- 1 Q. Please state your name, business address, and present position with Rocky
- 2 Mountain Power (the "Company"), a division of PacifiCorp.
- 3 A. My name is Paul H. Clements. My business address is 1407 West North Temple
- 4 Street, Suite 310, Salt Lake City, Utah 84116. My present position is Director,
- 5 Commercial Services for Rocky Mountain Power.
- 6 Q. How long have you been in your present position?
- 7 A. I have been in my present position since June 2015. I previously held similar
- 8 positions within PacifiCorp since December 2004.
- 9 Q. Please describe your education and business experience.
- 10 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
- 13 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

18 Q. What is the purpose of your testimony?

- 19 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

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A.

Company and its customers related to the amount of energy purchased from the Company by Kennecott over the 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.

Kennecott is a large industrial customer with an average gross load of approximately with an approximate load factor of 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. 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

<sup>&</sup>lt;sup>1</sup> Average gross load for the nine-year period 2007 through 2015. Gross load is the total consumption by Kennecott before deducting for self-generation.

<sup>&</sup>lt;sup>2</sup> 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?
    - 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.

79	Q.	Why has Kennecott been served under a special contract instead of regular
80		tariff rates?
81	A.	Kennecott is a unique customer. It owns and operates 214.34 MW nameplate of
82		generation behind its meter. While certain customers own some generation behind
83		their meter, most of the time that generation is a QF and is tied to the customer's
84		normal business process. Kennecott is different in that it operates 175 MW
85		nameplate of generation that is not tied to any business process and instead can be
86		dispatched solely on economics. The parties negotiated and executed special
87		contracts over the years to establish terms and conditions that optimized the
88		economic value of the generating assets to the mutual benefit of Kennecott and the
89		Company's other customers.
90	Q.	Please provide an example of how Kennecott's behind-the-meter generation
91		impacts other customers.
92	A.	Customers with behind-the-meter generation must make the decision to either: 1)
93		operate their generation and offset all or a portion of their own load (thus reducing
94		the amount of electricity purchased from the Company) or 2) not operate their
95		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).

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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.

A.

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?

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

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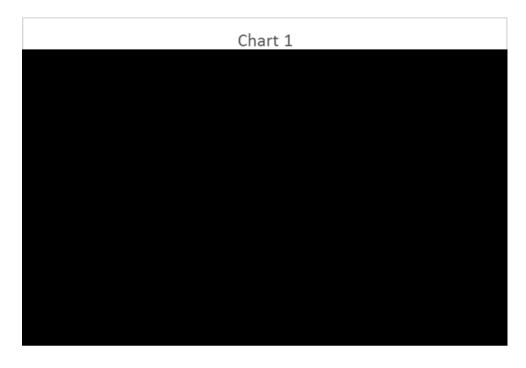
that provided an incentive to Kennecott to ensure its generation ran at a high availability factor in certain months. In 2011 and 2012, due to market conditions, the generation incentive was greatly reduced compared to prior years and was applicable to fewer months than in prior years. This resulted 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 <sup>3</sup>, Kennecott's self-



generation, and the RMP-served load between 2007 and 2015.

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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 percent than the amount served in 2007, even though the gross load was percent.

## ANALYSIS OF KENNECOTT'S CONTRIBUTION TO FIXED COSTS

- Q. How do Kennecott purchases at retail rates provide a benefit to other Utah customers?
- 140 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

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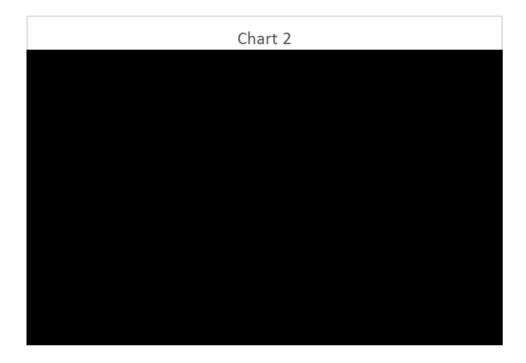
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to serve Kennecott's load is below the retail rate paid by Kennecott, other customers benefit from Kennecott's contribution to the Company's fixed costs of generation and transmission.

# 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.



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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.

