



**BEFORE THE PUBLIC UTILITIES COMMISSION OF THE  
STATE OF CALIFORNIA**

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Order Instituting Rulemaking to  
Consider Proposed Changes to  
General Order 95 to Modernize the  
Rules and Regulations Governing the  
Design and Construction of Overhead  
Electric and Communications  
Facilities in California.

R.24-10-005

**SOUTHERN CALIFORNIA EDISON COMPANY'S (U 338-E)**  
**REPLY COMMENTS ON ORDER INSTITUTING RULEMAKING TO CONSIDER**  
**PROPOSED CHANGES TO GENERAL ORDER 95**

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Dated: **December 9, 2024**

**SOUTHERN CALIFORNIA EDISON COMPANY’S (U 338-E) REPLY COMMENTS ON  
DECISION ISSUING ORDER INSTITUTING RULEMAKING TO CONSIDER PROPOSED  
CHANGES TO GENERAL ORDER 95**

**TABLE OF CONTENTS**

<b>Section</b>	<b>Page</b>
I. INTRODUCTION .....	1
II. DISCUSSION.....	2
A. SCE’s Reply to SED’s Opening Comments .....	2
1. Scoping Issue 1 .....	2
2. Scoping Issue 2 .....	3
3. Scoping Issue 3 .....	4
4. Scoping Issue 4 .....	4
B. Scope of Proceeding .....	5
III. CONCLUSION.....	6
ATTACHMENT A	

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**I.**

**INTRODUCTION**

Pursuant to Rule 6.2 of the California Public Utilities Commission’s (Commission or CPUC) Rules of Practice and Procedure and the Order Instituting Rulemaking to Consider Proposed Changes to General Order 95 to Modernize the Rules and Regulations Governing the Design and Construction of Overhead Electric and Communications Facilities in California (OIR), Southern California Edison Company (SCE) submits the following Reply Comments. SCE responds to the opening comments submitted by the Commission’s Safety and Enforcement Division (SED), and also addresses the scope of the proceeding.

**II.**  
**DISCUSSION**

**A. SCE’s Reply to SED’s Opening Comments**

SCE appreciates SED’s willingness to examine the benefits of Load and Resistance Factor Design (LRFD) in this proceeding<sup>1</sup> and looks forward to further discussing the proposed rule changes with SED in technical workshops. SCE acknowledges that the proposed rule changes developed by the GO 95-128 Rules Committee (Rules Committee) represent a significant change to the current General Order (GO) 95 rules regarding design and construction of overhead facilities. However, this update is necessary given that the current rules are based on an archaic Working Stress Design (WSD) methodology that is no longer used throughout the country (as it is not part of the National Electric Safety Code).

Further, the proposed rule changes are offered only as a starting point for modernizing GO 95 and were designed to yield the same results as applying the current GO 95 safety factors via the WSD methodology embedded in Rule 44.<sup>2</sup> In short, the proposed rule changes are reasonable updates to GO 95 that will appropriately modernize the GO without negatively impacting public safety.

SCE responds to SED’s opening comments on the four scoping issues in the OIR as follows:

**1. Scoping Issue 1**

SCE agrees with SED that if LRFD is adopted, references to “safety factor” in other parts of GO 95 will need to be reviewed and revised to be consistent with the new LRFD standard.<sup>3</sup> In its Opening Comments on Scoping Issue 4, SCE explained that the Rules Committee had

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<sup>1</sup> See SED Opening Comments, pp. 1-2.

<sup>2</sup> See Tables 4-1 and 4-2 in the proposed rule changes.

<sup>3</sup> SED Opening Comments, pp. 2-3.

developed 16 additional associated rule changes to GO 95 to reconcile other rules with the proposed changes to Section IV of GO 95.<sup>4</sup> SCE has included these 16 supplemental proposed rule changes as Attachment A to these Reply Comments. We intend to address them as an agenda item during the Commission-ordered IOU-led workshop in early January.

## **2. Scoping Issue 2**

SCE disagrees with SED's assertions that LRFD introduces a new concept, "allowable failure", into GO 95 and that LRFD may pose an increased risk to the public.<sup>5</sup> As mentioned above, the proposed changes developed by the Rules Committee were offered only as a starting point, and the proposed load and strength factors in new Table 4-1 and 4-2 for Rule 44 (associated with Light Loading and Heavy Loading criteria, respectively) were selected to yield the same results as applying the current "safety factors" via the WSD method currently embedded in Rule 44. Accordingly, there is no anticipated impact to public safety from adopting the proposed rule changes.

