

MISSOURI PUBLIC SERVICE COMMISSION

STAFF REPORT

CLASS COST OF SERVICE

APPENDIX 2

Other Staff Schedules

**UNION ELECTRIC COMPANY,
d/b/a AMEREN MISSOURI**

CASE NO. GR-2019-0077

*Jefferson City, Missouri
May 2019*

WEATHER NORMALIZATION ADJUSTMENT RIDER

APPLICABILITY

The Weather Normalization Adjustment (“WNA”) Rider is applicable to each ccf of gas delivered under the terms of the residential rate schedules of Union Electric Company d/b/a Ameren Missouri until such time as it may be discontinued or modified by order of the Commission in a general rate case.

CALCULATION OF ADJUSTMENT

The WNA Factor will be calculated for each billing cycle and billing month as follows:

$$WNA_i = \sum_{j=1}^{18} ((NDD_{ij} - ADD_{ij}) \cdot C_{ij}) \cdot \beta$$

Where:

i = the applicable billing cycle month

WNA_i = Weather Normalization Adjustment

j = the billing cycle

NDD_{ij} = the total normal heating degree days based upon Staff’s daily normal weather as determined in the most recent rate case. The daily normal weather for each month for each applicable weather station, arranged by rank, is identified on Sheets XX.

ADD_{ij} = the total actual heating degree days, base 65° at the applicable weather station; Columbia, MO for the areas around the Panhandle Eastern pipeline or Rolla system (“Panhandle Area”) and Cape Girardeau, MO for the areas in the southeast portions of Missouri (“Southeast Area”).

C_{ij} = the total number of customer charges charged in billing cycle j and billing month i

β = the applicable coefficient; 0.1077055 for the residential class in the Panhandle Area, and 0.1102156 for the residential class in the Southeast Area.

1. Monthly $WNA_i = WNA_i \times \text{Weighted Volumetric Rate (“WRVR”)}_i$

2. For the winter billing months (November through April) the Residential WRVR shall be equal to the Residential Winter Charge for Gas Used established at the conclusion of each general rate case. For Case No. GR-2019-0077 the amount is \$TBD. The Residential WRVR for each of the summer billing months (May through October) shall be determined at the conclusion of each general rate case as the percentage of total residential customers whose usage ends in the first rate block multiplied by the volumetric rate of that block plus the percentage of total residential customers whose usage ends in the second rate block multiplied by the volumetric rate of that block. Currently effective summer WRVR’s are reflected in the table below:

DATE OF ISSUE

month day year

DATE EFFECTIVE

month day year

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Name of Officer Title

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WEATHER NORMALIZATION ADJUSTMENT RIDER (Cont'd)

3. The Current Semiannual WNA (“CSWNA”) shall be the sum of the billing cycle WNA for each of the six Monthly WNA_i for the billing months in the applicable six month period divided by the annual volumetric billing determinates set for the residential rate class in the most recent rate case.

4. Semiannual Reconciliation Rate (“SRR”): Three (3) months prior to the end of the twelve (12) months of billing of each CSWNA, the over- or under-billing of the numerator of the CSWNA shall be calculated based on nine (9) months actual sales and three (3) months projected sales. The amount of over- or under-billing shall be adjusted as ordered by the Commission, if applicable. The resulting amount shall be divided by the annual volumetric billing determinates set for the residential rate class in the most recent rate case. Three (3) months prior to the end of the twelve (12) months of billing of each SRR, the over- or under-billing of the SRR shall be calculated based on nine (9) months actual sales and three (3) months projected sales. Any remaining over- or under-billing from the SRR shall be applied to the next SRR. The three (3) months projected sales associated with each CSWNA and SSR shall be trued-up with actuals upon calculation of the next applicable SSR.

5. The Company will make a semiannual rate filing with the Commission 30 days prior to the first effective day referenced in the CSWNA table to adjust the WNA Rider. Each CSWNA and SRR will remain in effect for twelve (12) months. The total WNA Rider rate shall be the sum of all effective CSWNAs and SRRs.

6. There shall be a limit of \$0.05 per ccf on upward adjustments for the WNA and no limit on downward adjustment. Any WNA adjustment amounts in excess of \$0.05 per ccf will be deferred for recovery from customers in the next WNA adjustment and applicable to part a. below. upward adjustments for the WNA and no limit on downward adjustment. Any WNA adjustment amounts in excess of \$0.05 per ccf will be deferred for recovery from customers in the next WNA adjustment and applicable to part a. below.