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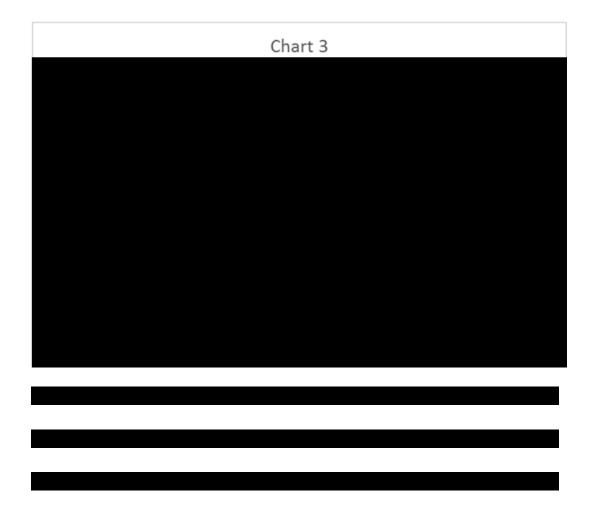
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To determine the total contribution to fixed costs, the per unit (MWh) contribution must be multiplied by the number of MWh sold by the Company in that period. Chart 3 belowshows the annual MWh sold by the Company to Kennecott on the right axis (the line) and the total annual contribution to fixed costs 162 CONFIDENTIAL – SUBJECT TO UTAH PUBLIC SERVICE COMMISSION RULE 746-100-16



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166		. The amount of
167		energy Kennecott buys from the Company has the largest impact on the total
168		amount of contribution to fixed costs. Chart 3 shows how tightly correlated those
169		two items have been over the past nine years.
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172	KEN	NECOTT'S ENERGY SUPPLY OPTIONS
173	Q.	Does Kennecott have other options for receiving electric service besides Rocky
174		Mountain Power?
175	A.	Yes. First, Kennecott's existing generation can run at a high rate of availability if
176		economic for Kennecott. Second, Kennecott has evaluated construction of
177		additional generation behind its meter and possesses an air permit for a design that
178		would add a 175 MW nameplate combustion turbine to its existing generation
179		assets which, if built, could serve Kennecott's entire load.
180		Third, pursuant to Utah Code Ann. § 54-3-32, Kennecott has the ability to

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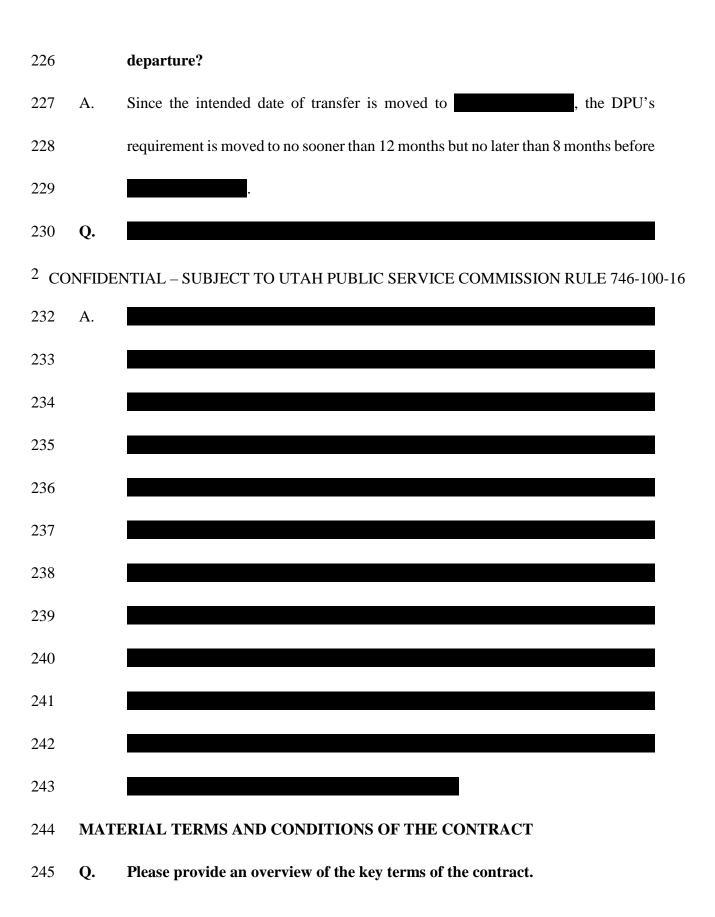
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take service from a non-utility energy supplier. Under Utah Code Ann. § 54-2-1(7)(b) and -1(19)(a), certain entities are exempted from the definition of "electrical corporation" and "public utility", respectively, if they provide electric service to 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

