

**Staff's Summary Document Addressing Statewide Average Retail Rates,  
Proposing a Definition for a Retail Rate that is Materially  
Greater than the State Average, and Identifying Potential Rate Relief Options**

This document sets forth the process the Staff of the Public Utilities Commission (Staff) used to compile results of the electric retail rate survey, its determination of a statewide average retail rate, its proposed definition for a retail rate that is materially greater than the statewide average, and its identification of options that would result in rate relief in certificated electric utility territories with retail rates materially greater than the state average.

Staff intends that the survey results, proposed definition, and rate relief options discussed herein will serve as a basis for meaningful participant comment and discussion at the workshop scheduled on October 19, 2020. These results, proposed definition, and rate relief options do not represent Staff's final recommendations for the items required to be determined in this proceeding, or Staff's positions in other ongoing or future proceedings. Additionally, the information and statements included in this document are Staff's alone, and do not constitute findings, positions, or conclusions of the Commission or any individual Commissioner.

**Calculation of a Statewide Average Retail Rate**

Through this proceeding, Staff assembled survey questions to obtain an accurate representation of electric retail rates across Colorado. The survey questions were issued through Attachment A to Decision No. C20-0451, issued June 18, 2020, and Attachment A to Decision No. R20-0593-I, issued August 13, 2020. Additionally, Staff sent the survey questions directly to Colorado's two investor-owned utilities (IOUs) and to municipal utilities and cooperative electric utilities identified through internal annual report databases, the user list of the Colorado Rural Electric Association (CREA), and the user list of the Colorado Association of Municipal Utilities (CAMU).

Staff sent surveys to 56 utilities and received responses from 20 utilities. Because responses were received from fewer than half of the utilities, Staff could not calculate an accurate statewide average based only on submitted information. Staff identified the 2018 U.S. Energy Information Administration (EIA) data as a publicly available resource for the purpose of identifying estimated rates for non-responsive utilities. After comparing data submitted in survey responses to the EIA's 2018 data, Staff determined that the rate information collected from the survey is substantially similar to the 2018 rates reported by the EIA. 38 retail providers of electricity in Colorado

are represented in the EIA data, excluding the Western Area Power Administration and behind-the-meter providers,<sup>12</sup> and 38 utilities are reflected in the survey results. While these are

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<sup>1</sup> Staff excludes from its analysis the Western Area Power Administration (WAPA) as WAPA does not serve retail customers and behind-the-meter providers that likewise do not provide retail electric service as defined for purposes of this proceeding.

<sup>2</sup> Annual Electric Power Industry Report, Form EIA-861 detailed data files, 2018 Sales to Ultimate Customers, excel file named "Sales\_Ult\_Cust\_2018," available at <https://www.eia.gov/electricity/data/eia861/> (accessed September 25, 2020).

not the same 38 utilities, the amount of total sales included is similar (55,265,085 mWh for the retail rate survey, and 55,493,946 mWh for the EIA data). Therefore, Staff used utility-specific 2018 EIA data to provide information for utilities that did not respond to the survey. The retail rate survey responses represent 83% of the total kilowatt hours (kWh), while EIA data was used to estimate the remainder.<sup>3</sup>

Staff next worked to establish an average retail rate. Two main decisions were made to establish the presented average. First, in addition to establishing average rates overall, average rates per kWh were also established for residential, commercial, and industrial customers by utility. Second, Staff determined that a weighted average based on kWh sales is the most appropriate metric by which to average. These decision points are described further below.