DATE OF ISSUE

month day year

DATE EFFECTIVE

_____ month day year

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Name of Officer

Title

Address

WEATHER NORMALIZATION ADJUSTMENT RIDER (Cont'd)

The table below identifies the daily normal HDD to be used for each month, currently arranged by rank from highest to lowest HDD. The normal HDD to be used for a specific calendar date is to be ranked consistent with the actual HDD rank in the applicable calendar month.

| STATION: CAPE GIRARDEAU FAA AIRP, MO (Station ID: 231289) | | | | | | | | | | | | |
|--|------|------|------|------|------|-----|-----|-----|-----|------|------|------|
| Averages of Daily HDD From Monthly Data by Rank (e.g. Worst 30 January Days, 2d Worst, etc.) | | | | | | | | | | | | |
| Rank | Jan | Feb* | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| 1 | 49.1 | 45.5 | 36.0 | 23.2 | 11.3 | 0.6 | 0.0 | 0.0 | 9.7 | 22.2 | 33.5 | 46.4 |
| 2 | 46.9 | 42.7 | 34.1 | 21.3 | 9.8 | 0.0 | 0.0 | 0.0 | 8.1 | 20.6 | 31.7 | 43.4 |
| 3 | 44.6 | 40.0 | 31.6 | 19.6 | 8.7 | 0.0 | 0.0 | 0.0 | 6.0 | 19.0 | 29.7 | 41.2 |
| 4 | 43.2 | 38.0 | 29.5 | 17.8 | 7.2 | 0.0 | 0.0 | 0.0 | 4.8 | 17.6 | 28.6 | 39.3 |
| 5 | 41.6 | 36.3 | 27.8 | 16.6 | 6.0 | 0.0 | 0.0 | 0.0 | 3.7 | 16.4 | 27.5 | 38.1 |
| 6 | 40.3 | 34.9 | 26.8 | 15.5 | 5.1 | 0.0 | 0.0 | 0.0 | 2.4 | 15.5 | 26.6 | 36.6 |
| 7 | 38.8 | 33.8 | 25.5 | 14.6 | 4.0 | 0.0 | 0.0 | 0.0 | 1.7 | 14.2 | 25.6 | 35.5 |
| 8 | 37.8 | 33.0 | 24.5 | 13.5 | 3.0 | 0.0 | 0.0 | 0.0 | 0.6 | 13.5 | 24.8 | 34.6 |
| 9 | 36.7 | 32.4 | 23.7 | 12.5 | 2.1 | 0.0 | 0.0 | 0.0 | 0.0 | 12.9 | 24.1 | 33.5 |
| 10 | 35.4 | 31.6 | 22.8 | 11.5 | 1.4 | 0.0 | 0.0 | 0.0 | 0.0 | 12.0 | 23.1 | 33.0 |
| 11 | 34.7 | 30.7 | 21.9 | 10.7 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 11.3 | 22.5 | 32.1 |
| 12 | 34.0 | 29.8 | 20.9 | 10.3 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 10.7 | 21.6 | 31.1 |
| 13 | 33.1 | 28.7 | 20.1 | 9.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 9.6 | 20.6 | 30.2 |
| 14 | 32.2 | 27.9 | 19.2 | 8.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 8.9 | 19.8 | 29.6 |
| 15 | 31.7 | 27.2 | 18.2 | 7.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 8.2 | 19.0 | 28.9 |
| 16 | 31.0 | 26.2 | 17.5 | 7.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.6 | 18.3 | 27.8 |
| 17 | 30.3 | 25.5 | 16.7 | 6.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.7 | 17.4 | 26.9 |
| 18 | 29.5 | 23.9 | 16.0 | 5.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.0 | 16.7 | 26.3 |
| 19 | 29.1 | 23.2 | 15.2 | 4.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.1 | 15.9 | 25.7 |
| 20 | 28.3 | 22.2 | 14.1 | 3.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.2 | 14.9 | 24.9 |
| 21 | 27.4 | 21.1 | 13.2 | 2.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.6 | 13.7 | 24.0 |
| 22 | 26.6 | 19.9 | 12.3 | 1.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.5 | 12.8 | 23.4 |
| 23 | 25.4 | 18.8 | 11.7 | 0.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.5 | 12.1 | 22.6 |
| 24 | 24.2 | 17.6 | 10.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.9 | 11.2 | 22.0 |
| 25 | 23.2 | 16.8 | 9.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.1 | 10.2 | 20.9 |
| 26 | 21.9 | 14.8 | 8.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 8.7 | 19.7 |
| 27 | 20.7 | 12.4 | 6.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.1 | 18.5 |
| 28 | 18.7 | 9.3 | 5.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.5 | 16.7 |
| 29 | 16.4 | | 4.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.8 | 14.7 |
| 30 | 13.7 | | 3.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.6 | 12.1 |
| 31 | 10.1 | | 0.9 | | 0.0 | | 0.0 | 0.0 | | 0.0 | | 9.1 |

