Joint-Use Rates

Prepared For:

City of Needles

Overview

- As part of the electric rate review, NPUA requested a review of the rate assessed for the Joint Use of Poles by telecom and cable entities.
- Today, the Needles electric system has **1271** distribution poles and **1,460** attachments
- Last known review of Joint-Use Rates was in **1994**.
- KRSA followed generally accepted CPUC/FCC procedures to update the current rates.

Development of Joint-Use Rates

- Determination of Pole Investments
- Calculation of Carrying Charge
- Applying Carrying Charge to bare pole investment to determine cost per usable space

Determination of Pole Investment

- KRSA relied upon latest asset report and isolated line-items pertaining to pole investments.

	Gross Investment	Depreciation	Net Plant
Poles	1,837,549.11	573,767.58	1,263,781.53

Transmission	3,787,251.10	2,530,596.99	1,256,654.11
Distribution	15,625,494.81	8,503,969.74	7,121,525.07
General	840,271.90	709,656.45	130,615.45
Total Plant	20,253,017.81	11,744,223.17	8,508,794.63

Calculation of Carrying Charge

The carrying charge is a blended annualized cost rate that ensures the utility recovers the full economic burden of owning and maintaining the pole when calculating the attachment rate.

Included in Carrying Charge calculation:

- Administrative costs
- Operating and maintenance costs
- Annual depreciation costs
- Financing interest costs
- CPI

NEEDLES PUBLIC UTILITY AUTHORITY
CALCULATION OF CARRYING CHARGE RATE

Line No		
	Administrative Charge	
1	Total General and Administrative Expenses	$1,339,644
2	Gross Plant Investment	$20,253,018
3	Administrative Charge Rate (Line 1/ Line 2)	6.6%
4		
5	**Maintenance Charge**	
6	Total Maintenance Expenses	$389,427
7	Gross Pole Investment	$1,837,549
8	Maintenance Charge Rate (Line 6/ Line 7)	21.2%
9		
10	**Depreciation Charge**	
11	Service Life	80
12	Depreciation Charge Rate (1 / Line 11)	1.3%
13		
14	**Cost Escalation (CPI)**	
15	Factor	2.7%
16	Net Plant Poles	$1,263,782
17	Cost Escalation Charge (Line 15/ Line16)	0.00%
18		
19	**Capital Carrying Charge**	
20	Gross Pole Investment Financed	665,922.68
21	Finance Rate	3.86%
22	Interest	$25,705
23	Gross Pole Investment	$1,837,549
24	Capital Carrying Charge (Line 22/ Line 23)	1.40%
25		
26	**Total Carrying Charge (Lines 3+8+12+17+24)**	30.5%

Joint-Use Rate

The gross pole investment is adjusted by multiplying it by 0.85 (the 'bare pole factor') to exclude the cost of non-usable elements such as appurtenances, guy wires, and other attachments, yielding the bare pole cost used in the rate calculation.

Space Factor = Calculated usable pole space for attachments based on a 45' standard pole. Attachments are assumed to use 1 foot of space.

Joint-Use Rate =
Bare Pole Investment x Carrying Charge Rate of 30.5% x Space Factor of 6% divided by Number of Poles = **$22.41 per attachment.**

NEEDLES PUBLIC UTILITY AUTHORITY
CALCULATION OF JOINT ATTACHMENT FEE

Line No	Description	Factors
1	Length of Pole	45
2	Buried Depth	6
3	Ground Clearance Required	18
4	Safety Worker Space	3.3
5	Reserved Utility Space	1
6	Total Usable Space	16.7
7	Space Occupied by Attachment	1
8	Number of Attaching Entities	1
9	Number of Distribution Poles	1271
10		
11	Space Factor	6.0%
12	Bare Pole Factor	0.85
13	Gross Pole Investment	$1,837,549
14	Carrying Charge Rate	30.5%
15		
16	**Maximum Rate Per Attachment**	**$22.41**

Results

REVENUES

Number of Attachments	1,460
Existing Joint-Use Rate	$7.78
Existing Annual Revenues	$11,359
Proposed Joint-Use Rate	$22.41
Proposed Joint-Use Revenues	$32,719
Change Increase / (Decrease)	**$21,360**

Utility Comparison	Year	Rate
Burbank	2017	$28.42
Mohave Electric Cooperative	2025	$31.74
Riverside	2017	$23.50
Needles (Proposed)	**2025**	**$22.41**
IID	2024	$21.96
Lodi Electric Utilities	2025	$21.94
Anaheim	2025	$19.46
Truckee Donner	2017	$19.00
Silicon Valley Power (City of Santa Clara)	2025	$18.50
Average Rate		$22.99

Joint-Use Application Fee

- NPUA may charge an appropriate one-time application processing fee. NPUA should assess the amount of time spent by staff for reviewing and processing applications and assess on a time x burdened labor costs.

Example:

	Hours/Pole	Labor Rate	Cost
Engineering Review	.5	$254.52	$127.26
Field Review	.5	$144.92	$72.46
Application Processing	.5	$93.16	$46.58
Total Application Application Fee Fee $/Pole			$246.30

Thank You!

Questions?

Written questions or comments can be sent to

kes@krsaline.com

Prepared by:

KRSA District Services Team

Utility Formation, Governance, Federal Power Systems, Power Supply, Power Markets, Budgeting, Financing, Rates, Billing, Bookkeeping, Reporting, and More!

Kenneth Saline P.E.
Dennis Delaney P.E.
Jeffrey Woner
Kent Simer
Daniel Pritchard
Jennifer Torpey

Scott Saline
Maggie Bauer
Ashley Blank
Nicole Klinker
Vedant Sahu