



ELECTRONICALLY FILED WITH RCA

March 31, 2017

Regulatory Commission of Alaska
701 W. 8th Avenue, Suite 300
Anchorage, AK 99501

Subject: *Tariff Advice No. 439-8; Chugach Electric Association, Inc. Charges for Distribution Services*

Commissioners:

The tariff filing described below is hereby transmitted to you for filing in compliance with the Alaska Public Utilities Regulatory Act and Sections 3 AAC 48.200 - 3 AAC 48.420 of the Alaska Administrative Code. The purpose of this filing is to revise Chugach Electric Association, Inc.'s (Chugach) general service fees in its Rates, Rules and Regulations Operating Tariff relating to distribution services.

<u>TARIFF SHEET NUMBER</u>		<u>CANCELS SHEET NUMBER</u>		<u>SCHEDULE OR RULE NUMBER</u>
<u>ORIGINAL</u>	<u>REVISED</u>	<u>ORIGINAL</u>	<u>REVISED</u>	
77	20th Revision	77	19th Revision	Schedule of
77.1	14th Revision	77.1	13th Revision	Fees

This filing complies with Commission Letter Order No. 100417 requiring annual updates to rates for special service installations reflecting third party contributions for use of Chugach's trench in residential underground secondary service installations that exceed Chugach's standard allowance. The purpose of these updates is to ensure that changes in underlying costs and contribution amounts are equitably reflected in Chugach's charges. Chugach is requesting that the proposed changes contained in this filing become effective May 15, 2017.

This filing is not for a new service, will not result in the termination of an existing service, conflict with any other schedule or rate contained in Chugach's operating tariff, or in any other way adversely impact customers or the public.

Summary

Chugach's charges associated with each distribution service fee activity have been updated based on current costs. If approved, the proposed rate changes would increase annual retail revenue by \$2,230, or approximately 0.6 percent on Chugach's distribution services revenue of approximately \$0.4 million. Chugach's total system revenues totaled approximately \$200 million in 2016 from 68,200 retail members (81,000 retail metered locations) and wholesale customer Seward Electric System.

Distribution Services Fees

Supporting documentation for the proposed charges relating to distribution service fees are included in Exhibits 1 through 5. Exhibit 1 contains a brief description of each fee activity. Exhibits 2 and 3 present the proposed charges, revenue impacts and number of services impacted by the changes. Exhibits 4 and 5 present supporting labor, equipment and material costs. The charges are based on a fully allocated cost methodology and include applicable labor, equipment, material and overhead costs. Overall, the rates are increasing about 0.4 percent, driven primarily by slightly higher labor and material costs.

Raising or Lowering of Facilities

Exhibit 2 provides a summary of the updated costs associated with raising and lowering secondary pedestals, single phase padmounted transformers, and metal street lights. Current charges are \$890 for secondary pedestals, \$2,130 for single phase padmounted transformers, and \$1,065 for metal street lights. Chugach is proposing that these charges be increased to \$900, \$2,165 and \$1,080, respectively.

In recognition of cost variances for certain activities, charges relating to the raising or lowering of three phase transformers, single and three phase junction cabinets, switching cabinets, and primary and secondary cable continue to be priced at cost on the basis of individual cost estimates on a per job basis.

Special Service Installations

The charge for residential secondary service inspections (other than the initial inspection) is remaining unchanged at \$150.

Payments received from other utilities for use of Chugach's trench are based on negotiated contractual agreements between Chugach and Alaska Communications Systems Holdings, Inc. (ACS), General Communication, Inc. (GCI) and TelAlaska. Attached is the signed agreement between Chugach and TelAlaska for calendar year 2017 (Attachment I). The joint trench contribution amounts are the same for all contracts. The 2017 joint trench contributions are \$1.26 per foot for two-party installations and \$1.50 per foot for three-party installations (see page 4 of 7 of the contract). These amounts are identical with 2016 levels. These amounts are subject to change, pending final contractor costs that are expected to be finalized in May. If these amounts are materially different than the amounts contained in this filing, Chugach will revise its tariff to reflect the changed amounts.

For secondary service installations exceeding the 100-foot standard allowance, Chugach is proposing that the per-foot non-winter installation decrease from \$12.60 to \$12.40 for single use trench and decrease from \$11.30 to \$11.10 for two-party installations due to lower material costs. The cost for residential overhead to underground service conversions is decreasing from \$4.10 to \$3.90 per foot, due to lower material costs.

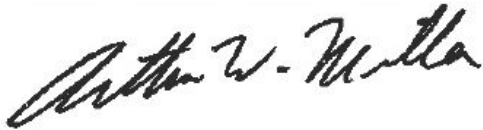
Description of Tariff Changes

Tariff Sheet Nos. 77 and 77.1: Contains the proposed rate adjustments to the individual charges for raising or lowering special service installations.

Please contact Jean Kornmuller in Chugach's Regulatory and External Affairs Department at 907-762-4184 or jean_kornmuller@chugachelectric.com, if additional information is needed.

Sincerely,

CHUGACH ELECTRIC ASSOCIATION, INC.



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Attachments

Chugach Electric Association, Inc.