* For Leap Year, the Normal HDD of February 29 is 17.8

WEATHER NORMALIZATION ADJUSTMENT RIDER (Cont'd)

The table below identifies the daily normal HDD to be used for each month, currently arranged by rank from highest to lowest HDD. The normal HDD to be used for a specific calendar date is to be ranked consistent with the actual HDD rank in the applicable calendar month.

| STATION: COLUMBIA WSO AP, MO (Station ID: 231791) | | | | | | | | | | | | |
|--|------|------|------|------|------|-----|-----|-----|------|------|------|------|
| Averages of Daily HDD From Monthly Data by Rank (e.g. Worst 30 January Days, 2d Worst, etc.) | | | | | | | | | | | | |
| Rank | Jan | Feb* | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
| 1 | 54.7 | 50.6 | 39.8 | 25.9 | 14.7 | 3.5 | 0.0 | 0.0 | 11.3 | 24.7 | 37.3 | 51.1 |
| 2 | 52.2 | 47.4 | 37.4 | 24.0 | 12.8 | 1.4 | 0.0 | 0.0 | 9.4 | 22.5 | 34.7 | 48.4 |
| 3 | 50.0 | 45.2 | 34.9 | 22.1 | 11.3 | 0.2 | 0.0 | 0.0 | 7.4 | 20.8 | 33.1 | 46.2 |
| 4 | 48.1 | 42.8 | 33.1 | 20.4 | 10.1 | 0.0 | 0.0 | 0.0 | 6.2 | 19.1 | 31.5 | 44.2 |
| 5 | 46.4 | 41.2 | 31.5 | 19.3 | 8.7 | 0.0 | 0.0 | 0.0 | 5.0 | 17.8 | 30.3 | 43.1 |
| 6 | 45.0 | 40.0 | 29.9 | 18.1 | 7.9 | 0.0 | 0.0 | 0.0 | 4.1 | 16.7 | 29.3 | 40.8 |
| 7 | 44.0 | 38.9 | 28.6 | 17.1 | 6.8 | 0.0 | 0.0 | 0.0 | 3.3 | 16.0 | 28.3 | 39.2 |
| 8 | 42.8 | 37.6 | 27.4 | 16.1 | 6.2 | 0.0 | 0.0 | 0.0 | 2.5 | 15.3 | 27.2 | 38.2 |
| 9 | 41.8 | 36.4 | 26.6 | 15.4 | 5.0 | 0.0 | 0.0 | 0.0 | 1.3 | 14.4 | 26.2 | 37.0 |
| 10 | 40.5 | 35.4 | 25.5 | 14.7 | 3.9 | 0.0 | 0.0 | 0.0 | 0.7 | 13.4 | 25.4 | 35.9 |
| 11 | 39.3 | 34.4 | 24.4 | 13.7 | 3.2 | 0.0 | 0.0 | 0.0 | 0.0 | 12.8 | 24.3 | 35.1 |
| 12 | 37.9 | 33.4 | 23.6 | 12.9 | 2.4 | 0.0 | 0.0 | 0.0 | 0.0 | 12.2 | 23.1 | 34.5 |
| 13 | 37.0 | 32.5 | 22.7 | 11.9 | 1.9 | 0.0 | 0.0 | 0.0 | 0.0 | 11.6 | 22.2 | 33.6 |
| 14 | 36.3 | 31.1 | 21.8 | 11.3 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 10.7 | 21.4 | 32.9 |
| 15 | 35.3 | 30.4 | 21.0 | 10.6 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 9.9 | 20.5 | 32.0 |
| 16 | 34.6 | 29.3 | 20.3 | 9.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 8.8 | 19.7 | 31.2 |
| 17 | 33.6 | 28.4 | 19.1 | 9.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 8.0 | 18.8 | 30.5 |
| 18 | 32.6 | 27.4 | 18.4 | 7.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.3 | 18.2 | 29.8 |
| 19 | 31.5 | 26.6 | 17.3 | 6.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.3 | 17.6 | 29.1 |
| 20 | 30.7 | 25.4 | 16.1 | 5.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5.5 | 16.7 | 28.1 |
| 21 | 30.0 | 24.5 | 15.5 | 4.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.7 | 16.0 | 27.2 |
| 22 | 28.8 | 23.3 | 14.6 | 3.6 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.8 | 14.7 | 26.3 |
| 23 | 28.1 | 22.1 | 13.4 | 2.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.0 | 13.7 | 25.3 |
| 24 | 26.8 | 20.7 | 12.4 | 1.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 2.1 | 12.6 | 24.5 |
| 25 | 26.3 | 19.3 | 11.1 | 0.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.2 | 11.3 | 23.6 |
| 26 | 25.0 | 17.0 | 9.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | 9.9 | 22.5 |
| 27 | 23.7 | 14.3 | 8.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 8.6 | 21.4 |
| 28 | 21.8 | 10.1 | 6.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6.8 | 19.6 |
| 29 | 19.6 | | 4.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.1 | 17.5 |
| 30 | 17.4 | | 2.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1.3 | 14.5 |
| 31 | 13.6 | | 0.0 | | 0.0 | | 0.0 | 0.0 | | 0.0 | | 11.0 |