An average retail rate per kWh can represent a utility's rate across rate classes, which would take the entire revenue divided by kWh sales, or an average rate per kWh can be determined for each rate class. Determining an average for each rate class allows for a more detailed look at specific similar customer types across utility companies. The retail rate survey asked utilities to define their own rate classes, and Staff compared utilities' definitions to EIA definitions and adjusted survey responses accordingly. The EIA defines residential use as use by private households and apartments buildings.<sup>4</sup> Commercial use is defined as power to nonmanufacturing business establishments and governmental entities organizations.<sup>5</sup> Industrial uses are defined as facilities and equipment used for producing, processing or assembling goods.<sup>6</sup> The industrial sector encompasses manufacturing, agriculture, forestry, hunting, mining, and construction. There are caveats within this definition as billing classes vary among utilities. Most utilities classify industrial use for their larger loads, so there may be activities that fall into the EIA's industrial use definition that do not reach a utility's required industrial load amount, and vice versa. Some revenues from specific customers were classified by utilities as special contracts, and Staff classified these as described in Attachment 9 to obtain some level of parity between utility-reported data and EIA data.

To determine the proper basis upon which to average the rates, Staff considered basing the average retail rate on utility providers, number of customers, or kWh sales. Averages using each of these bases are set forth below, but Staff ultimately believes a weighted average using kWh sales is most useful for purposes of this proceeding and the statutory requirement set forth in § 40-3-118 (1)(a), C.R.S.

Utilizing utility providers as the basis would entail adding the average retail rate each provider charges and dividing the sum of those rates by the number of providers to provide a simple arithmetic mean. However, there are utility providers with such a small customer base that it

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<sup>3</sup> 45,959,720,315 kWh were either survey responses or Staff-adjusted data, where data was adjusted between categories of customers but the total kWh for that utility did not change. See Attachment 9 for details of the utility-specific adjustments.

<sup>4</sup> See page 11 of <https://elecicd12c.eia.doe.gov/2017%20EIA-861%20Instructions.pdf> accessed September 30, 2020

<sup>5</sup> *Id.*

<sup>6</sup> *Id.*

does not make sense to compare them directly to providers serving larger customer bases and larger loads. Staff believes that equally weighing these utilities in determining an average rate would present a deceptive picture. For example, Public Service of Colorado (Public Service) serves

1.4 million customers and provides 30 million mWh per year, while the next closest provider is the City of Colorado Springs, which serves 232,407 and provides 4.5 million mWh per year. A straight average that counts every provider as equivalent would not present a statewide average retail rate that represents what most Coloradans pay for electricity. Therefore, Staff believes a weighted average across electricity providers is representative of retail rates paid statewide. A weighted average could either be based upon the number of customers or kWh sales. Staff notes that use is fairly consistent among residential classes, while use varies greatly among commercial and industrial classes. Thus, it is most consistent to compare kWh sold, which paints a more complete picture including the size and usage of the customer base.

To determine the average price per kWh, Staff added the total sales of all kWh in each rate class and took the revenue of that rate class divided by the kWh usage. This normalizes several factors such as utility size, customer usage, and rate structure. Staff proposes that this provides an accurate and complete picture of the “retail rate” that customers are paying for electricity. However, Staff recognizes that, given the different fixed charges and different rate structures across time of use or time of day rates, or different demand rates, the actual rate a customer pays from each utility will likely be different than the “average” retail rate.

### **Statewide Electric Retail Rates**

**Utilizing kWh sold as the basis**, the statewide average electric retail rate for residential electric rate payers is 12.18 cents per kWh, the average commercial rate is 9.79 cents per kWh, and the average industrial rate is 7.39 cents per kWh. The overall average retail rate is 9.95 cents per kWh. Averages based on providers and customer counts are included in the table below. As previously stated, Staff believes the average retail rates based on kWh sold are representative of what most Coloradans pay for electricity and are appropriate under § 40-3-118, C.R.S. However, these results are merely Staff’s initial calculations meant to provide a basis for meaningful participant comment and workshop discussion.

