

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE APPLICATION) CASE NO. PAC-E-16-13
OF ROCKY MOUNTAIN POWER FOR)
AUTHORITY TO MODIFY ELECTRIC) DIRECT TESTIMONY OF
SERVICE REGULATION NO. 12) F. ROBERT STEWART
RELATED TO LINE EXTENSION)
ALLOWANCES)
)

ROCKY MOUNTAIN POWER

CASE NO. PAC-E-16-13

October 2016

1 **Q. Please state your name, business address and position with PacifiCorp dba**
2 **Rocky Mountain Power (the “Company”).**

3 A. My name is F. Robert Stewart. My business address is 4171 West Lake Park
4 Blvd, Salt Lake City, Utah 84120. My present position is Senior Customer
5 Regulatory Specialist, in the Customer & Regulatory Liaison department in
6 Regulation.

7 **Q. Briefly describe your educational and professional background.**

8 A. In 1985, I graduated from Utah State University with a Master of Science degree
9 in Engineering, and have taken other university courses related to economics and
10 regulations. I joined Utah Power and Light Company (now Rocky Mountain
11 Power, the “Company”) as a Tariff Policy Coordinator in the Customer Service
12 Department in 1986. I began work in Regulation as a Tariff Analyst in 1995 and
13 advanced to my current position in 2004.

14 **Q. What are your responsibilities as Senior Customer Regulatory Specialist?**

15 A. My primary responsibilities include training Company personnel concerning the
16 correct application of the tariffs and regulations, along with drafting and filing
17 those tariffs with the various commissions overseeing PacifiCorp’s jurisdictions.
18 In particular I provide support and training in the application of the Company’s
19 line extension tariff, policy, and contracts. I also assist with addressing customer
20 complaints and appearing as a Company witness in customer complaint formal
21 hearings.

22 **Q. Have you previously appeared as a witness for the Company?**

23 A. Yes. I have presented testimony in regulatory proceedings for Rocky Mountain

1 Power and Pacific Power in the states of Utah, Idaho, Oregon, and Wyoming.

2 **Q. What is the purpose of your testimony in this case?**

3 A. The purpose of my testimony is to explain proposed changes to the Company's
4 line extension policy contained in Regulation No. 12, Line Extensions,
5 ("Regulation 12") and Electric Service Schedule No. 300, Regulation Charges,
6 ("Schedule 300"). The proposed changes to the residential line extension
7 allowance will move from Transformer, Meter, and Service ("TMS") to a fixed
8 price per service, and are designed to be revenue neutral. The proposed changes to
9 the non-residential line extension allowance will move from \$90/kW to a multiple
10 of revenue allowance, and is also designed to be revenue neutral.

11 **Q. Have you prepared any exhibits that summarize the proposed changes, and**
12 **where they appear in the tariffs?**

13 A. Yes. Exhibit No. 1 is a table that lists the location of proposed changes in
14 Regulation 12 and Schedule 300 and a brief explanation of those changes.

15 **Q. Have you provided clean and legislative copies of these proposed revisions to**
16 **the tariff sheets?**

17 A. Yes. The proposed changes addressed herein are included in both the clean and
18 legislative formatted tariff sheets provided as Exhibit No. 2.

19 **Q. How will these proposed changes be addressed in your testimony?**

20 A. My testimony will address the proposed changes in the order listed in
21 Exhibit No. 1.

1 **Schedule 300**

2 **Q. What is Schedule 300, Regulation Charges?**

3 A. Schedule 300 is a summary of charges for services offered by the Company as
4 defined and described in the Electric Service Regulations. The left-hand column
5 of Schedule 300 lists the sheet number of the Regulation page where the charges
6 are found.

7 **Q. What changes are you proposing for Facilities Charges?**

8 A. The first proposed change is to add a new category for transmission facilities (at
9 and above 46,000 Volts), to Facilities Charges and update the pricing for all of the
10 categories. Overall, these proposed Facilities Charges are lower.

11 **Q. What are the current prices for line extension Facilities Charges?**

12 A. The current charges are monthly values. They are 1.67 percent on facilities
13 installed at the Company's expense and 0.67 percent on facilities installed at the
14 customer's expense.

15 **Q. How are these costs determined?**

16 A. The Company utilizes financial models for determining Facilities Charges. The
17 output from these models is provided as Exhibit No. 3.

18 **Q. What costs are included in the Facilities Charges?**

19 A. If installed at the Company's expense the Facilities Charge includes: return on
20 capital; recovery of capital; income taxes; property taxes; other taxes, operation,
21 maintenance, administrative and general ("OMAG"), and customer accounts and
22 services. If the facilities are installed at the customer's expense the charge
23 includes property taxes, other taxes, OMAG, customer accounts and services, and

1 a capital replacement annuity.

2 **Q. How constant are these values from year to year?**

3 A. While the values in the tariff have not changed for many years, based on financial
4 records they fluctuate annually, with taxes and depreciation being the largest
5 variables. Some years the monthly value on facilities installed at Company
6 expense can be up or down by as much as 0.1 percent from the previous year, and
7 0.05 percent on facilities installed at customer expense. Typically the change is
8 less than that, but the values are never exactly the same from one year to the next.