SCE also respectfully disagrees with SED's reference to Decision (D.)14-02-015 as mandating, through GO 95, Rule 48, that overhead facilities "will not fail" (i.e., will have an allowable failure rate of zero) under certain conditions.<sup>6</sup> In D.14-12-089, the Commission clarified that it did not intend to address any issues regarding Rule 48 in D.14-02-015.<sup>7</sup> The Commission also modified D.14-02-015 to clarify the purpose of including a table of strength requirements for Grade A wood poles in low wind loading (the same table that SED cites at page 4 of its Opening Comments). The Commission clarified that the table provides a "literal interpretation of the rule wherein the loadings specified in GO 95, rule 43 are multiplied by the safety factors specified in GO 95, Rule 44," and was not intended to modify Rule 48.<sup>8</sup>

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<sup>4</sup> SCE Opening Comments, pp. 4-5.

<sup>5</sup> SED Opening Comments, pp. 3-4.

<sup>6</sup> SED Opening Comments, p. 3.

<sup>7</sup> With the exception of a "consensus proposal" regarding Rule 48, which was uncontested. D.14-12-089, p. 5.

<sup>8</sup> D.14-12-089, p. 9.

SCE reiterates that it is not opposed to creating a reasonable “framework” to assess the safety impacts of LRFD. Should the Commission desire, as part of the anticipated all-party technical workshop process, a “framework” of sample pole loading calculations based on the examples in GO 95 Appendix F could be performed. This could occur to demonstrate that the use of the existing WSD formulas and the proposed LRFD methodology yield similar results and would not reduce safety.<sup>9</sup>

### **3. Scoping Issue 3**

SCE disagrees with SED’s proposal that the Commission undertake two statistical surveys and that the proposed “Load Factor” be converted into wind gust units of miles per hour.<sup>10</sup> This proposal is fundamentally based on a WSD approach to structural loading. In addition, because wind is only one factor to be considered in a load factor analysis, SCE believes it will not be useful to develop and apply any type of performance-based testing (which implies an unknown test period) and a comparison to existing facilities constructed to comply with the current version of GO 95.

SED’s recommended statistical survey appears to be based on the incorrect assumption that LRFD introduces allowable failures. SCE believes the proposed comparison involving a theoretical survey and a statistical survey is unnecessary given that the proposed rule changes for LRFD were crafted in a manner to yield the same results when performing a pole load calculation using the current WSD method.

### **4. Scoping Issue 4**

SCE agrees that parties should identify GO 95 rules potentially affected by the LRFD proposed rule changes. As mentioned above, the 16 supplemental LRFD proposed rule changes

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<sup>9</sup> See SCE Opening Comments, pp. 4-5.

<sup>10</sup> SED Opening Comments, pp. 4-6.

developed and reviewed by the Rules Committee are submitted with these comments as Attachment A. SCE also agrees with SED that if this OIR is divided into two phases, Phase 1 should address rules that are directly related to LRFD. However, as discussed above, SCE does not believe SED's proposed surveys will be useful.

**B. Scope of Proceeding**

In Opening Comments, SCE recommended the Commission consider additional GO 95 issues (not related to LRFD) that are not being addressed in other Commission rulemakings in a second phase of this proceeding.<sup>11</sup> Several parties also indicated in opening comments that other GO 95 issues can be considered within scope of the proceeding.<sup>12</sup> Only three comments—those submitted by Crown Castle Fiber LLC (Crown Castle), AT&T California and Frontier Communications (AT&T/Frontier), and the Small LECs—indicated the scope of the proceeding should be limited to LRFD. These comments generally do not oppose the Rules Committee's proposed GO 95 changes, and appear to be concerned primarily that consideration of other GO 95 issues may distract from consideration of LRFD.<sup>13</sup>

SCE reiterates its position that additional GO 95 issues should be included in the scope of the proceeding. Specifically, the Commission should consider amending the remediation deadlines for Level 3 corrective actions contained in GO 95, Rule 18. Doing so will benefit customers and is consistent with the purpose of this proceeding to modernize GO 95.<sup>14</sup> This issue also is not actively being considered in another Commission rulemaking, to SCE's knowledge. SCE believes it is appropriate for the first phase of the proceeding to be narrowly focused on LRFD and to address additional GO 95 issues, including the deadlines for remediating Level 3 corrective actions, in a second phase of the proceeding. Adopting a two-

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<sup>11</sup> SCE Opening Comments, pp. 6-7.