SCHEDULE OF CHARGES AND FEES (Continued)

Distribution Services Fees

A. Raising or Lowering of Facilities

- | | | |
|--|---------------------------|---|
| 1. Secondary Pedestal | \$900.00 | I |
| 2. Single Phase Padmounted Transformer | \$2,165 | I |
| 3. Three Phase Padmounted Transformer | Chugach Cost ¹ | |
| 4. Single Phase Junction Cabinet | Chugach Cost ¹ | |
| 5. Three Phase Junction Cabinet | Chugach Cost ¹ | |
| 6. Switching Cabinet | Chugach Cost ¹ | |
| 7. Metal Street Light | \$1,080.00 | I |
| 8. Primary and Secondary Cable | Chugach Cost ¹ | |

B. Special Service Installations

- | | |
|---|-----------|
| 1. Secondary Service Inspections (New or Upgrade Service) | |
| a) Initial Inspection | No Charge |
| b) Per Inspection Charge, Other Than Initial Inspection | \$150.00 |

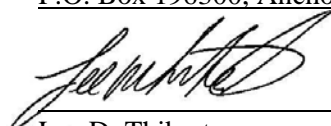
¹ Refer to Section 8.14, "Modification to Existing Facilities".

Tariff Advice No.: 439-8

Effective: May 15, 2017

Issued by: Chugach Electric Association, Inc.
P.O. Box 196300, Anchorage, Alaska 99519-6300

By:



 Lee D. Thibert

Title: Chief Executive Officer

Chugach Electric Association, Inc.

SCHEDULE OF CHARGES AND FEES (Continued)

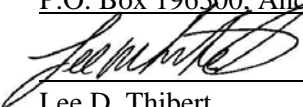
B. Special Service Installations (Continued)

2. New Underground Residential Service, Over 100 Ft.
 (applies to direct burial installation only)
- Single Use Trench - Chugach Only
- a) Installation Without Temporary Corflo Placement.....\$12.40/Ft. R
 - b) Installation Requiring Temporary Corflo Placement.....\$18.30/Ft. I
- Joint Use Trench – Two Party Installations ¹
- c) Installation Without Temporary Corflo Placement.....\$11.10/Ft. R
 - d) Installation Requiring Temporary Corflo Placement.....\$17.10/Ft. I
- Joint Use Trench – Three Party Installations ¹
- e) Installation Without Temporary Corflo Placement.....\$10.90/Ft. R
 - f) Installation Requiring Temporary Corflo Placement.....\$16.80/Ft. I
3. New Overhead Residential Service, Over 100 Ft. \$3.90/Ft. R
4. Residential Service Conversion, Overhead to Underground ²
 (applies to direct burial installation only)
- a) Conductor And Trenching.....\$12.40/Ft. R
 - b) Service Disconnect / Reconnect..... \$470.00 I
 - c) Secondary Riser, if Required..... \$1,320.00 R
5. Relocate Residential Overhead Service Attachment ² \$470.00 I
6. Residential Service Pole \$1,175.00 I
7. Guard Post for Padmounted Transformer or Switch Cabinet \$1000.00 I
8. Down Guy Relocation, per Anchor \$1,155.00 R

¹ Available only when contributions are made from joint use party.
² If a residential service is being upgraded in conjunction with the service work and must be replaced, the service replacement cost will be discounted at 50% but the discount shall not exceed \$1,550 (the value of the single-family residential distribution line extension credit).

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P.O. Box 196300, Anchorage, Alaska 99519-6300

By: 
 Lee D. Thibert

Title: Chief Executive Officer

Chugach Electric Association, Inc.
 Schedule of Fees and Charges - Operations
 Tariff Advice No. 439-8

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Chugach Electric Association, Inc.
Anchorage, Alaska

Schedule of Fees
Description of Distribution Service Fees

A. Raising or Lowering of Facilities

1) Secondary Pedestal

Secondary pedestals may be raised or lowered due to changes in grade or improper soil conditions. The operation requires the physical raising or lowering of the pedestal to the required height, splicing the conductor to extend or shorten the connection from the transformer and, if necessary, installing new conductor from the transformer.

The process also requires site inspection, identifying conductor destinations in older installations, and extending conduit (if raising) or digging (if lowering). The average time requirement for raising or lowering a secondary pedestal is 5.75 hours of labor and equipment from the Operations Service Crew.

2) Single Phase Padmounted Transformer

Transformers may be raised or lowered due to grade changes or improper soil conditions. The process involves de-energization and removal of the transformer followed by lifting the concrete pad, pouring gravel fill, leveling, re-installing pad and transformer, reconnecting the conductors, and finally re-energizing the transformer. Transformer installations require an average of 13.80 hours of labor and equipment from the Operations Service Crew. Estimated time is 9.20 hours for the transformer and 4.60 hours for the concrete envelope.

3) Three Phase Padmounted Transformer

This work is priced at cost by individual cost estimate.

4) Single Phase Junction Cabinet

This work is priced at cost by individual cost estimate.

5) Three Phase Junction Cabinet

This work is priced at cost by individual cost estimate.