9 **Q. What are the current costs?**

10 A. In 2014 the Company updated its depreciation study resulting in a decrease in the
11 costs on distribution facilities. The Company is proposing to lower the Facilities
12 Charges to an average rounded value of 0.6 percent for facilities installed at
13 customer expense and 1.3 percent for facilities installed at Company expense.

14 **Q. Are these costs for distribution, transmission or an average to the two?**

15 A. The costs described above are for distribution facilities; the cost for transmission
16 facilities is lower. The Company proposes adding a transmission Facilities
17 Charges to Schedule 300. The proposed Facilities Charges for transmission are
18 0.2 percent for facilities installed at customer expense and 0.9 percent for
19 facilities installed at Company expense.

20 **Q. Do you have any other changes to Schedule 300?**

21 A. Yes, the Company is proposing to remove the references to Sheet No. 12.4 for
22 Residential Extension Advance and Sheet No. 12.6 for Non-Residential Extension
23 Advance.

1 **Q. Why do you propose removing these references from Schedule 300?**

2 A. Primarily because the extension advance is not a set amount, it varies based on the
3 circumstances of each extension so an actual charge cannot be listed. As a result
4 the current listing of the extension advances in Schedule 300 are incomplete
5 definitions, rather than a charge. Idaho is the only Rocky Mountain Power
6 jurisdiction in which the Company lists the extension advances in Schedule 300.
7 Making this change will help internal efficiencies, reducing costs for all
8 customers.

9 **Q. Why is the definition in Schedule 300 incomplete?**

10 A. The current definition is “Cost in excess of” transformer, meter, and service
11 installation for residential customers and \$90/kW of estimated demand for Non-
12 residential customers. However, a customer may be required to pay an advance
13 even when their job cost is less than the allowance amount. Since the allowance is
14 not used for certain items such as refunds between customers, right-of-way costs,
15 and customer requested changes that cause an increase in costs, the customer may
16 have to pay an advance for costs that do not exceed the allowance amount. These
17 details are covered in Regulation 12, but are not appropriate for Schedule 300
18 which is intended to be a listing of charges.

19 **Q. Are there any other changes to Schedule 300?**

20 A. No

21 **Regulation No. 12, Line Extensions**

22 **Q. What changes are proposed to Section 1(b), Contract Minimum Billing?**

23 A. The Company proposes adding language from Regulation No. 3, Electric Service

1 Agreements (“Regulation 3”), to clarify that subsequent customers taking service
2 on a line will also be responsible for the contract minimum bills. The Company
3 proposes that this clarification be added to Regulation 12 so customers are aware
4 of the charge and assure this requirement from Regulation 3 is applied uniformly.

5 **Q. When is a subsequent customer responsible for the Contract Minimum**
6 **Billing?**

7 A. Under the provisions of Regulation 3, subsequent customers are responsible for
8 the contract minimum. But legally if a tenant contracted for a line extension, the
9 Company could not hold the owner responsible for the Contract Minimum
10 Billing. Section 1(a) of Regulation 12 provides protection for property owners and
11 the Company stating; “Where a tenant occupies the service location, the Company
12 may require the property owner to sign the contract.” If the Company requires
13 property owners to sign, work is not done without the owner’s consent. Also since
14 the contract minimum is billed to the subsequent customer, if the owner is the
15 subsequent customer they are billed as a matter of process.

16 **Extension Allowance**

17 **Q. What change is the Company proposing to Section 1(e) - Extension**
18 **Allowance?**

19 A. The Company proposes adding language to clarify that the allowance is the lesser
20 of: the maximum potential extension allowance, or the extension cost.

21 **Q. Why is the Company purposing this addition?**

22 A. The change corrects the occasional perception that the allowance is a credit that
23 the customer may use as they wish. For example, there is sometimes the incorrect

1 perception that if the cost of the line extension is less than the allowance for one
2 job then the customer or developer can use the left over amount on another job, or
3 to apply against other costs. The allowance is the lesser of the cost to provide
4 service to the customer or the line extension allowance. The intent is to provide
5 adequate service without unfairly increasing rate base for other customers.

6 **Mixed Use**

7 **Q. What is mixed use and why is this condition/definition being added?**

8 A. Section 1(i), Mixed Use, was added to clarify treatment when there are both
9 residential and non-residential loads in the same customer line extension request.
10 An example is a multi-story building with commercial space on the main floor
11 and apartments above. Or it could be a larger project with multiple buildings,
12 some residential and some non-residential, such as an apartment complex with a
13 commons area.

14 When the Company receives mixed use line extension requests the
15 provisions of both Section 2, Residential Extensions, and Section 3, Non-
16 residential Extensions, need to be applied. This is necessary because the line
17 extension allowance is different for residential than non-residential customers,
18 and non-residential extensions are subject to Contract Minimum Billings.

19 There are three potential ways to address mixed use applications: first,
20 apply the full residential allowance, then the non-residential allowance; second,
21 apply the full non-residential allowance then the residential allowance; or third,
22 allocate the costs based on respective portion of the demand for the residential
23 and non-residential loads. The Company proposes the third option because it

1 provides consistency and it's easy for customers to understand. No differentiation
2 needs to be made between an application with one large building with mixed use,
3 or several buildings some with mixed use and some only residential.