<sup>12</sup> *E.g.*, Joint Comments of Bear Valley Electric Service, Inc., Liberty Utilities, and PacifiCorp, pp. 3-5; SED Opening Comments, p. 7; Pacific Gas and Electric Company Opening Comments, p. 4.

<sup>13</sup> *See* Crown Castle Opening Comments, p. 4; AT&T California and Frontier Communications Opening Comments, pp. 4-5; Small LECs Opening Comments, p. 3.

<sup>14</sup> *See* SCE Opening Comments, pp. 6-7.

phased approach satisfies the concern raised by Crown Castle, AT&T/Frontier, and the Small LECs that the focus of the proceeding should be narrowly on LRFD and allows for other GO 95 issues to be considered during the proceeding.

**III.**

**CONCLUSION**

SCE appreciates the opportunity to provide these Reply Comments and respectfully requests that the schedule and scope of this proceeding incorporate these Reply Comments as well as SCE's Opening Comments.

Respectfully submitted,

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December 9, 2024

**Attachment A**

**ATTACHMENT A**

**Associated Rule Changes related to Rule 44 (Safety Factors) and LRFD Proposed Rule Changes**

<b>Associated Rule Change</b>	<b>GO 95 Rule</b>	<b>Title</b>	<b>Page</b>
1	12.1-C	Construction and Reconstruction of Lines	2
2	12.2	Maintenance of Lines	3
3	12.3	Lines Constructed Prior to This Order	4
4	34	Foreign Attachments	5
5	54.5	Sags	6
6	56.5	Overhead Guys, Anchor Guys and Span Wires	7
7	57.2	Use of Messenger	8
8	66	Guys	9
9	77.3	Material and Strength	10
10	84.5	Sags	11
11	86.2	Use	12
12	87.2	Use of Messenger	13
13	87.5	Fastenings	14
14	94.3	General Requirements	15
15	Appx. C	Conductor Sags	16

## Associated Rule Change 1

### 12.1 Construction and Reconstruction of Lines

#### C Subordinate Element

##### Original Rule

An element (such as a crossarm or a conductor) added to a pole, tower or structure shall meet all requirements of these rules but does not require any change in like elements already existing except where the added element is related in buck arm construction to an existing arm in which case all construction on the related arms shall meet the requirements of these rules. A crossarm, pole, tower or other structure to which any subordinate element is added shall meet the strength safety factor requirements specified in Rule 44.3.

##### Strikeout/Underline

#### C Subordinate Element

An element (such as a crossarm or a conductor) added to a pole, tower or structure shall meet all requirements of these rules but does not require any change in like elements already existing except where the added element is related in buck arm construction to an existing arm in which case all construction on the related arms shall meet the requirements of these rules. A crossarm, pole, tower or other structure to which any subordinate element is added shall meet the ~~strength safety factor~~ requirements specified in Rule 44.3.

##### Proposed Final Rule

#### C Subordinate Element

An element (such as a crossarm or a conductor) added to a pole, tower or structure shall meet all requirements of these rules but does not require any change in like elements already existing except where the added element is related in buck arm construction to an existing arm in which case all construction on the related arms shall meet the requirements of these rules. A crossarm, pole, tower or other structure to which any subordinate element is added shall meet the requirements specified in Rule 44.3.

## Associated Rule Change 2

### Original Rule

#### 12.2 Maintenance of Lines

All lines and portions of lines shall be maintained in such condition as to provide safety factors not less than those specified in Rule 44.3. Lines and portions of lines constructed or reconstructed on or after the effective date of this Order shall be kept in conformity with the requirements of this Order. The restoration of clearance originally established prior to the effective date of this Order, where the original clearance has been reduced by additional sagging or other causes, is not considered to be reconstruction and the reestablished clearance shall conform to the requirements of the rules in effect at the time the original clearance was established. The changing of clearance for any other purpose is reconstruction and clearances so changed shall comply with the rules of this Order applicable to reconstruction.

