



Control Number: 35077



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Project No. 35077

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Amendment to

INTERCONNECTION AGREEMENT

Between

South Texas Electric Cooperative

and

LCRA Transmission Services Company

November 5, 2009

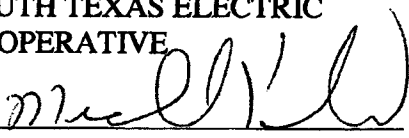
**AMENDMENT TO
INTERCONNECTION AGREEMENT**

This Amendment to the Interchange Agreement, dated October 7, 1987 ("the Agreement"), between South Texas Electric Cooperative ("STEC") and the Lower Colorado River is made and entered into this 5th day of November, 2009 between STEC and the LCRA Transmission Services Corporation ("Corporation") (assignee of the Lower Colorado River Authority), and collectively referred to hereinafter as the Parties. In consideration of the mutual promises and undertakings herein set forth, the Parties agree to amend the Agreement as follows:

1. Facility Schedule No. 4 and Facility Schedule No. 5 (including the diagrams attached thereto) attached to this Amendment are hereby added to the Agreement.
2. Facility Schedule No. 4 and Facility Schedule No. 5 will become effective upon execution of this Amendment by the Parties.
3. Except as otherwise expressly provided for herein, the Agreement will continue in full force and effect in accordance with its terms.

IN WITNESS WHEREOF, the Parties have caused this Amendment to be executed in several counterparts, each of which shall be deemed an original but all shall constitute one and the same instrument.

SOUTH TEXAS ELECTRIC
COOPERATIVE

By: 

Name: Michael Packard

Title: General Manager

Date: 10/30/09

LCRA TRANSMISSION SERVICES
CORPORATION

By: 

Name: Ray Pfefferkorn, P.E.

Title: LCRA Transmission Engineering Manager

Date: 11/5/09



FACILITY SCHEDULE NO. 4

1. Name: Bakersfield
2. Point of Interconnection location: The Point of Interconnection is located in Pecos County, