**Q. Please state your name, business address, and present position with Rocky Mountain Power (the "Company"), a division of PacifiCorp.**

A. My name is Paul H. Clements. My business address is 1407 West North Temple Street, Suite 310, Salt Lake City, Utah 84116. My present position is Director, Commercial Services for Rocky Mountain Power.

**Q. How long have you been in your present position?**

A. I have been in my present position since June 2015. I previously held similar positions within PacifiCorp since December 2004.

**Q. Please describe your education and business experience.**

A. I have a B.S. in Business Management from Brigham Young University. I have been employed with PacifiCorp since 2004 as an originator/power marketer responsible for negotiating qualifying facility contracts, negotiating interruptible retail special contracts, and managing wholesale or market-based energy and capacity contracts with other utilities and power marketers. I also worked in the merchant energy sector for approximately six years in pricing and structuring, origination, and trading roles for Duke Energy and Illinova.

## PURPOSE AND SUMMARY OF TESTIMONY

**Q. What is the purpose of your testimony?**

A. The purpose of my testimony is to support the Company's application for approval of the Energy Services Agreement ("the Contract") between Kennecott Utah Copper LLC ("Kennecott") and Rocky Mountain Power (the "Company").

Specifically, I provide a description of the type of service Kennecott has historically received from the Company, an analysis of Kennecott's historical contribution to the Company's fixed costs, an overview of Kennecott's options for electric service, an overview of the material terms and conditions included in the proposed Contract, and an economic analysis supporting the contract rates. I also include a brief description of the jurisdictional cost allocation analysis and the regulatory accounting treatment for the Contract which is presented and supported by Company witness Mr. Steven R. McDougal.

**Q. Please summarize your testimony.**

A. My testimony supports the Company's recommendation for Commission approval of the Contract. As a special contract customer for decades, Kennecott has consistently contributed to the Company's fixed costs at levels approved by the Commission. The Contract includes terms and conditions that result in Kennecott's continuing contribution to fixed costs at levels similar to its contribution levels over the past nine years. Kennecott has the option to take service from a non-utility energy supplier or operate its existing or proposed new generation at high levels of availability. Exercising either option will result in Kennecott purchasing less electricity from the Company and thus will reduce Kennecott's contribution to the Company's fixed costs, which may negatively impact other Utah customers. The Contract includes terms and conditions that provide greater certainty to the

Company and its customers related to the amount of energy purchased from the Company by Kennecott over the [redacted] term and greater certainty related to the resulting fixed cost contribution. The Contract rate and other terms result in a contribution to fixed costs at a comparable level to the level of contribution over the past nine years, resulting in an immaterial impact to other Utah customers.

**HISTORY OF THE ELECTRIC SERVICE PROVIDED TO KENNECOTT**

**Q. Please briefly describe Kennecott's electric load and generating assets.**

A. Kennecott is a large industrial customer with an average gross load of approximately [redacted][1] with an approximate load factor of [redacted] percent. Kennecott owns and operates multiple generating units behind its meter: a 175 MW nameplate "power plant" and two co-generation facilities with nameplates of 31.8 MW and 7.54 MW. The 175 MW power plant can operate on coal March through October only or natural gas year-round and is not considered a co-generation unit.[2] The two co-generation facilities are qualifying facilities ("QFs") and are operated year-round as an integral part of Kennecott's general business processes. The parties have typically entered into separate QF agreements in which Kennecott sells all or a portion of the output of the QFs to the Company. The QF agreements have been

[1] Average gross load for the nine-year period 2007 through 2015. Gross load is the total consumption by Kennecott [redacted] before deducting for self-generation.

[2] The power plant does not utilize waste heat or some other qualifying facility-like fuel type and does not produce steam for a purpose other than generating electricity. It does not meet the requirements of a qualifying facility and is more like a "merchant" power plant.

renewed on an annual basis over the past several years.

**Q. How has Kennecott historically utilized its generating assets?**

A. Kennecott has historically utilized its large generating capabilities to reduce its reliance on Rocky Mountain Power for supply of electric power and energy during the year, in particular during the months of March through October when the power plant can operate on coal.

**Q. What type of contract for electric service has been in place between Kennecott and the Company?**

A. Kennecott has typically received service under a special retail electric service agreement approved by the Commission. Prior special contracts have included rates for service when Kennecott relies entirely on the Company for service and rates for service when Kennecott offsets a portion of its load with its self-generation and only relies on the Company for back-up and some supplemental service. The special contracts have at times also included an incentive for Kennecott to operate its generation at a high level of availability during the summer months when such an arrangement was beneficial to Kennecott and the Company. The special contracts have also at times placed limitations on the months in which Kennecott could operate its generation to ensure a certain amount of supplemental service was provided by the Company. The special contracts have been negotiated on a case-by-case basis taking into account conditions at the time of negotiation.