### Strikeout/Underline

#### 12.2 Maintenance of Lines

All lines and portions of lines shall be maintained in such condition as to ~~provide safety factors not less than those~~ meet the requirements specified in Rule 44.3. Lines and portions of lines constructed or reconstructed on or after the effective date of this Order shall be kept in conformity with the requirements of this Order. The restoration of clearance originally established prior to the effective date of this Order, where the original clearance has been reduced by additional sagging or other causes, is not considered to be reconstruction and the reestablished clearance shall conform to the requirements of the rules in effect at the time the original clearance was established. The changing of clearance for any other purpose is reconstruction and clearances so changed shall comply with the rules of this Order applicable to reconstruction.

### Proposed Final Rule

#### 12.2 Maintenance of Lines

All lines and portions of lines shall be maintained in such condition as to meet the requirements specified in Rule 44.3. Lines and portions of lines constructed or reconstructed on or after the effective date of this Order shall be kept in conformity with the requirements of this Order. The restoration of clearance originally established prior to the effective date of this Order, where the original clearance has been reduced by additional sagging or other causes, is not considered to be reconstruction and the reestablished clearance shall conform to the requirements of the rules in effect at the time the original clearance was established. The changing of clearance for any other purpose is reconstruction and clearances so changed shall comply with the rules of this Order applicable to reconstruction.

## Associated Rule Change 3

### Original Rule

#### 12.3 Lines Constructed Prior to This Order

The requirements of this Order, other than the safety factor requirements specified in Rule 12.2, do not apply to lines or portions of lines constructed or reconstructed prior to the effective date of this Order. In all other particulars, such lines or portions of lines shall conform to the requirements of the rules in effect at the time of their construction or reconstruction. Lines or portions of lines constructed or reconstructed before July 1, 1942, may conform to and be maintained in accordance with the requirements of this Order, instead of the requirements in effect at the time of such construction or reconstruction.

### Strikeout/Underline

#### 12.3 Lines Constructed Prior to This Order

The requirements of this Order, other than the ~~safety factor~~ requirements specified in Rule 12.2, do not apply to lines or portions of lines constructed or reconstructed prior to the effective date of this Order. In all other particulars, such lines or portions of lines shall conform to the requirements of the rules in effect at the time of their construction or reconstruction. Lines or portions of lines constructed or reconstructed before July 1, 1942, may conform to and be maintained in accordance with the requirements of this Order, instead of the requirements in effect at the time of such construction or reconstruction.

### Proposed Final Rule

#### 12.3 Lines Constructed Prior to This Order

The requirements of this Order, other than the requirements specified in Rule 12.2, do not apply to lines or portions of lines constructed or reconstructed prior to the effective date of this Order. In all other particulars, such lines or portions of lines shall conform to the requirements of the rules in effect at the time of their construction or reconstruction. Lines or portions of lines constructed or reconstructed before July 1, 1942, may conform to and be maintained in accordance with the requirements of this Order, instead of the requirements in effect at the time of such construction or reconstruction.

## Associated Rule Change 4

### Original Rule

#### 34 Foreign Attachments

##### G. Guying

Where mechanical loads imposed on poles or structures exceed safety factors as specified in Rule 44, or at the request of the granting authority, additional strength shall be provided by the use of guys or other suitable construction. When guying is required, refer to Rules 56 and 86 for applicable requirements.  
54.5

### Strikeout/Underline

#### 34 Foreign Attachments

##### G. Guying

Where the effects of the mechanical loads imposed on poles or structures exceed ~~safety factors~~ the strength factors requirements as specified in Rule 44, or at the request of the granting authority, additional strength shall be provided by the use of guys or other suitable construction. When guying is required, refer to Rules 56 and 86 for applicable requirements.

### Proposed Final

#### 34 Foreign Attachments

##### G. Guying

Where the effects of the mechanical loads imposed on poles or structures exceed the strength requirements as specified in Rule 44, or at the request of the granting authority, additional strength shall be provided by the use of guys or other suitable construction. When guying is required, refer to Rules 56 and 86 for applicable requirements.

## Associated Rule Change 5

### Original Rule

#### 54.5 Sags

Minimum conductor sags shall be such that, under the loading conditions specified in Rule 43, the safety factor specified in Table 4, Rule 44 shall be met. See Charts in Appendix C for suggested sags at normal temperatures.

### Strikeout/Underline

#### 54.5 Sags

Minimum conductor sags shall be such that, under the loading conditions specified in Rule 43, the ~~safety factor requirements~~ specified in ~~Table 4~~, Rule 44 shall be met. See Charts in Appendix C for suggested sags at normal temperatures.