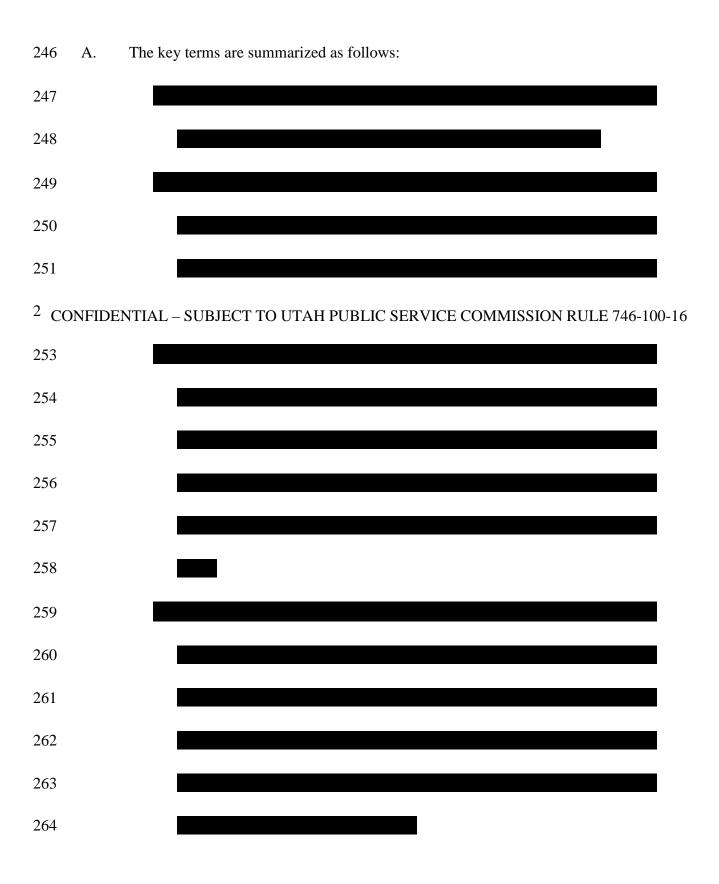
customer, or 2) allow a wholesale supplier (defined in Utah Code Ann. § 54-2-1(17)
as a "non-utility energy supplier") to provide power to the eligible customer from
the wholesale market or other generation resources. Kennecott meets the definition
of an eligible customer and therefore can take service 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.