* For Leap Year, the Normal HDD of February 29 is 20.4.

Residential Rates for Panhandle Area:
CSWNA Table:

| <u>Period</u> | <u>Rate First Effective</u> | <u>Months</u> | <u>Rate Ending Effective</u> | <u>CSWNA (Semiannual)</u> |
|---------------|------------------------------|---------------|------------------------------|---------------------------|
| 2020 S1 | 4/1/2020 | 12 | 3/31/2021 | TBD |
| 2019 S2 | 10/1/2019 | 12 | 9/30/2020 | TBD |
| 2019 S1 | Effective Date of this Sheet | | 3/31/2020 | 0.0000 |
| 2018 S2 | Effective Date of this Sheet | | 9/30/2019 | 0.0000 |

SRR Table:

| <u>Period</u> | <u>Rate First Effective</u> | <u>Months</u> | <u>Rate Ending Effective</u> | <u>SRR (Semiannual)</u> |
|---------------|------------------------------|---------------|------------------------------|-------------------------|
| 2020 S1 | 4/1/2020 | 12 | 3/31/2021 | TBD |
| 2019 S2 | 10/1/2019 | 12 | 9/30/2020 | TBD |
| 2019 S1 | Effective Date of this Sheet | | 3/31/2020 | 0.0000 |
| 2018 S2 | Effective Date of this Sheet | | 9/30/2019 | 0.0000 |

WNA Rider Rate:

| <u>Period</u> | <u>Rate First Effective</u> | <u>Months</u> | <u>Rate Ending Effective</u> | <u>Monthly WNA Rider Rate</u> |
|---------------|------------------------------|---------------|------------------------------|-------------------------------|
| 2018 S2 | Effective Date of this Sheet | | 9/30/2019 | 0.0000 |

DATE OF ISSUE month day year

DATE EFFECTIVE month day year

ISSUED BY:

Name of Officer Title

Address

Residential Rates for Southeast Area:

CSWNA Table:

| <u>Period</u> | <u>Rate First Effective</u> | <u>Months</u> | <u>Rate Ending Effective</u> | <u>CSWNA (Semiannual)</u> |
|---------------|------------------------------|---------------|------------------------------|---------------------------|
| 2020 S1 | 4/1/2020 | 12 | 3/31/2021 | TBD |
| 2019 S2 | 10/1/2019 | 12 | 9/30/2020 | TBD |
| 2019 S1 | Effective Date of this Sheet | | 3/31/2020 | 0.0000 |
| 2018 S2 | Effective Date of this Sheet | | 9/30/2019 | 0.0000 |