### Proposed Final Rule

#### 54.5 Sags

Minimum conductor sags shall be such that, under the loading conditions specified in Rule 43, the requirements specified in Rule 44 shall be met. See Charts in Appendix C for suggested sags at normal temperatures.

## Associated Rule Change 6

### Original Rule

#### 56 Overhead Guys, Anchor Guys and Span Wires

56.2 Use Where mechanical loads imposed on poles, towers, or structures are greater than can be supported with safety factors as specified in Rule 44, additional strength shall be provided by the use of guys or other suitable construction.

Where guys are used with poles or similar structures capable of considerable deflection before failure, the guys shall be able to support the entire load, the pole below the point of guy attachment acting merely as a strut.

Guys shall be attached to structures, as nearly as practicable, at the center of load. They shall be maintained taut and of such strength as to meet the safety factors of Rule 44.

### Strikeout/Underline

#### 56 Overhead Guys, Anchor Guys and Span Wires

56.2 Use Where mechanical loads imposed on poles, towers, or structures are greater than can be supported with ~~safety factors as~~ the requirements specified in Rule 44, additional strength shall be provided by the use of guys or other suitable construction.

Where guys are used with poles or similar structures capable of considerable deflection before failure, the guys shall be able to support the entire load, the pole below the point of guy attachment acting merely as a strut.

Guys shall be attached to structures, as nearly as practicable, at the center of load. They shall be maintained taut and of such strength as to meet the ~~safety factors~~ requirements of Rule 44.

### Proposed Final Rule

#### 56 Overhead Guys, Anchor Guys and Span Wires

56.2 Use Where mechanical loads imposed on poles, towers, or structures are greater than can be supported with the requirements specified in Rule 44, additional strength shall be provided by the use of guys or other suitable construction.

Where guys are used with poles or similar structures capable of considerable deflection before failure, the guys shall be able to support the entire load, the pole below the point of guy attachment acting merely as a strut.

Guys shall be attached to structures, as nearly as practicable, at the center of load. They shall be maintained taut and of such strength as to meet the requirements of Rule 44.

## Associated Rule Change 7

### Original Rule

#### 57.2 Use of Messenger

Where a cable is of such weight that it would not meet the safety factors of Table 4 when self-supported, attachment to stranded messenger shall be made for supporting said weight.

### Strikeout/Underline

#### 57.2 Use of Messenger

Where a cable is of such weight that it would not meet the ~~safety factors of Table 4~~ requirements of Rule 44 when self-supported, attachment to stranded messenger shall be made for supporting said weight.

### Proposed Final Rule

#### 57.2 Use of Messenger

Where a cable is of such weight that it would not meet the requirements of Rule 44 when self-supported, attachment to stranded messenger shall be made for supporting said weight.

## Associated Rule Change 8

### Original Rule

#### 66 Guys

##### 66.2 Use

Where mechanical loads imposed on towers or structures are greater than can be supported with safety factors as specified in rule 44 or the design of such towers and structures requires it, additional strength shall be provided by the use of guys or other suitable construction.

Where guys are used with structures capable of considerable deflection before failure, the guys shall be able to support the entire load, the structure below the point of guy attachment acting merely as a strut.

Guys shall be attached to structures, as nearly as practicable, at the center of load. They shall be maintained taut and of such strength as to meet safety factors of rule 44

### Strikeout/Underline

#### 66 Guys

##### 66.2 Use

Where mechanical loads imposed on towers or structures are greater than can be supported ~~with safety factors~~ as per the requirements specified in ~~R~~Rule 44 or the design of such towers and structures requires it, additional strength shall be provided by the use of guys or other suitable construction.

Where guys are used with structures capable of considerable deflection before failure, the guys shall be able to support the entire load, the structure below the point of guy attachment acting merely as a strut.

Guys shall be attached to structures, as nearly as practicable, at the center of load. They shall be maintained taut and of such strength as to meet ~~safety factors~~ the requirements of ~~R~~Rule 44.

### Proposed Final Rule

#### 66 Guys

##### 66.2 Use

Where mechanical loads imposed on towers or structures are greater than can be supported per the requirements specified in Rule 44 or the design of such towers and structures requires it, additional strength shall be provided by the use of guys or other suitable construction.

Where guys are used with structures capable of considerable deflection before failure, the guys shall be able to support the entire load, the structure below the point of guy attachment acting merely as a strut.

Guys shall be attached to structures, as nearly as practicable, at the center of load. They shall be maintained taut and of such strength as to meet the requirements of Rule 44.