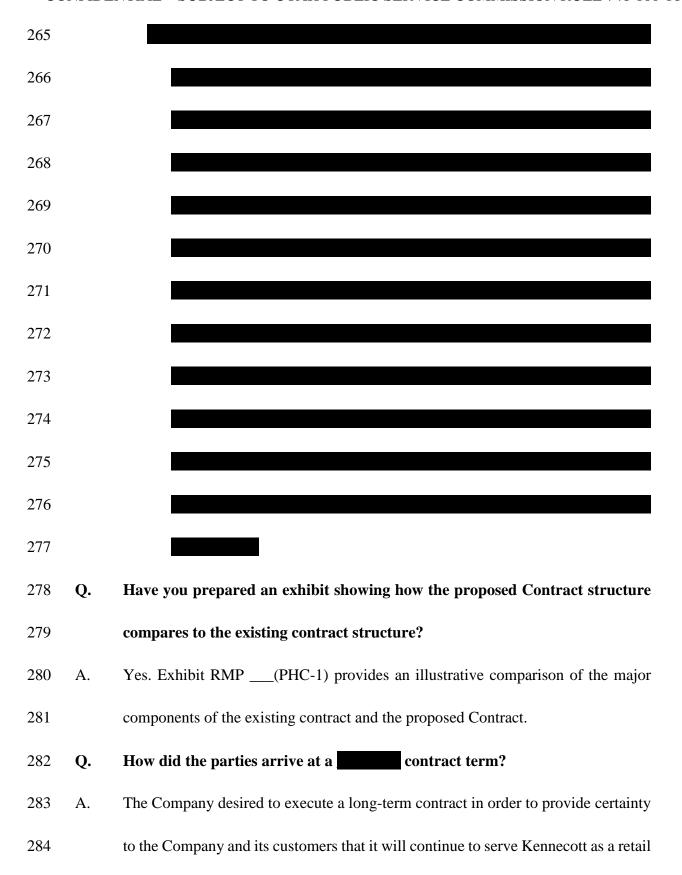
206		• If Kennecott goes to a non-utility energy supplier, it has the right to return	
207		to the Company's retail service after providing a 3-year notification of its	
208		intent to return.	
209	Q.	Has Kennecott initiated the process to take service from a non-utility energy	
210		supplier?	
211	A.	Yes. Kennecott provided notice to the Company that included an intended date of	
212		transfer of June 15, 2017.	
<sup>2</sup> CONFIDENTIAL – SUBJECT TO UTAH PUBLIC SERVICE COMMISSION RULE 746-100-16			
214	A.	Kennecott proceeded with arrangements for non-utility electric supply and its own	
215		transmission service agreement, but the parties continued negotiating terms and	
216		conditions under which Kennecott would remain a customer of the Company and	
217		withdraw or delay its intended date of transfer. The parties have reached agreement	
218		on a new contract in which Kennecott remains a customer of Rocky	
219		Mountain Power, and the Company understands that Kennecott will move the	
220		intended date of transfer to April 13, 2018, during the pendency of this proceeding	
221		and then to the end of the Contract term, upon approval of the	
222		Contract.	
223	Q.	How does the new contract and the new intended date of transfer impact the	
224		DPU's requirement to file a petition with the Commission requesting a	
225		proceeding to determine any cost impacts associated with Kennecott's	