4 **Q. How has the Company treated mixed use applications in the past?**

5 A. While this hasn't been as big an issue in our Idaho service territory it has in other
6 Company territories. The Company made the decision to address mixed use by
7 allocating costs based on the respective loads to the total loads years earlier when
8 mixed use buildings became more common. The Company has added this
9 definition to the line extension rule in each state when making other updates to the
10 rule.

11 **Refunds**

12 **Q. Why is Section 1(k) – Refunds, being added?**

13 A. The Company wanted to add some clarifications and conditions with regard to
14 refunds regardless of whether the customer was residential, non-residential or a
15 developer. Rather than add the clarifications and conditions in each of these three
16 major sections, this new paragraph was added to the Conditions and Definitions
17 section.

18 **Q. What are the clarifications and conditions of Section 1(k) - Refunds?**

19 A. There are several: first, the right for the customer to waive a refund if the refund
20 is less than 20 percent of their total refundable advance. This preserves the
21 customer's opportunity to receive four refunds of greater value. Since refunds are
22 based on the shared facilities, if an additional customer is only sharing a small
23 amount of the line extension paid for by the first customer's advance, the shared

1 cost of that second customer is also small. By allowing the first customer to waive
2 that refund, they are still eligible for four refunds. However if the additional
3 customer is sharing in all the line paid for by the first customer's advance so that
4 the refund is a maximum refund, either the first customer takes the refund, or if
5 they waive it, they will be eligible for one less refund in the future.

6 Second, the customer who pays the refund advance is not eligible for a
7 future refund from themselves. Since the refund to the first customer comes from
8 the additional customers added to the line, it makes no sense to collect a refund to
9 pay to the same person who paid the refund. If they were eligible for a refund
10 from their self and the refund were a maximum refund, it would eliminate their
11 opportunity to receive four refunds.

12 Third, it clarifies that the refund must be paid before the new customer's
13 service is connected. Besides making it clear to the new customer that they have
14 to pay the refund, it also reminds the Company of its responsibility to track
15 refunds and collect them upfront. If the Company fails to include the refund as
16 part of the amount to be collected from the new (additional) customer, it becomes
17 uncollectable by the Company. However, the Company is still obligated to pay
18 the refund to the original customer to whom it is due.

19 Fourth, if the customer who paid a refundable advance for the line
20 extension waives a refund, then no refund is owed by the new customer. If the
21 Company had already collected the refund, then it would be returned to the
22 customer who paid it.

23 Fifth, although it is the responsibility of the Company to track refunds,

1 occasionally the Company is either unaware a refund is due or cannot locate the
2 person to whom the refund is due. In these circumstances the person to whom the
3 refund is due needs to claim their refund within two years of when it is first due.
4 The original customer can know that a refund is due by observing someone has
5 connected to the line for which they paid a line extension advance, and has an
6 obligation to ask for the refund within a reasonable period of time. This protects
7 the Company from fraudulent claims years later.

8 **Section 1(m) - Routes, Easements and Rights-of-Way**

9 **Q. What changes are proposed to Routes, Easements and Rights-of-Way?**

10 A. There are two changes in addition to some re-wording: first, stronger language
11 stating the easement will be requested using the forms provided by the Company,
12 as opposed to the old language of “in a form acceptable to the Company,” the
13 easement is for Company lines and equipment, and it is necessary that the
14 Company obtain adequate right-of-way widths, protections and access necessary
15 for maintenance of lines and facilities. Requiring the Company-provided forms
16 insures the correct easement is obtained, and also streamlines the process by
17 eliminating ongoing negotiations of an “acceptable” form.

18 Second, is a subtle change stating that the Company will assist the
19 customer in obtaining necessary rights-of-way, rather than the Company will
20 obtain it if the customer requests. The reason for this change is when crossing
21 federal lands, it is generally necessary for the Company to apply for the easement.
22 However, keeping the customer involved helps when there are environmental or
23 other restrictions that cause the line to be re-routed and increases the cost.

1 **Section 2 - Residential Extensions**

2 **Q. What change are you proposing to the Residential Extension allowance?**

3 A. The Company proposes moving from a residential allowance of terminal facilities
4 (transformer, meter and service) to a fixed allowance of \$1,550. The \$1,550 is the
5 allowance calculated using costs from the 2010 Cost of Service Study.¹ Two
6 different methods are used to arrive at the allowance (see Exhibit No. 4). The first
7 method identifies the non-distribution revenue requirement (generation,
8 transmission, substation, backbone feeder, billing and accounting costs),
9 converting these to a percentage, and using the remaining percent and the average
10 price per kWh to calculate the margin of revenue in \$/kWh available to fund line
11 extensions. This, multiplied by the average annual kWh per residential customer,
12 arrives at an annual margin which is then converted into the investment supported
13 by revenue. The second method looks at the per customer gross investment of
14 distribution costs using the FERC accounts listed in Exhibit No. 4, to determine
15 the existing line extension related distribution plant costs per customer. The
16 \$1,550 is a rounded average of the results of the two methods. For homes that are
17 within a subdivision the Company proposes reserving \$550 for the residential
18 customer for service and meter and allocating \$1,000 per lot for the developer to
19 install primary, secondary, and transformers.