6) Switching Cabinet

This work is priced at cost by individual cost estimate.

Chugach Electric Association, Inc.
Anchorage, Alaska

Schedule of Fees
Description of Distribution Service Fees

7) Metal Street Light

Street lights may be removed for safety or convenience during construction and reinstalled at a later time. This process involves disconnection of the lighting unit from the energy source, storage of the unit, and later reinstallation of a direct burial of wood or metal pole, and reconnection to the energy source. The process requires 6.90 hours of labor and equipment from the Operations Service Crew.

8) Primary and Secondary Cable

This work is priced at cost by individual cost estimate.

B. Special Service Installations

1) Secondary Service Inspections (New or Upgrade Service)

Prior to connection of electric service, Chugach inspects all retail secondary service upgrades and installations to ensure compliance with Chugach service standards. The vast majority of the inspections are provided to building contractors for initial service installations.

At the first inspection, the building contractor (or consumer) is advised of any required modifications or conditions that require correction. If necessary, Chugach will re-inspect the work until the premises are safe for connection of electric service.

A. Initial inspections are provided without charge.

B. Per inspection charge, other than initial inspection

Chugach imposes a fee for each inspection after the initial inspection. The intent of this charge is to curtail the number of unwarranted re-inspections at the expense of other members.

Job Order Service Clerk: The time requirement for the Job Order Service clerk to prepare, submit and track each order is 30 minutes.

Journeyman Foreman: The time requirement for the Journeyman Foreman to complete the inspection is 60 minutes. Equipment costs are based on the cost of a meter technician vehicle rather than a loopwagon.

Chugach Electric Association, Inc.
Anchorage, Alaska

Schedule of Fees
Description of Distribution Service Fees

2) New Underground Residential Service, Over 100 Feet

This charge provides recovery of new underground service connections to either a pedestal or a transformer (padmounted or overhead) for service installations that exceed Chugach's standard 100 foot allowance. A riser may be required if the closest connections are overhead.

Labor is calculated based on the required hours on a per foot basis to dig the trenches and install the conductor. Boring underneath driveways may be required. If the installation is done during winter months, an additional cost for corflo is added. This installation may be completed on a: 1) Single Use Trench - Chugach Only; 2) Joint Use Trench - Two Party Installations; or 3) Joint Use Trench - Three Party Installations. Cost adjustments for installations involving joint use of a Chugach trench are based on current Letters of Agreement For Joint Trench Cost Sharing between Chugach and other participating utilities.

3) New Overhead Residential Service, Over 100 Feet, Non-winter installation

This charge provides recovery of new overhead service connections for service installations that exceed Chugach's standard 100 foot allowance. Labor is calculated based on the required hours on a per foot basis to connect electric service to the nearest overhead transformer. In addition, a lift pole and anchor installation may be required to maintain clearance per safety standards.

4) Residential Service Conversion, Overhead to Underground

A conversion from overhead to underground service occurs during customer remodeling or because of customer preference. The customer is responsible for the cost of the conversion.

This service requires connection to either a pedestal or a transformer (padmounted or overhead). A riser may be required if the closest connections are overhead. Labor and equipment is calculated based on the required hours on a per foot basis to install the conductor and dig the trenches. Boring underneath driveways may be required.

When secondary services are converted from overhead to underground, or when services are upgraded, Chugach must first disconnect service to allow the customer or the customer's contractor to complete the electrical work on the customer's side of the meter. After the work is completed and inspected, Chugach must reconnect the service. The additional time required for disconnection and subsequent service reconnection, including travel and on-site time, is between 3 and 4 hours.

Chugach Electric Association, Inc.
Anchorage, Alaska

Schedule of Fees
Description of Distribution Service Fees

5) Relocate Residential Overhead Service Attachment

The process of relocating residential overhead service involves the relocation of customer service entrance equipment to a new location, primarily attributed to code upgrades, increased capacity requirements, and damages to facilities. The average time requirement is 3.00 hours of labor and equipment from the Operations Service Crew.

6) Residential Service Pole

The installation of a residential service pole involves installing the pole to which overhead service connects. The average time requirement is 4.60 hours of labor and equipment from the Operations Service Crew.

7) Guard Post for Padmounted Transformer or Switch Cabinet

Guard posts are concrete-filled metal pipes eight inches in diameter that are used to protect transformers, switch cabinets, or poles from vehicle damage.

The average time requirement for installing a guard post is 2.875 hours of labor and equipment from the Operations Service Crew. Work involves digging a four-foot vertical hole, installing the metal pipe, backfilling and finally filling the pipe with concrete. The project may also require breaking up asphalt (such as in parking lots) or digging the four-foot vertical hole by hand due to utility conflicts.

8) Down Guy Relocation, per Anchor

A down guy wire may need to be relocated when increased wire size requires additional lead distance to maintain the correct tension. This relocation requires an average of 6.33 hours of labor and equipment from the Operations Service Crew. Estimated time is 1.15 hours for the down guy and 5.18 hours for each anchor. Anchors can be buried up to nine feet deep using an excavator, or may be installed with a hydraulic machine using a less invasive method depending on site conditions and expected tension to maintain.