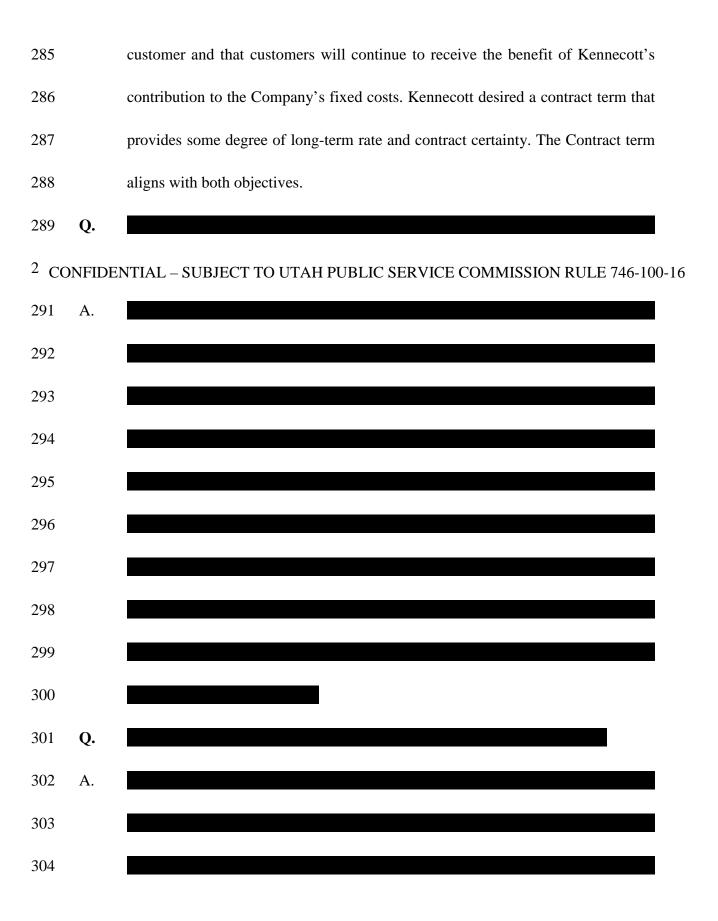


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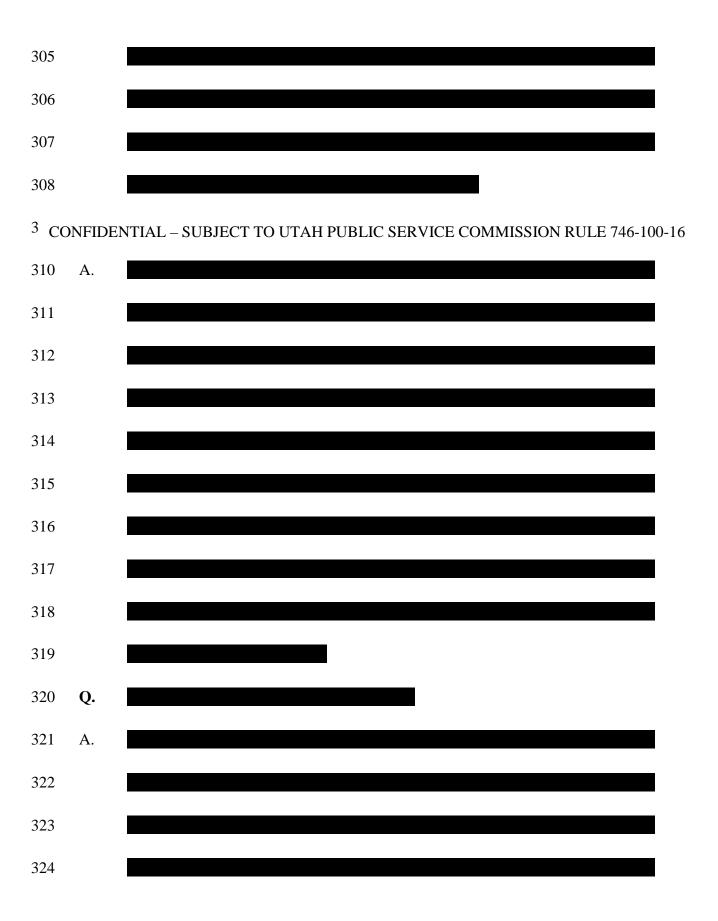


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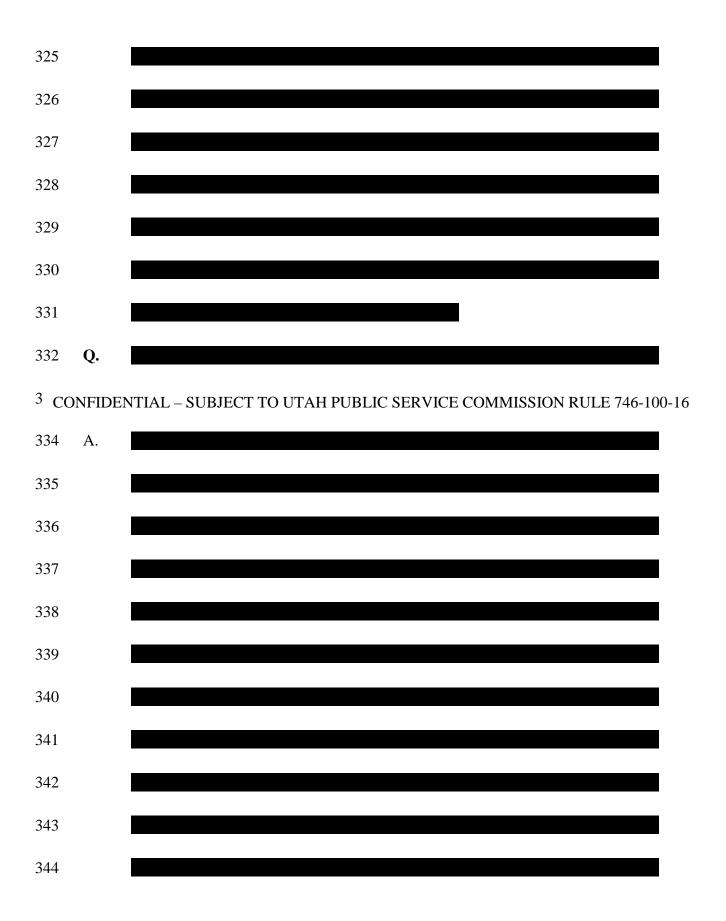