20 **Q. Why are you proposing this change?**

21 A. The Company proposes this change in order to align Idaho's line extension
22 allowance with PacifiCorp's other retail jurisdictions. For many years the
23 Company's residential allowance was five times the estimated annual revenue.

¹ Case No. PAC-E-11-12.

1 Then in 1993, the allowance was changed to 300 feet of primary plus transformer,
2 meter, and service, to match the allowance in the Company's other states. In
3 1995, the Company began to move to a revenue neutral allowance. Revenue
4 neutral meaning over time the maximum allowance would neither increase nor
5 decrease rates.

6 In 1997, the change in the Idaho allowance eliminated the 300 feet of
7 primary, leaving an allowance of transformer, meter, and service. Although the
8 Company proceeded to move to a fixed dollar allowance in the other PacifiCorp
9 states, it hasn't occurred in Idaho.

10 **Q. What is the basis of the \$550 for service and meter for homes within**
11 **developments?**

12 A. The \$550 is the cost of an 80 foot service plus the meter. Services vary greatly in
13 length but an 80 foot service will cover most residences building within a
14 development.

15 **Q. How does the proposed allowance of \$1,550 compare to the existing**
16 **allowance?**

17 A. The current allowance is transformer, meter, and service. The cost to serve a
18 single home with a 25 kVA overhead transformer and 80 foot service, plus meter,
19 is \$2,294. The cost to serve a single home with a 25 kVA pad mount transformer
20 and underground 80 foot service, plus meter, is \$4,044. Thus for the single home
21 requiring installation of a transformer, the proposed allowance is less than the
22 existing allowance. Because the transformer is the most expensive piece of
23 equipment, the cost per customer goes down as more than one customer is served

1 from a transformer.

2 The most common application of more than one customer per transformer
3 is within a residential subdivision where \$1,000 is the developer allowance and
4 \$550 is reserved for the home owner. So the cost comparison from multiple
5 homes from a single transformer, is comparing transformer cost to the proposed
6 \$1,000 developer allowance, and comparing the meter and service cost to the
7 \$550 home builder allowance.

8 The average transformer cost from three recent subdivisions is \$914 per
9 lot, with the high being \$978 per lot and the low being \$837 per lot. Since the
10 \$1,000 per lot allowance is more than this, the proposed allowance will cover the
11 transformer costs as well as some of the secondary and/or primary costs.

12 As already addressed, the \$550 per lot residential allowance covers the
13 cost of the service and meter within a standard subdivision. Since the existing
14 allowance is service and meter, the proposed and existing allowance both cover
15 the cost of the service and meter.

16 **Additional Customers, Advances and Refunds, both Standard and Remote Service**
17 **Customers**

18 **Q. What changes are proposed when additional customers connect to a line for**
19 **which the original customer paid an advance?**

20 A. The changes proposed are clarifications, including a reference to Section 1(k)
21 which I addressed earlier in my testimony.

1 **Q. How does the change in the allowance impact customers with regard to**
2 **refunds?**

3 A. There is no change in the process, although, on a customer cost and impact sense,
4 there may be impact on additional customers connecting to the line. The area of
5 potential impact for additional customers is parallel with the area of impact for the
6 original customer. The existing allowance covers the cost of the transformer,
7 meter and service, but not primary extensions. For single homes requiring a
8 transformer, the proposed allowance will not cover the full cost of the
9 transformer, so the initial customer will pay for a portion of the cost of the
10 transformer plus any primary extension. If the additional customer connects to the
11 primary line but not to the transformer, under both the existing and proposed
12 allowances the original customer will have paid for the primary so the refund is
13 the same on the primary. However, if the additional customer connects to the
14 transformer, under the existing allowance the original customer would not have
15 paid for the cost of the transformer so the additional customer wouldn't have to
16 either. Under the proposed allowance the original customer will have paid some
17 of the cost of the transformer, so the additional customer will be required to pay a
18 refund associated with the original customer's advance for the transformer.

19 **Q. How do you respond to additional customers connecting to the same**
20 **transformer that are upset because they think they're not given the same**
21 **allowance as the original customer?**

22 A. The Company explains that it is the original customer, not additional customers
23 connecting onto the line, who are at risk for paying the most for the line

1 extension. As an illustration using a simple example, assume each of the next
2 three customers connect their service right at the end of the line of the first
3 customer. When the original customer's line extension request requires primary, a
4 transformer, service and meter for electric service, the cost of that investment is
5 reduced by the line extension allowance and the customer must pay the rest. For
6 this example, assume this customer pays \$10,000. A year later a second customer
7 wants to take service from the same line extension. The second customer's
8 allowance will cover the cost for meter and service (the new facilities required to
9 serve them), the same as the first customer's allowance did. Since the second
10 customer can be served from the same transformer there is no additional
11 investment for a new transformer so no allowance is given for a transformer. The
12 second customer only pays 20 percent of the original customer's advance, or
13 \$2,000, which is returned to the original customer. Now the original customer has
14 paid \$8,000 and the second customer \$2,000 for the exact same service. Same
15 scenario for the third and fourth customer, they each pay \$2,000 which goes to the
16 original customer. At this point the original customer has out of pocket expenses
17 of \$4,000 and the three additional customers have each paid \$2,000. If at this
18 point five years has passed, the original customer isn't eligible for any more
19 refunds and has paid the most. If a fifth customer does connect within five years,
20 then each of the customers will pay \$2,000 for the primary and transformer and
21 they all get an allowance for meter and service. Whether under the existing line
22 extension allowance or the proposed allowance, the original customer pays an
23 advance and the additional customers pay 20 percent of the advance. Under both