If, instead, residential rates are averaged using providers as the denominator the average is 13.70 cents per kWh, and the average commercial rate is 11.40 cents per kWh. The industrial average using utility providers as the denominator is 9.38 cents per kWh. The overall average

retail rate is 11.70 cents per kWh. If averaged by customer count, the figures are 12.12 cents per kWh for residential, 9.98 for commercial, 11.17 for industrial, and 10.09 overall.

|                              | Average Residential Rate (cents/kWh) | Average Commercial Rate (cents/kWh) | Average Industrial Rate (cents/kWh) | Overall Statewide Average Rate (cents/kWh) |
|------------------------------|--------------------------------------|-------------------------------------|-------------------------------------|--|
| Weighted by kWh sold         | 12.18                                | 9.79                                | 7.39                                | 9.95                                       |
| Weighted by Customer Count   | 12.12                                | 9.98                                | 11.17                               | 10.09                                      |
| Average of Utility Providers | 13.70                                | 11.40                               | 9.38*                               | 11.70                                      |

\*This average only includes utilities that have an industrial rate class.

There is not much difference among the average resulting in residential rates regardless if the rates are weighted by kWh sold or weighted by customer count; however, weighting the results by kWh sold or by customer count results in dramatic differences in the industrial rate class. Ultimately, Staff proposes that to ascertain the average retail rate for electricity in Colorado it is best to weight by overall kWh sold. This is because use varies significantly within commercial and industrial classes, and thus an average weighted by a factor other than kWh sales may lead to misleading results.

Staff understands that several factors affect electric rate pricing, thus recognizes that it is a challenge to compare rates between providers. For example, industrial rates vary widely among utilities that can have significantly different industrial customers: several utilities do not have any industrial customers; some utilities have industrial customers with hundred thousand megawatt loads; and some utilities' industrial customers primarily consist of small farms on an irrigation system. Similar factors can also affect commercial and residential rates. Staff recognizes that there is a large variance between a primarily urban provider with a customer base of 1.4 million residential customers and a small provider serving a few thousand customers.

It may be helpful to think of these providers in buckets based on the size of their customer base, splitting the utilities into four categories: utilities with fewer than 10,000 residential customers, utilities with 10,000-30,000 residential customers, 30,001-60,000 residential customers, and 60,001-1,000,000 residential customers. Public Service is in its own class, being the only utility

with over one million residential customers. The average residential rates for providers of each size category are shown below.

| Number of Residential Customers | Average Residential Rate (cents/kWh) |
|---------------------------------|--------------------------------------|
| <10,000                         | 14.27                                |
| 10,000-29,999                   | 14.04                                |
| 30,000-59,999                   | 12.46                                |
| 60,000-999,999                  | 13.14                                |
| 1,000,000 and Over              | 11.13                                |

Staff recognizes the obvious benefits of having a large concentration of customers in an urban area. It is helpful not only for operational efficiency, but it allows a utility to spread out capital costs across a large customer base and thus every customer pays less of a share for any capital costs. There are additional costs to be borne by each customer when a provider must build additional infrastructure to reach a small number of customers.

Similar to the economies of scale that present themselves for residential rates, there are benefits at scale for commercial and industrial customers. Unlike residential use, commercial use and industrial use varies widely across the customer base. It is most helpful to compare commercial rates by overall commercial use, rather than customer count. As discussed above, what qualifies as a commercial customer varies across utility, and uses within the class vary. The average commercial rates among providers of each usage size category are shown below.

| Commercial Use             | Average Commercial Rate (cents/kWh) |
|----------------------------|-------------------------------------|
| 0-74,999,999 kWh           | 12.38                               |
| 75,000,000-499,999,999 kWh | 11.03                               |
| > 500,000,000 kWh          | 9.49                                |

Industrial rates can be categorized similarly, since the breakpoints for the load differ but the concept is the same. Some utilities favor industrial rates because industrial rates mean large loads, which means jobs and more ratepayers. Municipal utilities have a number of factors to

consider when setting rates among classes and rate design. A large load for a municipal utility could mean a greater tax base and more funds for the municipality.

| Industrial Use              | Average Industrial Rate (cents/kWh) |
|-----------------------------|-------------------------------------|
| 0-49,999,999 kWh            | 11.17                               |
| 50,000,000-149,999,999 kWh  | 9.10                                |
| 150,000,000-499,999,999 kWh | 8.51                                |
| >500,000,000 kWh            | 6.95                                |

### **Proposed Definition of a Retail Rate that is Materially Greater than the Statewide Average**

Section 40-3-118 (1)(a), C.R.S., requires a determination of the “minimum percentage by which a retail rate that exceeds the state average rate qualifies as a materially greater rate.” Staff recognizes that the Commission has significant discretion under the statute in determining the minimum percentage that would make a retail rate “materially greater” than the state average, and that the meaning of “material” varies widely in different contexts.