Chugach Electric Association, Inc.
Schedule of Fees and Charges - Operations
Tariff Advice No. 439-8

Proposed Changes to Tariff Fees & Charges

Description of Charge a	Labor Cost (Exhibit 4) b	Equipment and Material Cost (Exhibit 4) c	Total Direct Cost d	Distribution Overhead ¹ e	Joint Trench Contribution f	Total Cost g	Proposed Charge h	Current Charge i	Percent Change j
A. Raising or Lowering of Facilities									
1. Secondary Pedestal	\$478.72	\$242.24	\$720.96	\$180.24	----	\$901.21	\$900	\$890	1.1%
2. Single Phase Padmounted Transformer	\$1,148.93	\$581.39	\$1,730.31	\$432.58	----	\$2,162.89	\$2,165	\$2,130	1.6%
3. Three Phase Padmounted Transformer	----	----	----	----	----	----	----	Chugach Cost	----
4. Single Phase Junction Cabinet	----	----	----	----	----	----	----	Chugach Cost	----
5. Three Phase Junction Cabinet	----	----	----	----	----	----	----	Chugach Cost	----
6. Switching Cabinet	----	----	----	----	----	----	----	Chugach Cost	----
7. Metal Street Light	\$574.46	\$290.69	\$865.16	\$216.29	----	\$1,081.45	\$1,080	\$1,065	1.4%
8. Primary and Secondary Cable	----	----	----	----	----	----	----	Chugach Cost	----

¹ Supporting documentation for distribution overhead rate of 25 percent included in TA248-8, Exhibit 6.

Chugach Electric Association, Inc.
Schedule of Fees and Charges - Operations
Tariff Advice No. 439-8

Proposed Changes to Tariff Fees & Charges

Description of Charge	Labor Cost (Exhibit 4)	Equipment and Material Cost (Exhibit 4)	Total Direct Cost	Distribution Overhead ¹	Joint Trench Contribution	Total Cost	Proposed Charge	Current Charge	Percent Change
a	b	c	d	e	f	g	h	i	j
B. Special Service Installations									
1. Secondary Service Inspections (New or Upgrade Service)									
a) Initial Inspection	---	---	---	---	---	---	---	---	---
b) Per Inspection Charge, Other than Initial Inspection	\$116.27	\$5.12	\$121.39	\$30.35	---	\$151.73	\$150.00	\$150.00	0.0%
2. New Underground Residential Service, Over 100 Feet Single Use Trench - Chugach Only									
a) Installation Without Temporary Corflo Placement	\$5.58	\$4.31	\$9.89	\$2.47	---	\$12.36	\$12.40	\$12.60	-1.6%
b) Installation Requiring Temporary Corflo Placement	\$7.74	\$6.92	\$14.66	\$3.67	---	\$18.33	\$18.30	\$17.90	2.2%
Joint Use Trench - Two Party Installations									
c) Installation Without Temporary Corflo Placement	\$5.58	\$4.31	\$9.89	\$2.47	(\$1.26)	\$11.10	\$11.10	\$11.30	-1.8%
d) Installation Requiring Temporary Corflo Placement	\$7.74	\$6.92	\$14.66	\$3.67	(\$1.26)	\$17.07	\$17.10	\$16.70	2.4%
Joint Use Trench - Three Party Installations									
e) Installation Without Temporary Corflo Placement	\$5.58	\$4.31	\$9.89	\$2.47	(\$1.50)	\$10.86	\$10.90	\$11.10	-1.8%
f) Installation Requiring Temporary Corflo Placement	\$7.74	\$6.92	\$14.66	\$3.67	(\$1.50)	\$16.83	\$16.80	\$16.40	2.4%

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Chugach Electric Association, Inc.
Schedule of Fees and Charges - Operations
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Proposed Changes to Tariff Fees & Charges

Description of Charge	Labor Cost (Exhibit 4)	Equipment and Material Cost (Exhibit 4)	Total Direct Cost	Distribution Overhead ¹	Joint Trench Contribution	Total Cost	Proposed Charge	Current Charge	Percent Change
a	b	c	d	e	f	g	h	i	j
3. New Overhead Residential Service, Over 100 Feet	\$1.50	\$1.60	\$3.10	\$0.77	----	\$3.87	\$3.90	\$4.10	-4.9%
4. Residential Service Conversion, Overhead to Underground									
a) Conductor and Trenching	\$5.58	\$4.31	\$9.89	\$2.47	----	\$12.36	\$12.40	\$12.60	-1.6%
b) Service Disconnect / Reconnect	\$249.77	\$126.39	\$376.16	\$94.04	----	\$470.19	\$470.00	\$465.00	1.1%
c) Secondary Riser, if Required	\$574.46	\$481.70	\$1,056.17	\$264.04	----	\$1,320.21	\$1,320.00	\$1,325.00	-0.4%
Subtotal							\$1,802.40	\$1,802.60	
5. Relocate Residential Overhead Service Attachment	\$249.77	\$126.39	\$376.16	\$94.04	----	\$470.19	\$470	\$465	1.1%
6. Residential Service Pole	\$382.98	\$558.80	\$941.77	\$235.44	----	\$1,177.21	\$1,175	\$1,135	3.5%
7. Guard Post for Padmounted Transformer or Switch Cabinet	\$239.36	\$561.09	\$800.45	\$200.11	----	\$1,000.57	\$1,000	\$975	2.6%
8. Down Guy Relocation, per Anchor	\$527.01	\$395.48	\$922.49	\$230.62	----	\$1,153.11	\$1,155	\$1,165	-0.9%

¹ Supporting documentation for distribution overhead rate of 25 percent included in TA248-8, Exhibit 6.