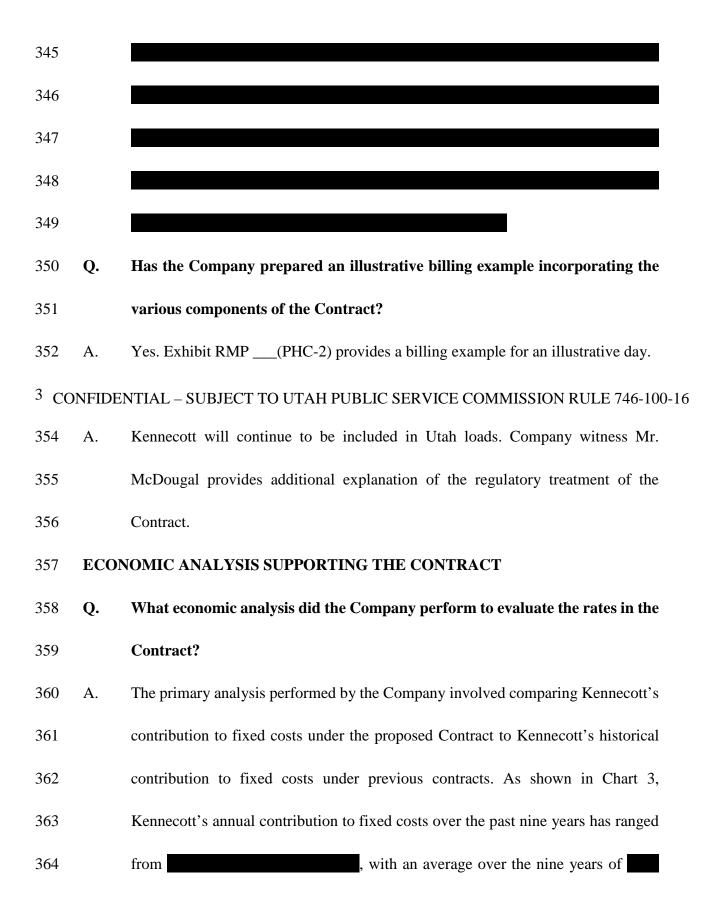
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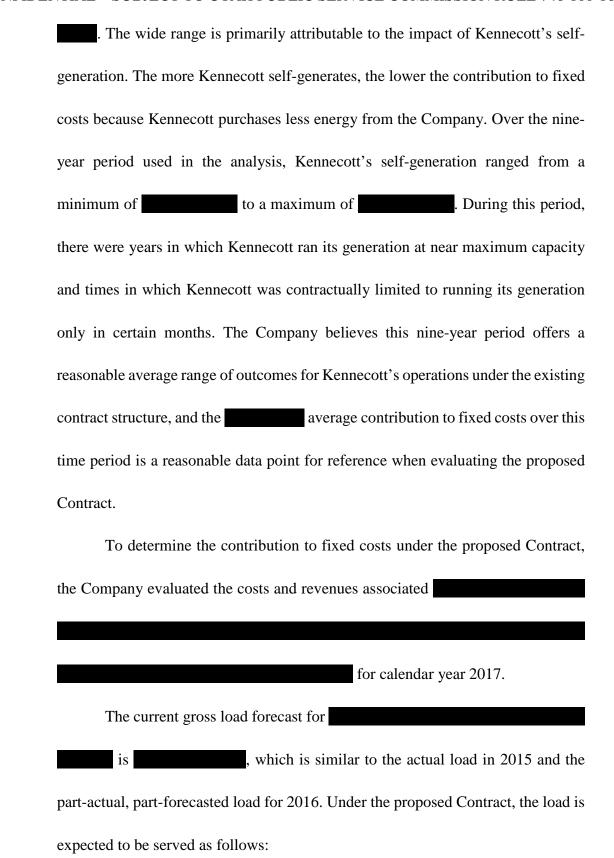
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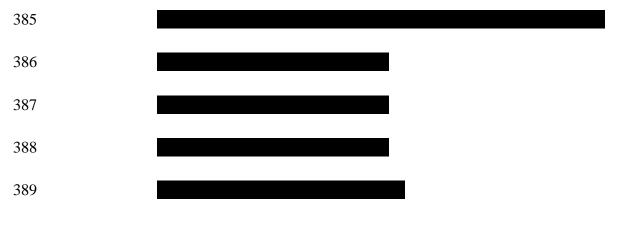
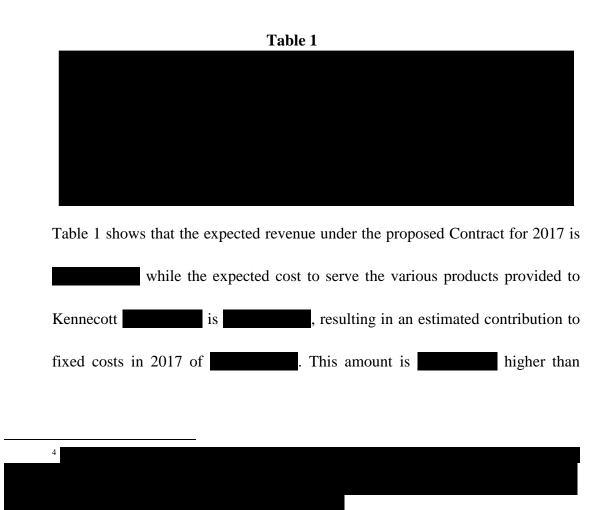