In a recent rate study performed in accord with a state Senate bill in the neighboring State of Kansas, a 13% drop in natural gas prices was seen as material.<sup>7</sup> In oil and gas contracts, a “material change” for a specific amount is most commonly defined as a 25% or 20% change.<sup>8</sup> Although not specific to the utility context, the IRS has also defined a “materially greater” amount in the context of a deferred compensation plan as 25%.<sup>9</sup> In a recent recommended decision an Administrative Law Judge has opined that a difference of two or three percent could be considered “material.”<sup>10</sup>

While these percentages that have been qualified as material differ widely, for purposes of this analysis, Staff proposes that using 25% as the minimum percentage at which a retail rate is materially greater than the average is most consistent with relevant examples and definitions of amounts that are “material.” While lower percentage amounts could conceivably be used, and may be “material” in a specific case or adjudication, considering pricing generally for purposes of recommendations and legislative reporting, 25% provides a materially greater than average rate.

Therefore, using kWh-based averages of 12.18 cents for residential retail rates, 9.72 cents for commercial rates and 7.39 cents for industrial rates, rates that are “materially greater” than the

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<sup>7</sup> <https://estar.kcc.ks.gov/estar/ViewFile.aspx/S20200108144309.pdf?Id=1a3a31e5-e38d-4445-aada-1cd0170a7b85> accessed September 30, 2020. Page 79 describes the drop in natural gas prices, page 145 references the “material” drop in natural gas prices

<sup>8</sup> <https://www.lawinsider.com/dictionary/material-change> accessed September 30, 2020

<sup>9</sup> <https://www.irs.gov/pub/irs-wd/201645012.pdf> accessed September 30, 2020

<sup>10</sup> Decision No. R20-0642 in Proceeding No. 19AL-0687E p. 72-73

average would be: 15.23 cents or more per kWh for residential use; 12.15 cents or more for commercial use; and 9.24 cents or more for industrial use. With the exception of industrial rates, where rates within the class vary widely, a rate that is 25% greater than average is well outside the normal distribution of rates within the class.

Staff notes that as an alternative to defining a rate as materially greater than average using a minimum percentage amount, a statistical definition such as two weighted standard deviations could be useful to explore retail rates charged in Colorado. The weighted standard deviation of residential electric rates is 1.994 cents per kWh, within commercial rates it is 1.595 cents per kWh, and within industrial rates it is 1.352 cents per kWh. For average rates overall the standard deviation is 1.629 cents per kWh. A difference of two weighted standard deviations greater or less than the average would capture a range of 95% of rates within that class. A rate that falls outside this range would clearly be an outlier.

Another statistical alternative Staff explored was to identify rates at or above the 90th percentile of electricity sold in the state. The 90th percentile of retail rates is 14.74 cents per kWh, for commercial rates it is 11.82 cents per kWh, for industrial rates it is 9.12 cents per kWh, and for overall rates it is 12.04 cents per kWh. By this measure Public Service has no rates at or above the 90th percentile, while Black Hills Colorado Electric's (Black Hills') residential rate and overall average rate are both at or above the 90th percentile. The 90th percentile is fairly well understood and thus represents a useful measuring stick for comparing retail rates.