1 the current and proposed line extension policy only new capital investment that's
2 required to serve the next four new customers is subject to an allowance. Since
3 the additional customers are using the same primary extension and transformer,
4 for which the Company has already provided an allowance when it was installed,
5 the cost that the new customers are responsible to pay is 20 percent of the net cost
6 the original customer paid.

7 The explanation added to Section 1(e) helps by explaining the allowance
8 is not the maximum potential allowance, but the lesser of it and the extension
9 costs. Although the Company's investment (the actual allowance applied) for the
10 next customer is less than with the original customer, the additional customer's
11 advance (investment) is also less than the original customer's advance. However,
12 if four additional customers connect, then the investment is the same.

13 **Q. What is the accounting for these costs?**

14 A. Company allowances are capital investments charged to the appropriate capital
15 accounts, which are eventually included in rate base. Customer advances for new
16 facilities are booked as Contributions In Aid of Construction, and reduce the
17 balance added to rate base. Customer advances that are refunds between
18 customers pass through a clearing account, with the advance from the additional
19 customer going into the account and the refund to the original customer coming
20 out of that account. The full amount of the additional customer's refund is paid to
21 the customer receiving the refund.

1 **Transformation Facilities**

2 **Q. Why was Section 2(d) - Transformation Facilities, added?**

3 A. With the change to the residential allowance from transformer, meter, and service
4 to \$1,550, the Company needed to address the situation of a shared residential
5 transformer becoming overloaded. “Shared” means more than one customer is
6 served from the transformer.

7 Regulation 5, section 2(b) reads in part, “If the Customer makes additions
8 or changes in his electrical facilities, either in size or character, the Customer shall
9 give the Company prior written notice of this fact.” But residential load growth
10 often consists of a new appliance, TV, finished bedroom etc. for which the
11 existing customer’s electrical circuit breaker panel can accommodate, or a hot tub
12 or air conditioning unit that may or may not be able to be wired into an existing
13 panel, so a lot of load growth takes place with no notice. Also, when there is load
14 growth on a transformer, often it is due to a cultural change where many
15 customers are adding load, so the growth isn’t just one of the customers, but
16 several or all of them. Customers give notice generally only when the load
17 addition to the residence requires an electrician to modify the entrance panel or
18 circuit breaker panel.

19 The proposed section is being added to address transformer upgrades
20 because of the reality that often it is not just one customer causing the overload,
21 but the upgrade is done in response to one customer’s request.

22 **Q. How will this section be applied?**

23 A. This section addresses two categories: first, existing residential customers; and

1 second, new residential customers in a subdivision where power has been
2 supplied to the lot line. The category of an existing residential customer for added
3 load is addressed in the previous response. The second category is included
4 because a person building within a subdivision has reason to expect the expense
5 of connecting to the electrical grid will be limited to the cost of their meter and
6 the service extending from the junction box at their lot line. Customers rightfully
7 expect the Company to have engineered an adequate electrical system. In order to
8 design an adequate system the Company has to make assumptions as to the future
9 loads. In setting the 25 kVA limit the Company looked at what size of load would
10 be reasonably expected for design. Since engineering standards for an all-electric
11 home of up to 4,500 square feet can be served from a 25 kVA transformer, the
12 Company determined that 25 kVA was a reasonable limit. To design for greater
13 loads in new subdivisions would be overdesign and result in excessive cost.

14 Below are examples of the application of Section 2(d) where customers
15 have made a request and existing secondary conductor, transformer or other
16 equipment has to be upgraded in order to respond to the request.

- 17 1) When an existing customer is the only entity to be served from the
18 conductor or equipment, the request is treated as a line extension with the
19 customer paying the costs in excess of their allowance.
- 20 2) When an existing customer's total load exceeds 25 kVA on shared
21 facilities, the request is treated as a line extension with the customer
22 paying the costs in excess of their allowance.
- 23 3) When an existing customer's total load (after their expansion or addition)

1 is less than 25 kVA on shared facilities, the shared facilities upgrade shall
2 be treated as a system improvement and not charged to the customer.

3 4) When a new customer within a subdivision on a lot with a secondary
4 service connection point at the lot line, and customer's total load is less
5 than 25 kVA on shared facilities, the shared facilities upgrade shall be
6 treated as a system improvement and not be charged to the customer.

7 5) For all other new customers the request is treated as a line extension with
8 the customer paying the costs in excess of their allowance.

9 A sentence has also been added to clarify that the customer retains the
10 responsibility to eliminate adverse impacts such as voltage fluctuations as stated
11 in Regulation 5 - Customer's Installation.

