. *See* section 3.3 of this Draft ASC Report for details.

Data input in this tab is used to calculate the cost of Tier 1 Power Purchases from BPA, and comes from BPA's Power Rates group. For background information and details, *see* http://www.bpa.gov/news/pubs/PastRecordsofDecision/2009/TRM-12S-A-02.pdf.

3.2.17 Above-RHWM Base Calculation

The Above-RHWM Base Calc tab calculates the cost of resources in an amount sufficient to serve a COU's Above-RHWM load. Under the TRM and CHWM Contracts, BPA must exclude from a Utility's ASC any Above-RHWM load and an amount of resource costs sufficient to serve such Above-RHWM load. To determine the amount of resource costs to exclude from a Utility's ASC, BPA follows the methodology described in Exhibit D of the Utility's CHWM Contract.

The associated Above-RHWM Ratios tab calculates the functionalization ratios used to allocate the total amount of materials and supplies cost, general plant and general plant depreciation expense, administrative and general costs, federal and state employment taxes, and property taxes that are to be included in the total costs of resources used to meet a Utility's Above-RHWM load.

3.3 Rate Period High Water Mark ASC Calculation under the Tiered Rate Methodology

CHWM Contracts require that the cost of resources used to meet Above-RHWM loads be calculated using a methodology similar to Endnote d of the 2008 ASCM. BPA uses the following method to determine the ASC of a COU that is participating in the REP.

- $\text{RHWM ASC} = \dfrac{\text{Contract System Cost} - \text{NewRes\$}}{\text{Contract System Load} - \text{NewResMWh}}$

- NewRes$ is the forecast cost of resources used to serve a customer's Above-RHWM Load. The costs included in NewRes$ will be determined using a methodology similar to Appendix 1, Endnote d, of BPA's 2008 ASCM and as described below.

- NewResMWh is the forecast generation from resources used to serve a customer's Above-RHWM Load. For this Draft ASC Report, the NewResMWh has been set equal to the customer's Above-RHWM Load.

- For calculating both NewRes$ and NewResMWh, Existing Resources for CHWMs specified in Attachment C, Column D, of the TRM (*see* TRM-12S-A-03, September 2009, Attachment C) and purchases of power at Tier 1 rates from BPA are excluded.

A number of considerations are used in calculating the cost of serving Above-RHWM Loads using Endnote d of the 2008 ASCM:

- Types of resources to serve Above-RHWM Loads may be different from those resources used in the NLSL resource cost calculation and will be recognized in calculating RHWM ASC:
    - Power purchases less than five years in duration.
- Total output of new resources may exceed Above-RHWM Load:
    - RHWM ASC does not specify removal of costs associated with this excess.

RHWM ASC calculation methodology:

- Set NewResMWh equal to Above-RHWM Load.
- NewRes$ = NewResMWh times Fully Allocated Cost (calculated using Endnote d).
- If output of material new resources fails to meet Above-RHWM Load, meet deficit with short-term ("ST") market purchases at utility-specific market price.
- If output of new resources exceeds Above-RHWM Load, reduce ST market purchases by excess to the extent possible in Contract System Cost calculation.
- Sell any remaining surplus at utility-specific Sales for Resale price in the Contract System Cost calculation.

3.4 ASC Forecast

Once the Base Period ASC is calculated, BPA Staff uses the ASC Forecast Model to escalate forward the Base Period ASC to the midpoint of the Exchange Period. The ASC Forecast Model uses IHS Global Insight's (an international economic and market forecasting company) forecast of cost increases for capital costs and fuel (except natural gas), operations and maintenance ("O&M"), and general and administrative ("G&A") expenses; BPA's forecast of market prices for purchases to meet load growth and to estimate short-term and non-firm power purchase costs and sales revenues; BPA's forecast of natural gas prices; and BPA's estimates of the rates it will charge for its PF rate and other products. For both the Draft and Final ASC Reports, BPA updates the escalators in the ASC Forecast Model to be consistent with the escalators used in the BP-22 Initial Proposal. For additional background on the determination of Exchange Period ASCs, *see* the 2008 ASCM, 18 C.F.R. § 301.4.

3.4.1 Forecast Contract System Cost

Forecast Contract System Cost includes a Utility's forecast costs for production and transmission resources, including power purchases and conservation measures, which are includable in and subject to the provisions of the 2008 ASCM. BPA escalates Base Period costs to the midpoint of the Exchange Period to calculate Exchange Period ASCs. *See* 18 C.F.R. § 301.4(a).