The following table compares the statewide average rate, both overall and by customer class, the three methods of exploring retail rates discussed above, and the rates of Colorado's two IOUs (all prices in cents/kWh):

| Rate Class      | Average Rate | 25% Greater than Average | Two Weighted Standard Deviations Greater than Average | 90th Percentile of Electricity Sold | Public Service | Black Hills |
|-----------------|--------------|--------------------------|---|-------------------------------------|----------------|-------------|
| Residential     | 12.18        | 15.23                    | 16.17   | 14.74                               | 11.13          | 16.38       |
| Commercial      | 9.79         | 12.23                    | 12.98   | 11.83                               | 9.37           | 11.12       |
| Industrial      | 7.39         | 9.24                     | 10.09   | 9.12                                | 7.66           | 8.50        |
| Overall Average | 9.95         | 12.44                    | 13.33   | 12.04                               | 9.31           | 12.24       |

While the statistical definitions explored by Staff are useful in providing some comparisons, our preliminary analysis for participant comment and workshop discussion uses the minimum percentage of 25% to identify rates that are materially greater than the state average. Ultimately, there is the most justification within the energy industry and regulatory framework to use 25%

percent as a measure of materially greater rates, and this is the method preferred by statute. Of the IOUs with certificated territories as contemplated by § 40-3-118, C.R.S., Black Hills has residential rates that are materially greater than the statewide average by this definition. Public Service, doing business as Xcel Energy, does not have any customer classes with rates that are materially greater than the statewide average. Additionally, Public Service's rates are below the calculated state average except for its industrial rates.<sup>11</sup> However, even Public Services' industrial rates are not "materially greater" than the state average.

Black Hills' retail electric rate for residential customers is 16.38 cents per kWh, which is 34% higher than the statewide average and outside two weighted standard deviations of the average. Black Hills' commercial rate is 14% higher than the statewide average and their industrial rate is 15% higher. Although higher than the average, these rates are not "materially greater" using Staff's proposal of 25%. Black Hills has an overall rate of 12.24 cents per kWh, which is 23% higher than the statewide average rate of 9.95 cents per kWh. While this overall rate is not more than 25% higher, it is past the 90<sup>th</sup> percentile of total rates.

### **Rate Relief Options**

Some possible types of rate relief that could be considered are described below. Inclusion in this list does not imply any endorsement by Staff or the Commission; the rate relief option is discussed for the purpose of allowing participants to comment on the benefits and challenges of each concept. When relevant, Commission decisions and trial staff positions in past proceedings are discussed. Other interveners also took positions in those cases, so this summary of rate relief options and positions taken is not intended to be exhaustive. Staff merely intends to illustrate some of the complexities inherent in taking on rate relief options within the Commission's existing regulatory framework and jurisprudence.

**Increase funding for the Black Hills Energy Assistance Program:** Black Hills is the only utility in the state which is at the maximum allowable charge of 31 cents per residential customer under the Electric Service Low-Income Program. Rule 3412(g), 4 *Code of Colorado Regulations* (CCR) 723-3. Rule 4412(g), 4 CCR 723-4, imposes the same limit for natural gas utilities, but no gas utility is at the 31 cent maximum. As such, Black Hills is the only utility with a wait list for their low-income program, known as BHEAP, or the Black Hills Energy Assistance Program. Increasing the amount that is collected from other customers would provide rate relief to low income customers.

Black Hills could file a Petition for Rulemaking under Rule 1306, 4 CCR 723-1, or a Petition for a Waiver under Rule 1003, 4 CCR 723-1, of the relevant rule. If granted, this would allow for increased funding to Black Hill's low-income program. There is a Triennial Review of the low-income programs pending in Proceeding No. 20M-0013EG, which may lead to a low-income rulemaking of its own. This rulemaking could include consideration of whether the residential fee should be raised.

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<sup>11</sup> As Public Service represents more than half of the retail electricity sold in the state, Staff notes that Public Service's rates will naturally tend to pull the average towards its rate averages given the large customer size.