12 **Changes to Section 3 - Non-Residential Extensions**

13 **Q. What is the basis for the Company's proposal that a customer whose demand**
14 **requires more than once circuit at the local distribution voltage take**
15 **transmission delivery?**

16 A. Most customers whose demand requires more than one distribution circuit to
17 serve, take service on Electric Service No. Schedule 9, which is the rate schedule
18 for customers taking service at transmission voltage.

19 When load in an area is greater than can be served by a single distribution
20 circuit, typically the Company will extend transmission lines and build a
21 substation to serve that area, rather than building two or more parallel distribution
22 feeders. So when a customer's load is large enough to require more than one
23 feeder (typically greater than 10,000 kVA or 10 MVA), the right engineering

1 solution is for the customer to take transmission delivery.

2 In Utah the Company has had a few customers requiring more than one
3 feeder request primary, not transmission, delivery. The Company builds a
4 substation next to the customer to serve the customer. Then after a few years,
5 because of the rate differential between distribution and transmission voltage
6 service, the customer eventually applies to be served at transmission voltage,
7 under rate Schedule 9. In order for the customer to go to Schedule 9, they either
8 have to buy the substation or build their own. If the Company has served other
9 customers from the substation, which is likely, the customer builds their own – if
10 there is room. In one instance there was not room so the customer could not move
11 to Schedule 9. In other instances the Company ended up with a substation not
12 ideally located and lightly loaded for a number of years.

13 For these reasons the Company proposal requires customers whose load
14 would require more than one distribution feeder to take transmission delivery.

15 **Extension Allowances – Delivery at 46,000 Volts and above**

16 **Q. What change are you proposing to the extension allowance for transmission**
17 **customers?**

18 A. The Company proposes the following housekeeping changes to: 1) correct the
19 beginning transmission voltage from 44,000 volts to 46,000 volts; and (2) include
20 contract minimum bill provisions for transmission delivery customers, the same
21 as sub-transmission greater than 1,000 kVA customers.

1 **Section 3(a) Extension Allowances – Delivery at less than 46,000 Volts**

2 **Q. What changes are being made to line extension allowances for non-**
3 **residential customers less than 1,000 kVA?**

4 A. There are three changes. First, changing to kVA from kW. Transformer capacity
5 is measured in kVA, and kW at 100 percent power factor equals kVA. Since kW
6 at a poor power factor requires a larger transformer than indicated by the kW, by
7 referencing kVA, the issue of power factor is not as readily overlooked by the
8 customer in applying and contracting for power. Although the rates have a penalty
9 for poor power factor, that occurs after engineering and construction. Making this
10 change gives the basis for making the same change in contracting, and helps bring
11 power factor awareness into the application process for power, thus making it
12 more likely to be included in the design and construction end of the customer's
13 operation.

14 Second, the allowance is changed from \$90 per kW to nine times the
15 estimated average monthly revenue ($0.75 \times$ estimated annual revenue). The
16 calculation of the allowance, provided in Exhibit No. 4, parallels that of the
17 residential allowance, except it uses the Investment to Revenue Ratio rather than
18 the fixed dollar investment.

19 Third, the remote service language is moved into Section 3(b)(1), and
20 removed from Section 3(c). The difference between regular $<1,000$ kVA
21 customers and remote service $<1,000$ kVA customers is the remote service
22 customer pays the contract minimum for as long as service is taken. Since all
23 $\geq 1,000$ kVA customers have an ongoing contract minimum, the remote language

1 only needs to be in Section 3(b)(1) for <1,000 kVA customers.

2 **Q. How does the proposed allowance of 0.75 x estimated annual revenue**
3 **compare to the current allowance of \$90 per kW?**

4 A. It depends on the customer's load factor, with load factor meaning the hours the
5 customer's operation runs at full load. The load factor is the percent calculated as
6 follows: ((customer's total kWh consumption in the billing period divided by
7 (measured kW demand times the hours in the billing period)) times 100). For a
8 given kW the revenue increases as the load factor increases. The proposed
9 allowance and the existing allowance are approximately equal at a 15 percent load
10 factor. Customers' load factors typically range from 15 percent up to 90 percent
11 (for a 24 x 7 production facility) with a rough average for commercial customers
12 of a 40 percent load factor. At a 40 percent load factor the proposed allowance is
13 approximately two and a half times the existing allowance of \$90/kW.

14 **Extension Allowance for 1,000 kVA or Greater**

15 **Q. What changes are proposed for Section 3(b)(2) 1,000 kVA or Greater?**

16 A. Two of the three changes that are proposed for the Less than 1,000 kVA are
17 proposed for the 1,000 kVA or Greater. They change the designation to kVA from
18 kW, and change the allowance from \$90 per kW to nine times the estimated
19 average monthly revenue or (0.75 x estimated annual revenue).

20 **Additional Capacity**

21 **Q. Why was Section 3(b)(3) - Additional Capacity added?**

22 A. Section 3(b)(3) - Additional Capacity, was added to align the tariff with practice.
23 When a customer adds load, of necessity the allowance has to be calculated based

1 on the new load or new revenue. If the total load was used, then the customer
2 would be receiving an allowance on the original load twice, once when it was first
3 added, and again with the additional load. Thus Section 3(b)(3) is a housekeeping
4 item, to add a long standing practice as a clarification to the tariff.