**Q. Why has Kennecott been served under a special contract instead of regular tariff rates?**

A. Kennecott is a unique customer. It owns and operates 214.34 MW nameplate of generation behind its meter. While certain customers own some generation behind their meter, most of the time that generation is a QF and is tied to the customer's normal business process. Kennecott is different in that it operates 175 MW nameplate of generation that is not tied to any business process and instead can be dispatched solely on economics. The parties negotiated and executed special contracts over the years to establish terms and conditions that optimized the economic value of the generating assets to the mutual benefit of Kennecott and the Company's other customers.

**Q. Please provide an example of how Kennecott's behind-the-meter generation impacts other customers.**

A. Customers with behind-the-meter generation must make the decision to either: 1) operate their generation and offset all or a portion of their own load (thus reducing the amount of electricity purchased from the Company) or 2) not operate their generation and purchase all of their electricity from the Company. Most customer generation is "co-generation" and is an integral part of the customer's business operations (by utilizing waste heat from a process or by providing process steam).

Customers with co-generation do not typically decide whether or not to run based solely on the economics of their generation costs compared to the Company's retail rates because they <u>must</u> run their generation to support their business operations.

Kennecott's power plant is independent of its core operations and therefore can be dispatched solely on the economics of its operating costs compared to the Company's retail rates. This results in a unique arrangement which must be optimized through a negotiated special contract. Absent specific contractual terms and conditions, Kennecott is not obligated to operate (or not operate) its generation in any specific manner. At times, it is economic for the Company to incent Kennecott to run its generation at a high level of availability, and at times it is economic for the Company to attempt to limit the times when Kennecott runs its generation. The amount of energy Kennecott purchases from the Company (instead of self-generating) impacts Kennecott's contribution to the Company's fixed costs which, in turn, impacts other customers.

**Q. How has Kennecott's generation been treated in recent special contracts?**

A. Between 2000 and 2012, it was economic for the Company to incent Kennecott to run its generation during certain months. During those months, the marginal cost to serve Kennecott was higher than Kennecott's retail rate, so other customers benefited by Kennecott self-generating instead of buying from the Company at retail rates. The special contracts during that period included terms and conditions that provided an incentive to Kennecott to ensure its generation ran at a high availability factor in certain months. In 2011 and 2012, due to market conditions, the generation incentive was greatly reduced compared to prior years and was applicable to fewer months than in prior years. This resulted in less self-generation from Kennecott in this time period. Starting in 2013 and continuing through the current contract, it was economic for the Company to eliminate the generation credit incentive completely and instead limit Kennecott's generation to certain months through contractual limitations in which generation was prohibited during certain months. During this time period, the marginal cost to serve Kennecott was lower than Kennecott's retail rate for most or all months in the year, so customers benefited when Kennecott purchased more energy from the Company at tariff rates.

Chart 1 below shows the Kennecott gross load[3], Kennecott's self-generation, and the RMP-served load between 2007 and 2015.

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[3] [redacted]

Chart 1

[redacted]

When Kennecott's self-generation was contractually limited or incentives to generate were low and applicable to only a few months of the year, which was largely the case starting in 2011, Kennecott purchased more MWh from the Company at retail rates. As shown in Chart 1, the amount of load served by RMP in 2015 was [redacted] percent [redacted] than the amount served in 2007, even though the gross load was [redacted] percent [redacted].

**ANALYSIS OF KENNECOTT'S CONTRIBUTION TO FIXED COSTS**

**Q. How do Kennecott purchases at retail rates provide a benefit to other Utah customers?**

A. If the Company is not investing in new generation or transmission resources but instead can serve Kennecott's load with existing resources, and if the marginal cost to serve Kennecott's load is below the retail rate paid by Kennecott, other customers benefit from Kennecott's contribution to the Company's fixed costs of generation and transmission.

**Q. What has been Kennecott's contribution to fixed costs over the last nine years?**

A. A reasonable estimate of a customer's contribution to fixed costs can be calculated by subtracting the Company's marginal cost of generation from the customer's average retail rate. The Company's actual net power costs is a reasonable estimate of its marginal cost of generation. To estimate the contribution to fixed costs on a per unit (MWh) basis for Kennecott between 2007 and 2015, I subtracted the Company's actual average system net power costs from Kennecott's average rate for each year. Chart 2 shows this calculation and the resulting annual contribution to fixed costs, in dollars per MWh.