Table 1 shows the expected volumes, revenues<sup>4</sup> and marginal costs<sup>5</sup> associated with

 $<sup>^{3}\,</sup>$  CONFIDENTIAL – SUBJECT TO UTAH PUBLIC SERVICE COMMISSION RULE 746-100-16



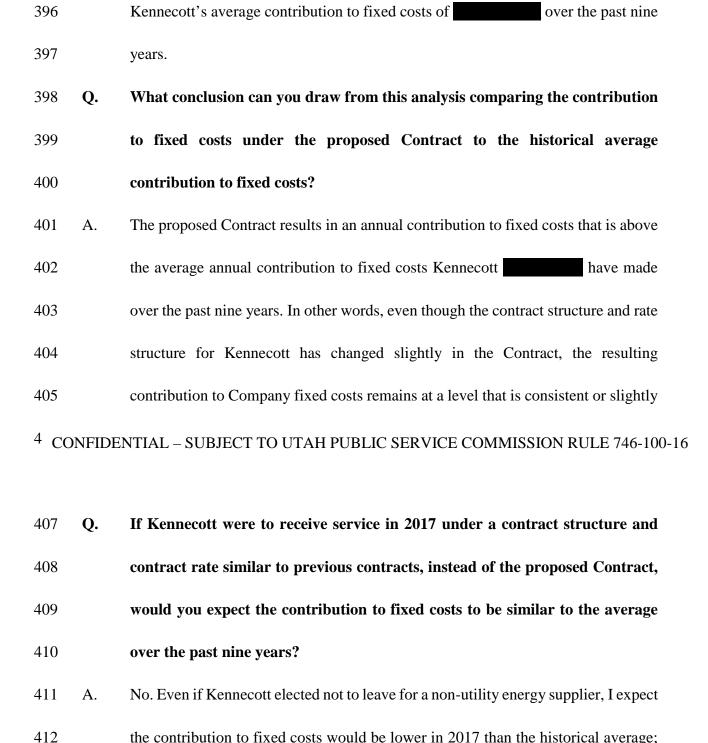
<sup>&</sup>lt;sup>5</sup> The assumed marginal cost is the Company's estimate of system average net power costs for 2017 grossed up by 6.3% to account for losses.

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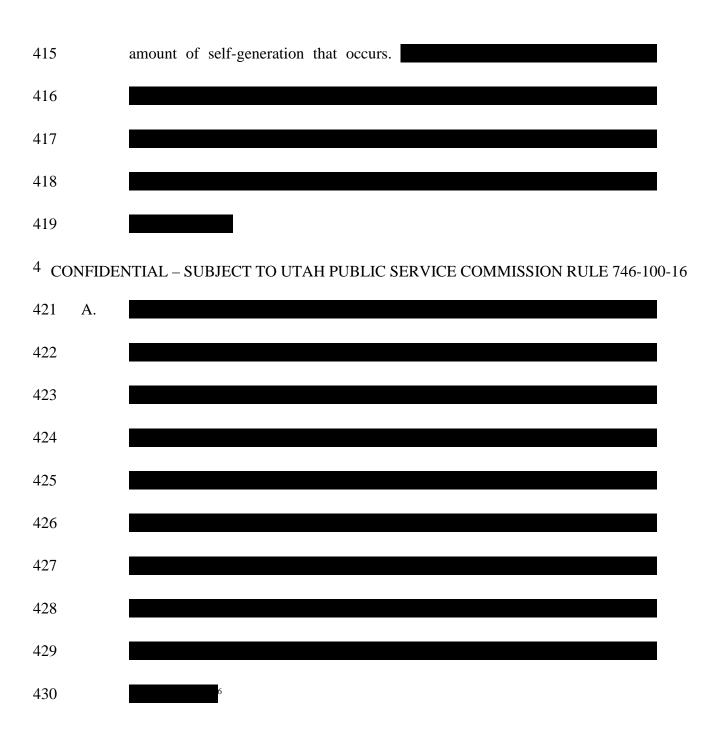