3.4.2 Forecast of Sales for Resale and Power Purchases

BPA does not normalize short-term purchases and sales for resale. The short-term purchases and sales for resale for the Base Period are used as the starting values for the forecast. Utilities are then allowed to include new plant additions and use utility-specific forecasts for the (1) price of long-term purchased power contracts, and (2) long-term sales for resale price contracts to value purchased power expenses and sales for resale revenue. *See* 18 C.F.R. § 301.4(b).

3.4.3 Forecast Contract System Load and Exchange Load

As a part of its ASC Filing, each IOU is required to provide a four-fiscal-year forecast of its total retail load, as measured at the meter. For the COUs only, total retail forecast loads, as determined by BPA under the TRM, will be provided through the end of the Exchange Period. In addition, for the COUs, qualifying residential and farm retail loads, as measured at the retail meter, are required.

Each Utility is required to submit a current distribution loss study as described in the 2008 ASCM, Appendix 1, Endnote e. The total retail and the residential and farm load forecasts are adjusted for distribution losses (and NLSLs when appropriate). The resulting load forecasts are the Contract System Load forecast and Exchange Load forecast, respectively.

3.4.4 Load Growth Not Met by New Resource Additions

All load growth not met by new resource additions is met by purchased power at the forecast utility-specific short-term purchased power price. To calculate the cost of serving load growth not served by new resource additions, BPA uses the method outlined in the 2008 ASCM. *See* 18 C.F.R. § 301.4(e).

4 REVIEW OF THE ASC FILING

Pursuant to the 2008 ASCM, the Rules of Procedure for ASC Review Processes, and section 5(c) of the Northwest Power Act, BPA is responsible for reviewing all costs, revenues, and loads used to establish ASCs for the REP. BPA Staff began the FY 2022-2023 ASC Review Process of PacifiCorp's ASC Filing in July 2020. During the initial review, no issues were raised by BPA Staff or any other party. See PacifiCorp's Issue List for FY 2022-2023 which is posted on the REP Secure website. The preliminary findings of BPA's review of PacifiCorp's ASC Filing are memorialized in this Draft ASC Report. Following a comment period and the opportunity for oral argument before BPA's Administrator or designee, the Final ASC Reports for the FY 2022-2023 ASC Review Process are scheduled to be issued in July 2021.

BPA Staff's ASC determinations are limited to specific findings on issues identified for comment, with the exception of ministerial or mathematical errors or deviations due to changes in functionalizations. There may be additional issues BPA has not identified for comment in this Draft ASC Report. Acceptance of a Utility's treatment of an item without comment does not signify a decision as to the proper interpretation to be applied either in subsequent ASC Filings or universally under the 2008 ASCM. Similarly, further experience under the 2008 ASCM may result in BPA adopting a modified or different interpretation of the 2008 ASCM in future ASC reviews.

On April 14, 2020, prior to the start of the FY 2022-2023 ASC Review Processes, BPA emailed parties interested in the ASC Review Processes with information relating the FY ASC Review Processes, such as: schedules, rules of procedure, instructions and general information. Subsequently, BPA staff held a new analyst training on May 12, 2020.

Table 4-1 summarizes any direct adjustments BPA made to PacifiCorp's Appendix 1 in this Draft ASC Report as a result of BPA Staff's review and evaluation. Supporting arguments may be found in the Errata, Resolved Issues and/or Unresolved Issues sections listed in table 4-1.

Although a Utility's state, county, or municipal regulatory bodies, or the Commission, may allow a particular functionalization to a specific account, BPA is not required to follow that treatment when calculating ASCs under the 2008 ASCM. Rather, BPA is tasked with making an independent determination of the appropriateness of inclusion or exclusion of particular costs, the reasonableness of the costs included in Contract System Costs, the appropriateness of Contract System Loads, and the functionalization method used in the calculation of any cost in conformance with the 2008 ASCM. *See* Rules of Procedure, § 3.2.2.

Table 4-1: Summary of ASC Errata Corrections and Issues

Appendix 1 Schedule	Adjustment
Schedule 1 – Plant Investment/Rate Base	No direct adjustment.
Schedule 1A – Cash Working Capital	No direct adjustments.
Schedule 2 – Capital Structure and Rate of Return	No direct adjustments.