**Reduced cost of debt:** Black Hills's last Phase I rate case, Proceeding No. 16AL-0326E, resulted in Commission Decision No. C16-1140, which assigned Black Hills Colorado Electric a 5.29% cost of debt, along with a 9.37% return on equity and a capital structure of 52.39% equity and 47.61% debt. Trial Staff's position was for a 4.88% cost of debt. Black Hills Company requested a 5.20% cost of debt, but for base rate purposes the Commission, in a split decision, chose a 5.29% cost of debt. This figure was chosen in part so that lower cost debt at 4.40%, which had been used to finance the LM 6000 gas generation unit, would be assigned directly to that unit and become part of the ongoing Clean Air Clean Jobs Act (CACJA) rider with this lower cost debt assigned to it, as well as a different weighted average cost of capital based on 33% equity, 67% debt. The Commission decision noted that rates and charges for utility service are to be just and reasonable pursuant to § 40-3-101(1), C.R.S., and strove to make a determination of just and reasonable rates.

Black Hills's survey answers show, on the tab labeled Question 14- Weighted Average Cost of Capital- Company and Affiliates,<sup>12</sup> that the cost of debt for Black Hills Electric on June 30, 2020 was 3.91%, showing that Black Hills has taken advantage of the low interest rate environment in the meantime. Leaving other elements of the capital structure and return on equity equal, this would yield a weighted average cost of capital of  $[52.39\% \times 9.37\%] + [47.61\% \times 5.29\%] = 6.77\%$ . (See page 28 of Decision No. C16-1140).  $7.43\% - 6.77\% = 0.66\%$ , or a 66 basis point drop in the weighted average cost of capital. It is important to note that in a rate case, every element of the above calculation (as well as any additions or subtractions from rate base, roll-ins of existing riders, tax considerations, and other assorted elements) would be subject to a utility proposal and testimony, discovery and intervener adjustments and testimony, and a decision either from the Commission or an Administrative Law Judge and levels of appeal beyond that, both to the Commission and to state courts. Nonetheless, the discrepancy between the cost of debt awarded to Black Hills and Black Hills's actual cost of debt is a substantial one and does point towards one avenue of rate relief. It is also worth noting that "single issue ratemaking" is disfavored within regulatory jurisprudence and thus an attempt to reset Black Hills's rates solely based on cost of debt may or may not be feasible.

**Residential Rate mitigation:** Rate mitigation was a contested topic in the last Black Hills Electric Phase II Proceeding (Proceeding No. 17AL-0477E). Black Hills proposed to mitigate its residential rates by decreasing the residential increase indicated by the Class Cost of Service Study (CCOSS) by 50%. Commission trial staff opposed the mitigation effort and recommended a three to five-year phased-in approach whereby residential rates would rise to the proper cost-based level over time. See Answer Testimony of Erin T. O'Neill, pages 23-27. In the end the Commission accepted Black Hills's rate mitigation approach, finding that a 17% increase on the residential class was too large and choosing to use Black Hills's Revenue Requirement for Rate Mitigation (see Decision No. C18-0445 at ¶ 119, pages 39-40). Thus any effort to further mitigate the residential rates of Black Hills's residential customers at this time, at the expense of other rate classes, would further exacerbate the discrepancy with the CCOSS which was presented in Black Hills's most recent Phase II case.

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<sup>12</sup> Attachment 1 Corrected Public Version filed August 31, 2020 in this proceeding, page 4 of 11

**Special Contract/Economic Development Rates:** Economic Development Rates are permitted by statute to generally promote the development of the Colorado economy. Investor-owned utilities may offer a rate to a commercial or industrial customer which is below the tariff price but not below the marginal cost of serving the customer. The statute specifically provides that the utility bears the burden of proof to establish that “other customers on the utilities system do not experience a rate increase due to a rate or rates offered to a qualifying commercial or industrial customer pursuant to this section.” § 40-3-104.3(4)(c)(II)(C), C.R.S.

Black Hills filed an application for an economic development rate tariff in Proceeding No. 18A-0791E, and an application for a Service Agreement with a customer pursuant to the economic development rate tariff in Proceeding No. 19A-0055E. The application was ultimately granted with some modifications and conditions. However, the customer in question was unable to meet its obligations under the contract and never took service from Black Hills, and a Notice of Termination was filed into the Consolidated Proceeding on December 18, 2019 by Black Hills.