5 **Additional Customers, Advances and Refunds**

6 **Q. Please explain the changes being made to Section 3(c) - Advances and**
7 **Refunds to non-residential customers?**

8 A. These changes can all be characterized as housekeeping changes of varying
9 significance, with the first change being the most significant. This change
10 provides that when a customer pays for only its share of the capacity of a line
11 extension and the Company pays the remainder, the customer is not entitled to a
12 refund when other customers connect to those facilities. For example if a
13 customer requests to add 3,000 kVA and in response to the request the Company
14 adds 10,000 kVA of capacity, and, the customer is only charged for 30 percent of
15 the cost of those facilities (3,000/10,000), the customer has only paid for the
16 capacity they have contracted to use. Any load additions to the line will be using
17 capacity paid for by the Company, therefore no refunds are due to the customer.

18 The second change is to incorporate the refund provisions of the new
19 section 1(k). The final change is a clarification to an existing paragraph regarding
20 the adjustment of Facilities Charges when there is an advance collected from a
21 subsequent customer and refunded to the customer who originally paid the
22 advance. The adjustment is to transfer the Facilities Charges of the advance from
23 the customer who originally paid the advance to the new customer who pays the

1 advance which is then refunded to the original customer. This is the application of
2 the existing and proposed language, but the existing language, “The Company
3 will allocate the Facilities Charges in the same manner ...” was unclear.

4 **Q. Please explain the change to Regulation 12, Section 3(d) - Reduction in**
5 **Contract Capacity or Demand.**

6 A. The Company is proposing limiting the time a customer can reserve unused
7 capacity to 36 months (three years). Currently the Company has to determine
8 whether to 1) upgrade a line in order to add additional customers based on the
9 contract capacities, or 2) not upgrade the line and not charge the additional
10 customer because the actual load of the two customers are below the contracted
11 amount, making it unlikely the line will be overloaded by the additional load.
12 However this second option bears significant risk to the Company and customers.
13 The line could become overloaded within the contracted capacities, and an
14 upgrade would not be charged to the customer causing the upgrade but would be a
15 Company expense. A 36-month period will allow balance between contract
16 capacity commitments and adding additional customers, without doing
17 unnecessary network upgrades or taking risks.

18 **Extensions to Non-Residential and Residential Planned Developments**

19 **Q. Please explain the changes to Section 4.**

20 A. Section 4 has been extensively rewritten for standardization, clarification and to
21 address problems in the current tariff. The standardization changes have been
22 made to always list residential applications first and then non-residential
23 applications.

1 Section 4(a), General, has two new provisions: first, language was added
2 requiring a recorded plat before the Company will install facilities. When a
3 development is recorded the taxes change from typically a lower agricultural tax
4 rate, to the higher residential or commercial tax rate. Because of this the Company
5 is beginning to see some developers request installation of lines without a
6 recorded plat. The plat has to be recorded before the lots can be sold and before
7 the public utility easements “(PUE)” can be recorded. If the Company were to
8 install facilities based on proposed design, and then the PUE were different when
9 recorded, there would be a conflict between the PUE and the actual location of the
10 lines. It is Company policy that a plat is recorded before the Company installs
11 facilities; this new addition to the tariff incorporates that policy into the tariff.

12 Second, a provision is added that the Company is not required to install
13 lines without a reasonable assurance of future customers connecting and using the
14 facilities. The Company does not make extensions to a home if there is no
15 building permit or other proof of a home actually being built. The same applies
16 for a non-residential building. But developments are, by tariff definition, “areas
17 where groups of dwellings or buildings are planned to be constructed at or about
18 the same time.” Developers make application before building permits can be
19 issued. Although developers pay a portion of the installation (residential) or all of
20 the installation (non-residential), the Company is left with the ongoing costs of
21 maintenance and taxes. If there are no customers connecting for service for an
22 extended period of time the facilities sit unused and unsupervised, subject to
23 vandalism, and it is more likely there will be modification of the plats within the

1 development, which leads to issues with location of facilities and modification of
2 those facilities. If customers eventually connect, there are often maintenance
3 issues. For all these reasons the Company is proposing this change to strengthen
4 its position of not making a development line extension unless there is reasonable
5 assurance of actual applicants for service within five years.

6 Section 4(b), Allowances and Advances, has been modified to better state
7 the connection or relationship of the developer's responsibility and allowances
8 with the residential and non-residential sections of Regulation 12. Also references
9 to refunds have been moved to Section 4(c).

10 The residential section has been modified to accommodate the change in
11 the residential allowance from a transformer, meter, and service allowance to the
12 \$1,550 allowance. The existing tariff allocates the residential allowance in a
13 development based on need and responsibility; the meter and service allowance
14 goes to the residential applicant, and the transformer allowance goes to the
15 developer who is responsible to see secondary voltage connections are available
16 at the lot line. The proposed residential allowance of \$1,550 is also allocated in a
17 development with \$550 going to the residential applicant for the service and meter
18 as addressed in Section 2(a)(1), and the remaining \$1,000 going to the developer
19 for the costs to provide secondary voltage connections to the lot lines. However, if
20 the lots are several acres in size, transformer placement cannot be determined in
21 advance and the full residential allowance is reserved for the residential customer.
22 The developer is then responsible for all the costs of providing primary service to
23 the lot line. Non-residential is basically the same with the addition of wording

1 referencing Section 3. Non-residential Extensions as the tariff provisions that
2 apply to actual service to buildings.