Chugach Electric Association, Inc.
Schedule of Fees and Charges - Operations
Tariff Advice No. 439-8

Revenue Impact with Changes to Tariff Fees & Charges

Description a	Estimated Services b	Total Feet > 100 c	Current		Proposed		Difference	
			Charge d	Revenue e	Charge f	Revenue g	Charge h	Revenue i
A. Raising or Lowering Facilities								
1. Secondary Pedestal	120	-	\$890	\$106,800	\$900	\$108,000	\$10	\$1,200
2. Single Phase Padmounted Transformer	10	-	\$2,130	\$21,300	\$2,165	\$21,650	\$35	\$350
3. Three Phase Padmounted Transformer	-	-	Chugach Cost	----	Chugach Cost	----	Chugach Cost	----
4. Single Phase Junction Cabinet	-	-	Chugach Cost	----	Chugach Cost	----	Chugach Cost	----
5. Three Phase Junction Cabinet	-	-	Chugach Cost	----	Chugach Cost	----	Chugach Cost	----
6. Switching Cabinet	-	-	Chugach Cost	----	Chugach Cost	----	Chugach Cost	----
7. Metal Street Light	15	-	\$1,065	\$15,975	\$1,080	\$16,200	\$15	\$225
8. Primary and Secondary Cable	-	-	Chugach Cost	----	Chugach Cost	----	Chugach Cost	----

Chugach Electric Association, Inc.
Schedule of Fees and Charges - Operations
Tariff Advice No. 439-8

Revenue Impact with Changes to Tariff Fees & Charges

Description a	Estimated Services b	Total Feet > 100 c	Current		Proposed		Difference		
			Charge d	Revenue e	Charge f	Revenue g	Charge h	Revenue i	
B. Special Service Installations									
1. Secondary Service Inspections (New or Upgrade Service)									
a) Initial Inspection	-	-	-	-	-	-	-	-	-
b) Per Inspection Charge, Other Than Initial Inspection	20	-	\$150.00	\$3,000	\$150.00	\$3,000	\$0.00	\$0	
2. New Underground Residential Service, Over 100 Feet Single Use Trench - Chugach Only									
a) Installation Without Temporary Corflo Placement	40	2,400	\$12.60	\$30,240	\$12.40	\$29,760	(\$0.20)	(\$480)	
b) Installation Requiring Temporary Corflo Placement	35	2,100	\$17.90	\$37,590	\$18.30	\$38,430	\$0.40	\$840	
Joint Use Trench - Two Party Installations									
c) Installation Without Temporary Corflo Placement	30	1,800	\$11.30	\$20,340	\$11.10	\$19,980	(\$0.20)	(\$360)	
d) Installation Requiring Temporary Corflo Placement	20	1,200	\$16.70	\$20,040	\$17.10	\$20,520	\$0.40	\$480	
Joint Use Trench - Three Party Installations									
e) Installation Without Temporary Corflo Placement	20	1,200	\$11.10	\$13,320	\$10.90	\$13,080	(\$0.20)	(\$240)	
f) Installation Requiring Temporary Corflo Placement	10	600	\$16.40	\$9,840	\$16.80	\$10,080	\$0.40	\$240	
3. New Overhead Residential Service, Over 100 Feet	20	1,200	\$4.10	\$4,920	\$3.90	\$4,680	(\$0.20)	(\$240)	

Chugach Electric Association, Inc.
Schedule of Fees and Charges - Operations
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Revenue Impact with Changes to Tariff Fees & Charges

Description	Estimated Services	Total Feet > 100	Current		Proposed		Difference	
			Charge	Revenue	Charge	Revenue	Charge	Revenue
a	b	c	d	e	f	g	h	i
4. Residential Service Conversion, Overhead to Underground								
a) Conductor and Trenching	30	1,800	\$12.60	\$22,680	\$12.40	\$22,320	(\$0.20)	(\$360)
b) Service Disconnect / Reconnect	20	-	\$465	\$9,300	\$470	\$9,400	\$5	\$100
c) Secondary Riser, if Required	25	-	\$1,325	\$33,125	\$1,320	\$33,000	(\$5)	(\$125)
5. Relocate Residential Overhead Service Attachment	20	-	\$465	\$9,300	\$470	\$9,400	\$5	\$100
6. Residential Service Pole	5	-	\$1,135	\$5,675	\$1,175	\$5,875	\$40	\$200
7. Guard Post for Padmounted Transformer or Switch	20	-	\$975	\$19,500	\$1,000	\$20,000	\$25	\$500
8. Down Guy Relocation, per Anchor	20	-	\$1,165	\$23,300	\$1,155	\$23,100	(\$10)	(\$200)
Total	480	-	----	\$406,245	----	\$408,475	----	\$2,230