Chart 2

[redacted]

Chart 2 shows how both Kennecott's average retail rate and the Company's net power costs have risen over the past nine years, but Kennecott's average retail rate has generally risen more over this period, resulting in an increasing contribution to fixed costs, on a per unit basis.

To determine the total contribution to fixed costs, the per unit (MWh) contribution must be multiplied by the number of MWh sold by the Company in that period. Chart 3 belowshows the annual MWh sold by the Company to Kennecott on the right axis (the line) and the total annual contribution to fixed costs

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Chart 3

[redacted]

[redacted]

[redacted]. The amount of energy Kennecott buys from the Company has the largest impact on the total amount of contribution to fixed costs. Chart 3 shows how tightly correlated those two items have been over the past nine years. [redacted].

**KENNECOTT'S ENERGY SUPPLY OPTIONS**

**Q. Does Kennecott have other options for receiving electric service besides Rocky Mountain Power?**

A. Yes. First, Kennecott's existing generation can run at a high rate of availability if economic for Kennecott. Second, Kennecott has evaluated construction of additional generation behind its meter and possesses an air permit for a design that would add a 175 MW nameplate combustion turbine to its existing generation assets which, if built, could serve Kennecott's entire load.

Third, pursuant to Utah Code Ann. § 54-3-32, Kennecott has the ability to take service from a non-utility energy supplier. Under Utah Code Ann. § 54-2-1(7)(b) and -1(19)(a), certain entities are exempted from the definition of "electrical corporation" and "public utility", respectively, if they provide electric service to an "eligible customer". This would allow: 1) a third party to build, own, finance, or operate a generation facility and provide the energy directly to the eligible customer, or 2) allow a wholesale supplier (defined in Utah Code Ann. § 54-2-1(17) as a "non-utility energy supplier") to provide power to the eligible customer from the wholesale market or other generation resources. Kennecott meets the definition of an eligible customer and therefore can take service from a non-utility energy supplier.

**Q. What is the process for Kennecott to take service from a non-utility energy supplier?**

A. The following process must be followed for Kennecott to initiate a transfer of service from the Company to a non-utility energy supplier:

- Provide a minimum of 18 months' notice to the utility of the intended date of transfer of service to a new provider to allow for adequate planning by the utility of loss of the load, and concurrently request transmission service under the PacifiCorp OATT. Kennecott must apply with PacifiCorp transmission no later than 240 days before the intended date of transfer of service.
- No sooner than 12 months but no later than 8 months before the later of the original intended date of transfer or the updated intended date of transfer, the Utah Division of Public Utilities ("DPU") is required to file a petition with the Commission requesting a proceeding to determine any cost impacts associated with Kennecott's departure.

- If Kennecott goes to a non-utility energy supplier, it has the right to return to the Company's retail service after providing a 3-year notification of its intent to return.

**Q. Has Kennecott initiated the process to take service from a non-utility energy supplier?**

A. Yes. Kennecott provided notice to the Company that included an intended date of transfer of June 15, 2017.

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A. Kennecott proceeded with arrangements for non-utility electric supply and its own transmission service agreement, but the parties continued negotiating terms and conditions under which Kennecott would remain a customer of the Company and withdraw or delay its intended date of transfer. The parties have reached agreement on a new [redacted] contract in which Kennecott remains a customer of Rocky Mountain Power, and the Company understands that Kennecott will move the intended date of transfer to April 13, 2018, during the pendency of this proceeding and then to the end of the Contract term, [redacted], upon approval of the Contract.

**Q. How does the new contract and the new intended date of transfer impact the DPU's requirement to file a petition with the Commission requesting a proceeding to determine any cost impacts associated with Kennecott's**

**departure?**

A. Since the intended date of transfer is moved to [redacted], the DPU's requirement is moved to no sooner than 12 months but no later than 8 months before [redacted].

**Q.** [redacted]

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A. [redacted]

**MATERIAL TERMS AND CONDITIONS OF THE CONTRACT**

**Q. Please provide an overview of the key terms of the contract.**

A. The key terms are summarized as follows:

[redacted]

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[redacted]

[redacted]

**Q. Have you prepared an exhibit showing how the proposed Contract structure compares to the existing contract structure?**

A. Yes. Exhibit RMP **___**(PHC-1) provides an illustrative comparison of the major components of the existing contract and the proposed Contract.

**Q. How did the parties arrive at a** [redacted] **contract term?**

A. The Company desired to execute a long-term contract in order to provide certainty to the Company and its customers that it will continue to serve Kennecott as a retail customer and that customers will continue to receive the benefit of Kennecott's contribution to the Company's fixed costs. Kennecott desired a contract term that provides some degree of long-term rate and contract certainty. The Contract term aligns with both objectives.