Associated Rule Change 9

Original Rule

77.3 Material and Strength

B. Strength

The strength of span wires, backbones, messengers, etc., shall be such that the safety factors of Rule 44 are met.

Strikeout/Underline

77.3 Material and Strength

B. Strength

The strength of span wires, backbones, messengers, etc., shall be such that the ~~safety factors~~ requirements of Rule 44 are met.

Proposed Final Rule

77.3 Material and Strength

B. Strength

The strength of span wires, backbones, messengers, etc., shall be such that the requirements of Rule 44 are met.

## Associated Rule Change 10

### Original Rule

#### 84.5 Sags

The minimum conductor sags shall be such that under the specified loading conditions, the safety factor specified in Table 4, Rule 44 shall be met.

### Strikeout/Underline

#### 84.5 Sags

The minimum conductor sags shall be such that under the specified loading conditions, the ~~safety factor~~ requirements specified in ~~Table 4~~, Rule 44 shall be met.

### Proposed Final Rule

#### 84.5 Sags

The minimum conductor sags shall be such that under the specified loading conditions, the requirements specified in Rule 44 shall be met.

## Associated Rule Change 11

### Original Rule

#### 86.2 Use

Where mechanical loads imposed on poles, towers or structures are greater than an be supported with the safety factors as specified in Rule 44, additional strength shall be provided by the use of guys or other suitable construction.

Where guys are used with poles or similar structures capable of considerable deflection before failure, the guys shall be able to support the entire stress, the pole below the point of guy attachment acting merely as a strut.

Guys shall be attached to structures as nearly as practicable at the center of load. They shall be maintained taut and of such strength as to meet the safety factors of Rule 44.87.2

### Strikeout/Underline

#### 86.2 Use

Where mechanical loads imposed on poles, towers or structures are greater than ~~can be supported with the safety factors as~~ per the requirements specified in Rule 44, additional strength shall be provided by the use of guys or other suitable construction.

Where guys are used with poles or similar structures capable of considerable deflection before failure, the guys shall be able to support the entire stress, the pole below the point of guy attachment acting merely as a strut.

Guys shall be attached to structures as nearly as practicable at the center of load. They shall be maintained taut and of such strength as to meet the ~~safety factors~~ requirements of Rule 44.

### Proposed Final Rule

#### 86.2 Use

Where mechanical loads imposed on poles, towers or structures are greater than can be supported per the requirements specified in Rule 44, additional strength shall be provided by the use of guys or other suitable construction.

Where guys are used with poles or similar structures capable of considerable deflection before failure, the guys shall be able to support the entire stress, the pole below the point of guy attachment acting merely as a strut.

Guys shall be attached to structures as nearly as practicable at the center of load. They shall be maintained taut and of such strength as to meet the requirements of Rule 44.

## Associated Rule Change 12

### Original Rule

#### 87.2 Use of Messenger

Where a cable is of such weight that it would not meet the safety factors of Table 4 when self-supported, said weight shall be supported by attachment to a stranded messenger.

### Strikeout / Underline

#### 87.2 Use of Messenger

Where a cable is of such weight that it would not meet the ~~safety factors of Table 4~~ requirements of Rule 44 when self-supported, said weight shall be supported by attachment to a stranded messenger.

### Proposed Final Rule

#### 87.2 Use of Messenger

Where a cable is of such weight that it would not meet the requirements of Rule 44 when self-supported, said weight shall be supported by attachment to a stranded messenger.

## Associated Rule Change 13

### Original Rule

#### 87.5 Fastenings

Messenger fastenings shall meet the safety factors of Rule 44. The fastenings or attachments by which messengers are deadended shall have a strength at least equal to that of the strand to which they are attached.

### Strikeout/Underline

#### 87.5 Fastenings

Messenger fastenings shall meet the ~~safety factors~~ requirements of Rule 44. The fastenings or attachments by which messengers are deadended shall have a strength at least equal to that of the strand to which they are attached.

### Proposed Final Rule

#### 87.5 Fastenings

Messenger fastenings shall meet the requirements of Rule 44. The fastenings or attachments by which messengers are deadended shall have a strength at least equal to that of the strand to which they are attached.

## Associated Rule Change 14

### Original Rule

#### 94.3 General Requirements

On joint use poles supporting Class T, C, L or H Circuits (up to 50 kV), the following shall apply:

A. Antennas shall meet the requirements of Class C equipment, unless otherwise specified in this rule.

B. All associated elements of the antenna (e.g. associated cables, messengers) shall meet the requirements of Class C circuits.