Chugach Electric Association, Inc.
Schedule of Fees and Charges - Operations
Tariff Advice No. 439-8

Summary of Labor, Equipment and Material Costs

Description of Charge a	Required Hours b	Labor Cost		Equipment Cost		Material Cost (unit or per foot)			Total Cost j
		Hourly Rate c	Total d	Hourly Rate e	Total f	Unit Cost g	No. Units h	Total i	
A. Raising or Lowering Facilities									
1. Secondary Pedestal	5.75	\$83.26	\$478.72	\$42.13	\$242.24	----	----	----	\$720.96
2. Single Phase Padmounted Transformer									
a) Transformer	9.20	\$83.26	\$765.95	\$42.13	\$387.59	----	----	----	\$1,153.54
b) Concrete	4.60	\$83.26	\$382.98	\$42.13	\$193.80	----	----	----	\$576.77
Total	13.80	\$83.26	\$1,148.93	\$42.13	\$581.39	----	----	----	\$1,730.31
3. Three Phase Padmounted Transformer	----	----	----	----	----	----	----	----	Chugach Cost
4. Single Phase Junction Cabinet	----	----	----	----	----	----	----	----	Chugach Cost
5. Three Phase Junction Cabinet	----	----	----	----	----	----	----	----	Chugach Cost
6. Switching Cabinet	----	----	----	----	----	----	----	----	Chugach Cost
7. Metal Street Light	6.90	\$83.26	\$574.46	\$42.13	\$290.69	----	----	----	\$865.16
8. Primary and Secondary Cable	----	----	----	----	----	----	----	----	Chugach Cost

Chugach Electric Association, Inc.
Schedule of Fees and Charges - Operations
Tariff Advice No. 439-8

Summary of Labor, Equipment and Material Costs

Description of Charge a	Required Hours b	Labor Cost		Equipment Cost		Material Cost (unit or per foot)			Total Cost j
		Hourly Rate c	Total d	Hourly Rate e	Total f	Unit Cost g	No. Units h	Total i	
B. Special Service Installations									
1. Secondary Service Inspections (New or Upgrade Service)									
a) Initial Inspection	----	----	----	----	----	----	----	----	----
b) Per Inspection Charge, Other Than Initial Inspection *	1.000	\$89.17	\$89.17	\$5.12	\$5.12	----	----	----	\$94.29
(labor cost: foreman = 1 hr, job order clerk = 0.5 hrs)	0.500	\$54.19	\$27.10	\$0.00	\$0.00	----	----	----	\$27.10
	1.500		\$116.27		\$5.12	----	----	----	\$121.39
* Supporting documentation for the equipment hourly rate was included in TA247-8, Exhibit 5, page 3.									
2. New Underground Residential Service, Over 100 Feet									
Single Use Trench - Chugach Only									
a) Installation Without Temporary Corflo Placement									
1. Conductor (4/0 3-wire)	0.015	\$83.26	\$1.25	\$42.13	\$0.63	\$1.49	1.00	\$1.49	\$3.37
2. Trenching	0.052	\$83.26	\$4.33	\$42.13	\$2.19	----	----	----	\$6.52
Total	0.067	\$83.26	\$5.58	\$42.13	\$2.82	\$1.49	1.00	\$1.49	\$9.89
b) Installation Requiring Temporary Corflo Placement									
1. Winter Corflo	0.026	\$83.26	\$2.16	\$42.13	\$1.10	\$1.51	1.00	\$1.51	\$4.77
2. Conductor (4/0 3-wire)	0.015	\$83.26	\$1.25	\$42.13	\$0.63	\$1.49	1.00	\$1.49	\$3.37
3. Trenching	0.052	\$83.26	\$4.33	\$42.13	\$2.19	----	----	----	\$6.52
Total	0.093	\$83.26	\$7.74	\$42.13	\$3.92	\$3.00	1.00	\$3.00	\$14.66
Joint Use Trench - Two Party Installations									
c) Installation Without Temporary Corflo Placement	0.067	\$83.26	\$5.58	\$42.13	\$2.82	\$1.49	1.00	\$1.49	\$9.89
d) Installation Requiring Temporary Corflo Placement	0.093	\$83.26	\$7.74	\$42.13	\$3.92	\$3.00	1.00	\$3.00	\$14.66

Chugach Electric Association, Inc.
Schedule of Fees and Charges - Operations
Tariff Advice No. 439-8