Schedule 3 – Expenses	No direct adjustments.
Schedule 3A – Taxes	No direct adjustments.
Schedule 3B – Other Included Items	No direct adjustments.
Schedule 4 – Average System Cost	Erratum Correction. See section 4.1.2.
Appendix 1 Supporting Worksheets	**Adjustment**
Load Forecast	Erratum Correction. See section 4.1.1.
New Resource Additions	No direct adjustments.
Materiality – Individual	No direct adjustments.
Materiality – Grouped	No direct adjustments.
NLSL Calculation	No direct adjustments.
Wind Resources	No direct adjustments.
3-Year Purchased Power and Sales for Resale	No direct adjustments.
Salary and Wages	No direct adjustments.
Ratios	No direct adjustments.
ASC Forecast Model	**Adjustment to Model**
Natural Gas Updates	Nat_Gas_Mkt_Prices_Tab
Market Price Updates	Nat_Gas_Mkt_Prices_Tab

4.1 Errata Corrections Filed by Utility

PacifiCorp and BPA agreed to the following errata corrections. These corrections were submitted by PacifiCorp to BPA's Secure REP website on August 23, 2018.

4.1.1 Load Forecast

PacifiCorp submitted errata corrections to the Load Forecast tab to remove direct access sales. As such, all Load Forecast values were replaced.

1. **Cells C29:F29; C31:F31; C36:F47**
Inserted values:

Row	Column C	Column D	Column E	Column F
29	7,326,855	7,312,414	7,322,664	7,332,846
31	21,026,552	21,133,333	21,296,642	21,392,021
36	791,367	793,655	795,010	796,175
37	667,012	646,644	647,803	648,946
38	619,131	620,092	620,923	621,913
39	534,427	534,934	535,705	536,570
40	517,290	517,435	517,879	518,405
41	541,661	541,757	542,264	542,883
42	648,224	648,624	649,514	650,383
43	589,060	589,287	590,010	590,829
44	478,530	478,440	478,903	479,540
45	504,248	504,239	504,805	505,437
46	633,066	633,593	634,689	635,607
47	802,839	803,715	805,159	806,160

4.1.2 Schedule 4 – Average System Cost

PacifiCorp submitted errata corrections to the Schedule 4 to report NLSL load.

1. **Cell F45:**
Inserted value: 565,316.8 NLSL MWH

4.2 Resolved Issues

BPA did not raise any issues with PacifiCorp's ASC Filing. All questions raised during the review were satisfactorily answered through PacifiCorp's responses to Data Requests and/or errata corrections.

4.3 Identification and Analysis of Unresolved Issues

BPA has no unresolved issues with PacifiCorp at the time of this Draft ASC Report.

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5 GENERIC ISSUES AND STATEMENTS

There are no generic issues to report for this ASC Filing.

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6 FY 2022-2023 ASC

PacifiCorp's As-Filed Base Period (CY 2019) ASC was \$80.32/MWh. As a result of adjustments made during the ASC Review Process, PacifiCorp's Base Period ASC increased to \$80.42/MWh.

PacifiCorp's As-Filed Exchange Period ASC for FY 2022-2023 was \$76.07/MWh. As a result of adjustments made during the preliminary ASC Review Process, PacifiCorp's Exchange Period ASC for FY 2022-2023 increased to \$77.47/MWh. PacifiCorp does not have any major resources coming on line or being removed prior to the FY 2022-2023 Exchange Period.

This Exchange Period ASC does not reflect any changes in NLSL status. See section 2.7 for potential adjustments to Exchange Period ASCs.

7 REVIEW SUMMARY

This Draft ASC Report is BPA Staff's preliminary determination of PacifiCorp's FY 2022-2023 Filing, and PacifiCorp's Base Period and Exchange Period ASCs based on the information and data provided by PacifiCorp to date and on the professional review, evaluation, and judgment of BPA Staff. BPA is soliciting comments from Utilities and others participating in the FY 2022-2023 ASC Review Process on this Draft ASC Report and the Draft ASC Reports of all other Utilities.

Comments on any Draft ASC Report should identify with specificity the decisions and/or statements from the Draft ASC Report that the commenter intends to support or oppose. *See* Rules of Procedure for BPA's ASC Review Processes, § 3.6.1.2. Failure to raise an objection to a decision or issue addressed in the Draft ASC Report will result in the waiver of that issue on appeal. *Id.*, at § 3.6.1.3. After review and consideration of all comments, BPA will make final ASC determinations for each Utility for FY 2022-2023 in the Final ASC Reports, which are scheduled to be published in July 2021.

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BONNEVILLE POWER ADMINISTRATION
December 2020