SRR Table:

| <u>Period</u> | <u>Rate First Effective</u> | <u>Months</u> | <u>Rate Ending Effective</u> | <u>SRR (Semiannual)</u> |
|---------------|------------------------------|---------------|------------------------------|-------------------------|
| 2020 S1 | 4/1/2020 | 12 | 3/31/2021 | TBD |
| 2019 S2 | 10/1/2019 | 12 | 9/30/2020 | TBD |
| 2019 S1 | Effective Date of this Sheet | | 3/31/2020 | 0.0000 |
| 2018 S2 | Effective Date of this Sheet | | 9/30/2019 | 0.0000 |

WNA Rider Rate:

| <u>Period</u> | <u>Rate First Effective</u> | <u>Months</u> | <u>Rate Ending Effective</u> | <u>Monthly WNA Rider Rate</u> |
|---------------|------------------------------|---------------|------------------------------|-------------------------------|
| 2018 S2 | Effective Date of this Sheet | | 9/30/2019 | 0.0000 |

DATE OF ISSUE month day year

DATE EFFECTIVE month day year

ISSUED BY:

Name of Officer Title

Address

Special Contract Rates – Transportation Service

1. Purpose: The purpose of this Special Contract Rate schedule (“SCR”) is to encourage efficient utilization of the existing company system and services in Missouri.

2. a. Availability: Service under this schedule is available to existing customers that have executed an affidavit as to the availability of a viable natural gas transportation alternative that would result in disconnection from the Company’s existing facilities, or new customers that have executed an affidavit that the customer has a viable natural gas transportation alternative available. In addition, the following limitations shall apply:

2. b. Documentation of viable natural gas transportation alternatives. Customer shall furnish to Company documentation of the alternative transportation sources described in the affidavit provided in compliance with this section including sufficient documentation to demonstrate that but-for necessity of the discount provided under this schedule. Customers must present a properly executed affidavit testifying that but-for the provision of the natural gas service discounts under this SCR, Customer would utilize an alternative source of natural gas transportation.

2. c. Customer qualifications:

(1) prospective customers who are expected to have usage exceeding 300,000 Ccf/year going forward; or

(2) retention customers who have had usage exceeding 300,000 Ccf/year in each of the preceding 3 years, and who are expected to have usage exceeding 300,000 Ccf/year going forward pursuant to qualifying Special Contract incentive awards.

3. Applicability: All transportation volumes delivered shall be considered qualified volumes with respect to the incentive provisions of this schedule to the extent that such usage would have been displaced per Customer affidavit.

4. Incentive Provisions

Rate Discount: With respect to the qualified volumes, the commodity margin of the sales or transportation rate will be discounted by an amount and for a term stated within the SCR contract. Within these parameters, the SCR contract shall specify the level of discounts as a percent of non-gas/non-ISRS charges that shall be provided for each contract year that, in the Company’s discretion, based on the needs of the customer will be most effective in retaining, expanding or attracting the customer, as applicable. The customer bill for non-gas/non-ISRS charges produced after application of such discount must be of sufficient amount to (1) produce revenues in excess of assignable and actual marginal costs for each year of the life of the contract, and (2) be a minimum of 90% of the cost of the viable natural gas transportation alternative over the life of the contract. **Revenue Limitation:** The total dollar amount of the incentives provided under this schedule shall not exceed one percent (1%) of the Company's jurisdictional gross revenues during each calendar year; provided, however, the Company shall have the right at any time and for good cause shown to seek a modification of this limitation upon application to the Commission.

5. Reporting: During the term of this schedule the Company will prepare and submit an annual report to the Commission as a BSC Submission in EFIS listing the names and locations of customers receiving service hereunder and a statement of incentives provided to each customer during the reporting period. The report will also describe the basis used to qualify each customer added to the

Company's Special Contract program during the reporting period. The report will include an affidavit respecting each customer receiving service under the SC in a given year, certifying that the Company has verified that the customer continued to meet applicable usage and any other contractual requirements throughout the subject year.

6. Other: Prior to any determination of the Company's revenue requirement for rate making purposes before the Commission, test year revenues shall first be adjusted to reflect the level corresponding to that which would be produced under the standard otherwise applicable rate schedule.

7. Adjustments and Surcharges: The rates hereunder are subject to adjustment as provided in the following schedules: Infrastructure System Replacement Surcharge, Purchased Gas Adjustment/Actual Cost Adjustment Clause; Tax and License Rider

8. Regulations: Service under the SCR is subject to Rules and Regulations filed with the Commission

9. Contracts under prior versions of the SC tariff shall be allowed to continue subject to the provisions of the S C tariff; however, further renewals are prohibited unless such contracts comply with this SCR.