Summary of Labor, Equipment and Material Costs

Description of Charge a	Required Hours b	Labor Cost		Equipment Cost		Material Cost (unit or per foot)			Total Cost j
		Hourly Rate c	Total d	Hourly Rate e	Total f	Unit Cost g	No. Units h	Total i	
Joint Use Trench - Three Party Installations									
e) Installation Without Temporary Corflo Placement	0.067	\$83.26	\$5.58	\$42.13	\$2.82	\$1.49	1.00	\$1.49	\$9.89
f) Installation Requiring Temporary Corflo Placement	0.093	\$83.26	\$7.74	\$42.13	\$3.92	\$3.00	1.00	\$3.00	\$14.66
3. New Overhead Residential Service, Over 100 Feet (1/0 TPX)	0.018	\$83.26	\$1.50	\$42.13	\$0.76	\$0.84	1.00	\$0.84	\$3.10
4. Residential Service Conversion, Overhead to Underground									
a) Conductor and Trenching	0.067	\$83.26	\$5.58	\$42.13	\$2.82	\$1.49	1.00	\$1.49	\$9.89
b) Service Disconnect / Reconnect	3.000	\$83.26	\$249.77	\$42.13	\$126.39	\$0.00	0.00	\$0.00	\$376.16
c) Secondary Riser, if Required	6.900	\$83.26	\$574.46	\$42.13	\$290.69	\$191.01	1.00	\$191.01	\$1,056.17
5. Relocate Residential Overhead Service Attachment	3.000	\$83.26	\$249.77	\$42.13	\$126.39	\$0.00	0.00	\$0.00	\$376.16
6. Residential Service Pole	4.600	\$83.26	\$382.98	\$42.13	\$193.80	\$365.00	1.00	\$365.00	\$941.77
7. Guard Post for Padmounted Transformer or Switch Cabinet	2.875	\$83.26	\$239.36	\$42.13	\$121.12	\$439.97	1.00	\$439.97	\$800.45
8. Down Guy Relocation, per Anchor									
a) Down Guy	1.150	\$83.26	\$95.74	\$42.13	\$48.45	\$48.80	1.00	\$48.80	\$192.99
b) Anchor	5.180	\$83.26	\$431.26	\$42.13	\$218.23	\$80.00	1.00	\$80.00	\$729.49
Total	6.330	\$83.26	\$527.01	\$42.13	\$266.68	\$128.80	1.00	\$128.80	\$922.49

Chugach Electric Association, Inc.
Schedule of Fees and Charges - Operations
Tariff Advice No. 439-8

Calculation of Average Hourly Equipment and Labor Costs
for Operations Service Crews

Description a	Two-Person Loopwagon b	Three-Person UG Service Crew c	Four-Person Heavy Crew d	Total e	Average per hour ¹ f
Equipment Cost					
Loopwagon	\$57.56	----	----	\$57.56	----
Line Truck	----	\$86.31	\$86.31	\$172.62	----
Crane Truck	----	----	\$91.49	\$91.49	----
Back Hoe	----	\$33.17	----	\$33.17	----
Back Hoe Trailer	----	\$8.55	----	\$8.55	----
Manhaul	----	----	\$15.78	\$15.78	----
Total	\$57.56	\$128.03	\$193.58	\$379.17	\$42.13
Labor Cost					
Foreman Lineman	----	\$89.17	\$89.17	\$178.34	----
Leadman	\$86.40	----	----	\$86.40	----
Journeyman Lineman	\$80.76	\$161.52	\$242.28	\$484.56	----
Total	\$167.16	\$250.69	\$331.45	\$749.30	\$83.26

¹ Based on total service crew of 9.

**LETTER OF AGREEMENT FOR JOINT TRENCH COST SHARING
BETWEEN CHUGACH ELECTRIC ASSOCIATION, INC.
AND
TELALASKA, INC.**

Effective January 1, 2017

This letter of agreement is to implement an arrangement for joint trench and joint service trench assessment charges. By signature below, TelAlaska, Inc. (TelAlaska) and Chugach Electric Association, Inc. (Chugach) agree to the following:

A. Joint Trench (excluding Residential Service Trench and Service Wire Installation)

1. Projects involving trunk or mainline distribution cables shall be defined on a project-by-project basis by the Design Engineers for both utilities. During the design phase of a project, each party agrees to make reasonable effort to advise the other party of proposed work that might afford joint trenching opportunity.
2. Chugach will follow the same procedures for all TelAlaska projects that Chugach seeks to participate in joint trench. Project construction schedules shall be set by the utility administering the work.
3. Unless other arrangements are made with the contractor or Chugach line crew prior to the work, the contractor or Chugach line crew shall provide all labor to install TelAlaska supplied communications materials.
4. The rate for conventional trenching and road crossings are identified in Appendix A and are subject to updates on an annual basis no later than May of each year to be effective the first day of June. Chugach shall notify TelAlaska at least thirty (30) days before formalizing revised rates. The division of trenching costs for each party is based on the number of parties participating in the trench.
 - Two-Party Installations: TelAlaska pays for 45% of the trench costs
 - Three-Party Installations: TelAlaska pays for 30% of the trench costs

In the event directional drilling, winter thawing, removal/replacement of curb and gutter or additional requirements are needed, the participating utilities will pay an agreed upon amount based on the work.

5. For line extensions where Chugach is reimbursed by a customer or applicant, Chugach will not charge TelAlaska for the portion of the trench being reimbursed. This provision does not apply to joint service trench installations.