C. Support elements (e.g. arms, braces, brackets, hardware) and pole-top extensions shall conform to the requirements of Section IV.

Note: Support elements (e.g. arms, braces, brackets, hardware) and pole-top extensions installed above supply lines shall meet Grade "A" requirements and safety factors specified in Rule 44, Table 4.

### Strikeout/Underline

#### 94.3 General Requirements

On joint use poles supporting Class T, C, L or H Circuits (up to 50 kV), the following shall apply:

A. Antennas shall meet the requirements of Class C equipment, unless otherwise specified in this rule.

B. All associated elements of the antenna (e.g. associated cables, messengers) shall meet the requirements of Class C circuits.

C. Support elements (e.g. arms, braces, brackets, hardware) and pole-top extensions shall conform to the requirements of Section IV.

Note: Support elements (e.g. arms, braces, brackets, hardware) and pole-top extensions installed above supply lines shall meet Grade "A" requirements ~~and safety factors~~ specified in Rule 44, ~~Table 4~~.

### Proposed Final Rule

#### 94.3 General Requirements

On joint use poles supporting Class T, C, L or H Circuits (up to 50 kV), the following shall apply:

A. Antennas shall meet the requirements of Class C equipment, unless otherwise specified in this rule.

B. All associated elements of the antenna (e.g. associated cables, messengers) shall meet the requirements of Class C circuits.

C. Support elements (e.g. arms, braces, brackets, hardware) and pole-top extensions shall conform to the requirements of Section IV.

Note: Support elements (e.g. arms, braces, brackets, hardware) and pole-top extensions installed above supply lines shall meet Grade "A" requirements specified in Rule 44.

## Associated Rule Change 15

### Original Rule – Appendix C, Conductor Sags

#### (a) Basis of Sag Curves for Supply Conductors

Data are presented in Appendix C in the form of curves in Charts numbers 1 to 9 inclusive, showing conductor sags which produce tensions that do not exceed either 35% of ultimate strength of the conductor at 60° F. and no wind, or 50% of ultimate strength (safety factor of 2) of the conductor under the maximum loading conditions specified for Light or Heavy Loadings in Rule 43. These sags are considered particularly applicable to the stringing of new wire (i.e., they should be considered initial sags for conductors which have not been prestressed) and are not recommended in the case of used or so-called prestressed wire.

#### (b) Communication Conductor Sags

The safety factors of Rule 44 and the conductor sizes of Rule 49.4 are the minimum requirements applicable to communication conductors. Conductors will meet the minimum requirements of these rules for Grade “C” construction.

### Strikeout/Underline - Appendix C, Conductor Sags

#### (a) Basis of Sag Curves for Supply Conductors

Data are presented in Appendix C in the form of curves in Charts numbers 1 to 9 inclusive, showing conductor sags which produce tensions that do not exceed either 35% of ultimate strength of the conductor at 60° F. and no wind, or 50% of ultimate strength (~~safety factor of 2~~) of the conductor under the maximum loading conditions specified for Light or Heavy Loadings in Rule 43. These sags are considered particularly applicable to the stringing of new wire (i.e., they should be considered initial sags for conductors which have not been prestressed) and are not recommended in the case of used or so-called prestressed wire.

#### (b) Communication Conductor Sags

The ~~safety factors~~ requirements of Rule 44 and the conductor sizes of Rule 49.4 are the minimum requirements applicable to communication conductors. Conductors will meet the minimum requirements of these rules for Grade “C” construction.

### Proposed Final Rule - Appendix C, Conductor Sags

#### (a) Basis of Sag Curves for Supply Conductors

Data are presented in Appendix C in the form of curves in Charts numbers 1 to 9 inclusive, showing conductor sags which produce tensions that do not exceed either 35% of ultimate strength of the conductor at 60° F. and no wind, or 50% of ultimate strength of the conductor under the maximum loading conditions specified for Light or Heavy Loadings in Rule 43. These sags are considered particularly applicable to the stringing of new wire (i.e., they should be considered initial sags for conductors which have not been prestressed) and are not recommended in the case of used or so-called prestressed wire.

#### (b) Communication Conductor Sags

The requirements of Rule 44 and the conductor sizes of Rule 49.4 are the minimum requirements applicable to communication conductors. Conductors will meet the minimum requirements of these rules for Grade “C” construction.