An Economic Development Rate may help a utility to attract an employer which will in turn lead to more residential and small commercial customers over time, and adding more customers may result in lower rates for the existing customers than otherwise would occur. In the short term, an Economic Development Rate is not likely to provide rate relief to other customers.

**Black Hills’ Electric Resource Plan (ERP) Amendment, 19A-0660E:** This recent proceeding, styled as “Renewable Advantage,” was designed to add inexpensive solar resources to the Black Hills system that would lower overall rates. This proceeding is completed and the settlement agreement has been approved. The parties to the settlement agreed that Black Hills could acquire a solar Purchase Power Agreement (PPA) resource, with potential back-up resources if the preferred bid falls through. The parties also agreed that the resource would result in lower costs to ratepayers, although this will come in the form of lower ECA costs – not lower base rate costs. Trial staff stated in testimony supporting the settlement that “[t]he Preferred Bid is projected to result in approximately \$17 million in customer savings in the 2020 to 2031 timeframe and \$31 million over the life of the Purchase Power Agreement (through 2038).”<sup>13</sup>

**Future Electric Resource Planning and Subsequent Rate Cases:** Going forward for ERPs, the legislature has provided in § 40-2-125.5(5)(f), C.R.S., that affected communities within a qualifying retail utility’s service territory and organizations representing those communities shall be presumed to have standing in an ERP which presents a qualifying retail utility’s clean energy plan. The next ERP filed after January 1, 2021 is required to include a clean energy plan. A “qualifying retail utility” is defined as a retail utility offering service to more than 500,000 customers, which makes Public Service the only qualifying retail utility in the state required to file a clean energy plan, though other utilities are permitted to opt in if they so choose. The statute provides that the clean energy plan shall impact rates no more than 1.5% on an average bill. While the ERP process does not include a determination of rates, and is not a rate

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<sup>13</sup> William J. Dalton Settlement Testimony p. 10, lines 12-15.

proceeding, the statutory provisions recognize that communities have an interest in determining how Colorado's complex goals for renewable energy and resource planning will be met. Determinations of which resources to pursue and where those resources will be sited are important considerations for the communities of Colorado as utilities move to meet the state's renewable energy and emissions reduction goals. In subsequent rate proceedings following the ERP process, utility customers of Colorado are statutorily represented by the Office of Consumer Counsel (OCC).

While presumed community standing does not provide rate relief to customers in a direct sense, it does give customers of the utility's service territory a seat at the table in these proceedings in the form of their local governments, as well as giving more stakeholders a voice in the ERP process. These proceedings will necessarily be decided on the facts and issues presented, but Staff opines that these added statutory requirements, in addition to OCC's ongoing duties, should not be overlooked as meaningful rate relief opportunities.

### **Customer Behavior Strategies for Rate Relief**

**Time of Use/Time of Day Rates:** Black Hills proposed a pilot program for residential Time of Day rates in Proceeding No. 18A-0676E, but which ultimately did not lead to a residential Time of Day program. For residential customers in particular, Staff has argued that Time of Use rates can provide benefits in the short-term through individual behavior change, in the medium-term through higher load factors leading to lower Residential allocation in Phase II proceedings, and in the long-term through avoiding the need for additional peaking generation, which would be a benefit to the entire system as well as the residential class. However, the Commission determined in 18A-0676E that customers which are eligible for low-income assistance and customers who are slightly further up the income ladder would likely see their bills increase through the Time of Day rate. See Decision No. C19-0590, with special concurrences from all Commissioners for a discussion of the specific rationale.

**Demand-Side Management (DSM) Programs:** Black Hills' current 2019-2021 DSM plan was approved in Proceeding No. 18A-0279E. Black Hills' energy efficiency goals were increased from their previously approved plan for 2016-2018, which was approved in Proceeding No. 15A-0424E. Annual reports for each DSM year can be found in those proceedings.