January 1, 2017

6. Upon each project completion, excluding service installations, and at a time mutually agreed to by both utility field inspectors, the utilities shall meet at the project site for final inspection of joint trench construction. Chugach shall fill out a Joint Trench Construction Report found in Appendix B, which shall be verified by the TelAlaska Inspector on site.

B. Residential Service Trench and Service Wire Installation

1. Unless other arrangements are made with the contractor or Chugach line crew prior to the work, the contractor or Chugach line crew shall provide all labor to install TelAlaska supplied communications materials.
2. The rate for service trenching is identified in Appendix A and is subject to updates on an annual basis no later than May of each year to be effective on the first day of June. The division of service trenching costs for each party is based on the number of parties participating in the trench.
 - Two-Party Installations: TelAlaska pays for 25% of the service trench costs
 - Three-Party Installations: TelAlaska pays for 15% of the service trench costs
3. The rate for installation of TelAlaska coaxial or fiber optic service cable by Chugach crews is identified in Appendix A. This is for cable installation and is in addition to trenching costs.
4. The parties agree that service installations will not require individual site inspections and therefore a Joint Trench Construction Report is not required.

C. Billing and Invoicing

1. Chugach will bill TelAlaska quarterly on a project-by-project basis. Invoices shall provide the project name, TelAlaska work order number and Chugach's work order number for projects. For services, sufficient information will be provided for TelAlaska to correlate billing to each service location.
2. TelAlaska shall process Chugach billings for joint trench on a Net 30-day term upon receipt of invoice from Chugach.
3. Chugach invoices are to be directed to:

TelAlaska, Inc.
201 East 56th Avenue
Anchorage, AK 99518
Attention: Mr. Jason Louvier

LETTER OF AGREEMENT FOR JOINT TRENCH COST SHARING
BETWEEN CHUGACH ELECTRIC ASSOCIATION, INC. AND
TELALASKA, INC.

January 1, 2017

4. Where TelAlaska is billing, the reciprocal shall apply and invoices directed to:

Chugach Electric Association, Inc.
5601 Electron Drive
Anchorage, AK 99518
Attn: Distribution Engineering

D. Access to Work Site

Either party may at any time have access to work sites for the purpose of inspection.

E. Application of Agreement to Projects


This Agreement shall apply to all new projects or those projects already in design, which will have line extension, and/or subdivision agreements executed by Chugach on January 1, 2017 or later. In addition, it shall apply to all new services installed after January 1, 2017.

F. Term of Agreement

This Agreement is effective starting January 1, 2017 and will automatically renew each year unless cancelled in writing by either party with ninety (90) days' notice.

Agreed Upon By:

CHUGACH ELECTRIC ASSOCIATION, INC.



Shelly R. Schmitt, P.E.
Senior Manager, Distribution Engineering

Date: 3/1/2017

TELALASKA, INC.



Jason Louvier
Vice President of Operations

Date: 3/17/2017

Appendix A

Trenching Rates Effective January 1, 2016

A. Joint trench (excluding service trench)	\$6.44/foot
A1. TelAlaska assessment for two party installation (45% of A)	\$2.90/foot
A2. TelAlaska assessment for three party installation (30% of A)	\$1.93/foot
B. Joint road crossing – no asphalt	\$19.85/foot
B1. TelAlaska assessment for two party installation (45% of B)	\$8.93/foot
B2. TelAlaska assessment for three party installation (30% of B)	\$5.96/foot
C. Joint road crossing – with asphalt	\$44.02/foot
C1. TelAlaska assessment for two party installation (45% of C)	\$19.81/foot
C2. TelAlaska assessment for three party installation (30% of C)	\$13.21/foot
D. Joint service trench (excluding installation of TelAlaska cable)	\$5.02/foot
D1. TelAlaska assessment for two party installation (25% of D)	\$1.26/foot
D2. TelAlaska assessment for three party installation (15% of D)	\$0.75/foot
E. Installation of TelAlaska service cable in trench – not dependent on # of parties	\$1.18/foot

Appendix B: JOINT TRENCH CONSTRUCTION REPORT

Project Name: _____

Chugach Work Order: _____

TelAlaska Work Order: _____

Electrical Contractor: _____

Completion Date: _____

Joint Trench Participants Chugach TelAlaska Other _____

Joint Trench Two party: .45 x \$ 6.44 x _____ ft = \$ _____

 Three party: .30 x \$ 6.44 x _____ ft = \$ _____

Road Crossing with Asphalt Two party: .45 x \$ 44.02 x _____ ft = \$ _____

 Three party: .30 x \$ 44.02 x _____ ft = \$ _____

Road crossing with no Asphalt Two party: .45 x \$ 19.85 x _____ ft = \$ _____

 Three party: .30 x \$ 19.85 x _____ ft = \$ _____

Service Trench Two party: .25 x \$ 5.02 x _____ ft = \$ _____

 Three party: .15 x \$ 5.02 x _____ ft = \$ _____

Service Cable (only Chugach Crew installs) \$ 1.18 x _____ ft = \$ _____

Additional Costs/Notes: _____

Prepared by (Chugach): _____ Date: _____

Accepted by (TelAlaska): _____ Date: _____