3 Section 4(c), Refunds, has been revised in an attempt to clarify when
4 refunds are due to a developer.

5 Section 4(d), Underground Extensions, has wording added to address
6 conversions from overhead to underground, referencing existing Section 6 on
7 relocations. Also wording has been added to emphasize that “Developer must
8 provide” means it is at the developer’s expense.

9 **Extension Exceptions**

10 **Q. Are there any changes to Section 5 - Extension Exceptions?**

11 A. Yes. Section 5(c), Emergency Service, has been updated from the existing
12 allowance of \$90 /kW to the proposed non-residential allowance.

13 **Relocation or Replacement of Facilities**

14 **Q. Please explain the new provisions to Section 6(a), Relocation of Facilities.**

15 A. There are two proposed changes that work together to address feasibility and cost
16 responsibility. The current tariff states if the customer requests a relocation, or an
17 overhead to under conversion, the Company will do so. The reality is sometimes
18 the Company cannot relocate the facilities or convert them to underground. One
19 reason is the existing easement is insufficient. The insufficiency can be: the
20 customer wants the line moved over 15 feet which puts it out of the easement; the
21 customer wants it underground and the easement only provided for overhead
22 facilities; the customer wants it underground and there is conflict with existing
23 underground pipes or lines; etc. However, if the customer can obtain the

1 necessary easement the Company will do the work (at the customer's expense as
2 explained in subsequent paragraphs). The project can also be not feasible because
3 of other restrictions and engineering limitations. In short, the Company will
4 relocate distribution lines where possible at the customer's request and expense.

5 **Contract Administration Allowance**

6 **Q. Please explain the changes to Section 7 - Contract Administration Allowance.**

7 A. The changes to Section 7 are housekeeping edits to help make the section read
8 easier and clarify customers' right to waive the refundable advance and choose to
9 receive the Contract Administration Allowance instead.

10 **Summary**

11 **Q. Please summarize your testimony.**

12 A. This Application seeks authorization to move from a residential line extension
13 allowance of transformer, meter, and service to a maximum potential extension
14 allowance of \$1,550. The extension allowance is the lesser of the maximum
15 potential extension allowance and the actual extension costs. If the proposed
16 residential allowance is for development of a standard subdivision the \$1,550
17 would be divided with \$1,000 going to the developer of the subdivision and \$550
18 reserved for the customer's service and meter.

19 The current allowance offered under Regulation 12 is transformer, meter,
20 and service. The most common application of more than one customer per
21 transformer is within a residential subdivision where \$1,000 is the developer
22 allowance and \$550 is reserved for the home-owner. The average transformer cost
23 from three recent subdivisions is \$914 per lot, therefore the proposed \$1,000 per

1 lot allowance would exceed the current developer allowance. For the residential
2 customer the \$550 per lot residential allowance covers the cost of the service and
3 meter within a standard subdivision. Since the existing allowance is service and
4 meter, the proposed and existing allowance both cover the cost of the service and
5 meter.

6 This Application also seeks authorization to move from a non-residential
7 allowance of \$90 per kW to 75 percent of the estimated annual revenue. Generally
8 this change will increase the allowance to nonresidential customers. The proposed
9 allowance and the existing allowance are approximately equal for a customer with
10 a 15 percent load factor. At 40 percent load factor the proposed allowance is
11 approximately two and a half times the existing allowance of \$90/kW.

12 For residential customers the Application proposes to fund the upgrade of
13 shared transformers when the requesting customer's load is less than 25 kVA. For
14 non-residential customers the proposal is to be able to ratchet down contract
15 demand obligations to the maximum measured demand in the last three years.
16 Also, to be able to require customers requesting service exceeding the capacity of
17 one distribution circuit to take transmission delivery.

18 In addition to these changes there are other clarifications and
19 housekeeping items. The more notable items are: 1) an explanation of the
20 meaning and application of "Mixed Use" where both residential and non-
21 residential loads will be served from the same line extension; 2) wording
22 correlating residential and non-residential line extension allowances with
23 developer line extensions; 3) no customer refunds when the customer only pays

1 the costs for their demand and the Company pays the rest; 4) line relocations
2 subject to feasibility; 5) requiring recorded plats for developments before the
3 Company will install facilities; and 6) clarification of refunds with regard to
4 developments.

5 In addition to the revisions to Regulation 12, Line Extension, the
6 Application also proposes updates to the Facilities Charges listed in Schedule 300,
7 Regulation Charges, and the addition of charges for transmission facilities.

8 The intent of this Application is to provide revenue neutral line extension
9 allowances to protect both existing and new customers, provide clarifications to
10 confusing areas in the tariffs, and make minor housekeeping changes to align the
11 tariff with current practices and correct minor errors. For these and other reasons
12 supported in my testimony I recommend Commission approval of the revisions to
13 Regulation 12 and Schedule 300.

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

15 A. Yes.