**Q.** [redacted]

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A. [redacted]

**Q.** [redacted]

A. [redacted]

[redacted]

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A. [redacted]

**Q.** [redacted]

A. [redacted]

[redacted]

**Q.** [redacted]

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A. [redacted]

[redacted]

**Q. Has the Company prepared an illustrative billing example incorporating the various components of the Contract?**

A. Yes. Exhibit RMP ___(PHC-2) provides a billing example for an illustrative day.

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A. Kennecott will continue to be included in Utah loads. Company witness Mr. McDougal provides additional explanation of the regulatory treatment of the Contract.

## ECONOMIC ANALYSIS SUPPORTING THE CONTRACT

**Q. What economic analysis did the Company perform to evaluate the rates in the Contract?**

A. The primary analysis performed by the Company involved comparing Kennecott's contribution to fixed costs under the proposed Contract to Kennecott's historical contribution to fixed costs under previous contracts. As shown in Chart 3, Kennecott's annual contribution to fixed costs over the past nine years has ranged from [redacted], with an average over the nine years of [redacted]

[redacted]. The wide range is primarily attributable to the impact of Kennecott's self-generation. The more Kennecott self-generates, the lower the contribution to fixed costs because Kennecott purchases less energy from the Company. Over the nine-year period used in the analysis, Kennecott's self-generation ranged from a minimum of [redacted] to a maximum of [redacted]. During this period, there were years in which Kennecott ran its generation at near maximum capacity and times in which Kennecott was contractually limited to running its generation only in certain months. The Company believes this nine-year period offers a reasonable average range of outcomes for Kennecott's operations under the existing contract structure, and the [redacted] average contribution to fixed costs over this time period is a reasonable data point for reference when evaluating the proposed Contract.

To determine the contribution to fixed costs under the proposed Contract, the Company evaluated the costs and revenues associated [redacted] for calendar year 2017.

The current gross load forecast for [redacted] is [redacted], which is similar to the actual load in 2015 and the part-actual, part-forecasted load for 2016. Under the proposed Contract, the load is expected to be served as follows:

[redacted]

Table 1 shows the expected volumes, revenues[4] and marginal costs[5] associated with

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**Table 1**

[redacted]

Table 1 shows that the expected revenue under the proposed Contract for 2017 is [redacted] while the expected cost to serve the various products provided to Kennecott [redacted] is [redacted], resulting in an estimated contribution to fixed costs in 2017 of [redacted]. This amount is [redacted] higher than

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[4] [redacted]

[5] The assumed marginal cost is the Company's estimate of system average net power costs for 2017 grossed up by 6.3% to account for losses.

Kennecott's average contribution to fixed costs of [redacted] over the past nine years.

**Q. What conclusion can you draw from this analysis comparing the contribution to fixed costs under the proposed Contract to the historical average contribution to fixed costs?**

A. The proposed Contract results in an annual contribution to fixed costs that is above the average annual contribution to fixed costs Kennecott [redacted] have made over the past nine years. In other words, even though the contract structure and rate structure for Kennecott has changed slightly in the Contract, the resulting contribution to Company fixed costs remains at a level that is consistent or slightly

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**Q. If Kennecott were to receive service in 2017 under a contract structure and contract rate similar to previous contracts, instead of the proposed Contract, would you expect the contribution to fixed costs to be similar to the average over the past nine years?**

A. No. Even if Kennecott elected not to leave for a non-utility energy supplier, I expect the contribution to fixed costs would be lower in 2017 than the historical average; and instead would be closer to the lower levels seen in 2007 through 2010. As I described earlier, a major factor in the level of contribution to fixed costs is the amount of self-generation that occurs. [redacted]

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A. [redacted][6]

[6] To calculate the on-peak Schedule 9 rate, the analysis assumes the demand charge is spread across on-peak hours only since the demand charge is assessed based on measured load during the on-peak period.

Chart 4

[redacted]

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[redacted]

**Q.** [redacted]

A. [redacted]

[redacted]

**Q. What conclusion can you draw from the evaluation of the economics of**

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A. [redacted]

The proposed contract includes an estimated contribution to fixed costs of [redacted], which is higher than the contribution that is estimated to occur if Kennecott were to take service under standard tariff rates and run its generation at a high rate of availability (thus offsetting a large percentage of its load).

**Q. Has the Company performed any additional analysis to evaluate the economics of the Contract?**

A. Yes. Mr. McDougal provides testimony describing how the Company used its jurisdictional cost allocation model to evaluate the impact of the Contract on Utah revenue requirement. His analysis shows that the impact of the new Contract to Utah customers is negligible, and the Contract is a net benefit on a total system basis.

**Q. Does this conclude your direct testimony?**

A. Yes.