and instead would be closer to the lower levels seen in 2007 through 2010. As I

described earlier, a major factor in the level of contribution to fixed costs is the

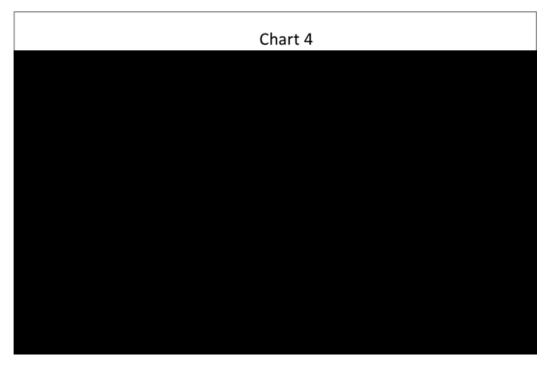
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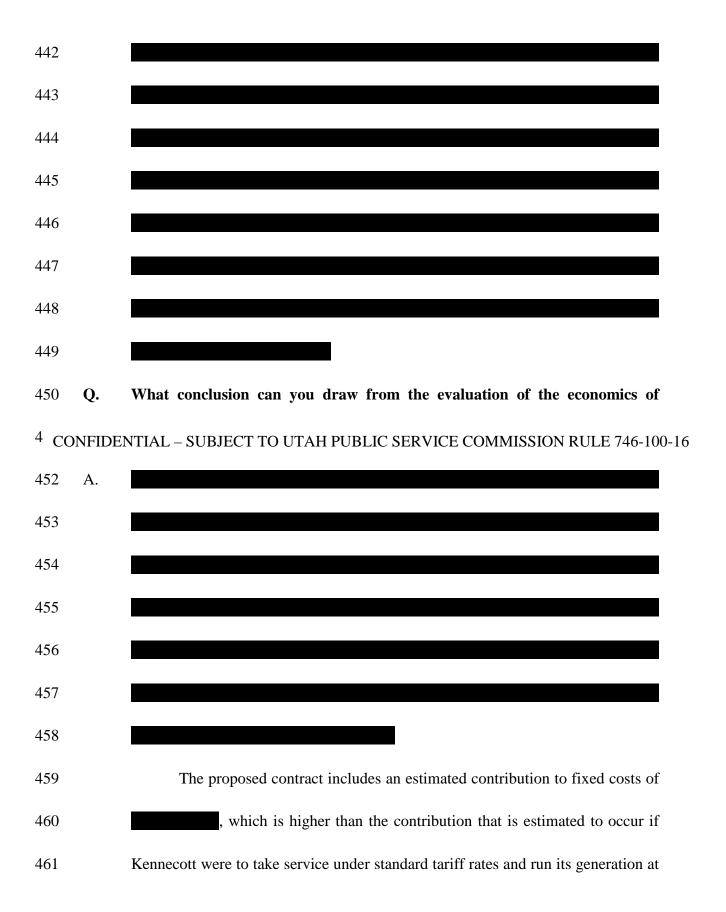
<sup>&</sup>lt;sup>6</sup> To calculate the on-peak Schedule 9 rate, the analysis assumes the demand charge is spread across on-peak hours only since the demand charge is assessed based on measured load during the on-peak period.



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462		a high rate of availability (thus offsetting a large percentage of its load).
463	Q.	Has the Company performed any additional analysis to evaluate the economics
464		of the Contract?
465	A.	Yes. Mr. McDougal provides testimony describing how the Company used its
466		jurisdictional cost allocation model to evaluate the impact of the Contract on Utah
467		revenue requirement. His analysis shows that the impact of the new Contract to
468		Utah customers is negligible, and the Contract is a net benefit on a total system
469		basis.
470	Q.	Does this conclude your direct testimony?
471	A.	Yes.