In 2018, Black Hills had achieved 90% of their energy efficiency goal at 74% of their program budget, making their plan fairly cost-effective. Looking specifically at the residential DSM programs tells a similar story; for 2018 87% of the residential kWh savings goal was met at 70% of the program budget. Additionally, for 2018, all cost-benefit tests applied were positive, ranging from \$4.5 million to \$13.2 million. However, in 2019 Black Hills achieved only 65% of their energy efficiency goal using 79% of their approved budget, and did not achieve their DSM bonus. Additionally in 2019, only 49% of the residential kWh savings goal was met at 93% of the budget, and the Ratepayer Impact Measure Test showed a Net Benefit of -\$12.7 million, though three out of the four cost-benefit tests applied resulted in Net Benefits ranging from \$9 million to \$14.7 million. Looking at the 2019 report for residential DSM programs, the home energy comparison report and residential retail products programs did not produce nearly as

much energy savings (and, by extension, bill savings) as anticipated. Residential new homes and residential high efficiency cooling were also under-utilized, though with smaller energy efficiency goals for those programs. Going forward, increased DSM outreach and increased DSM customer uptake could lead to bill relief for customers who take advantage of these programs.

| Program Category                    | 2019 Goal @ Meter | 2019 Actual @ Meter | 2019 Goal @ Generator | 2019 Actual @ Generator | % of Goal |
|-------------------------------------|-------------------|---------------------|-----------------------|-------------------------|-----------|
| Residential Retail Products         | 4,473,856         | 2,919,272           | 4,827,208             | 3,149,841               | 65%       |
| Residential High Efficiency Cooling | 281,518           | 102,336             | 303,752               | 110,418                 | 36%       |
| Residential Appliance Recycling     | 84,327            | 183,459             | 90,987                | 197,948                 | 218%      |
| Residential On-Site Evaluation      | 128,317           | 161,334             | 138,452               | 174,077                 | 126%      |
| Home Energy Comparison Report       | 6,105,000         | 2,090,000           | 6,587,182             | 2,255,071               | 34%       |
| Residential New Homes               | 30,928            | 0                   | 33,370                | 0                       | 0%        |

### Stakeholder Proposals for Rate Relief

**Community Choice Energy:** Comments from stakeholder Larry Miloshevich indicated support for a PUC study of Community Choice Energy and referenced House Bill 20-1064, which was introduced in the 2020 legislative session. HB 20-1064 did include that “a consultant study was eliminated as a result of COVID-related budget constraints” and Staff believes it is worthwhile to think about the 20 topics highlighted by Mr. Miloshevich on pages 12-13 of his comments and whether those 20 topics can be best addressed by a consultant or otherwise. It is also worth noting that the CCE approach advocated by Mr. Miloshevich, which follows the model of California, may or may not offer rate relief to ratepayers, as it is more targeted at facilitating clean energy and emissions reduction goals. To undertake such a study on our own is beyond the scope of this retail rate survey, but it is a topic that warrants discussion by participants, in the form of comments and in the form of discussion at the workshop.

**Taking local economic conditions into consideration:** The Office of Consumer Counsel (OCC) proposed taking local economic conditions into consideration as a topic of potential rate relief, and Staff believes this topic merits some discussion. It is not a traditional cost of service regulation topic. Typically, energy assistance programs are used to help those who otherwise would face an undue energy burden. Given the wait list for the Black Hills Energy Assistance Program discussed above, it is a topic of particular importance for Black Hills Colorado Electric. The local economic conditions of the Pueblo/Southern Colorado area are a subtext running through many of the Commission's recent Black Hills decisions, including the Time of Day decision, the Economic Development Rates decision, and the Phase II Electric decision. Frequently this means that solutions which might be considered to help one subset of customers would harm another subset, and given the economic precarity of the Black Hills residential customer base as a whole, any potential solution is fraught from the start. To the extent that OCC wishes to expand on how local economic conditions would be taken into consideration in current Commission jurisprudence or as part of a different regulatory regime which would need to be ratified by the legislature, it would be worthwhile to understand the implications of what OCC proposes.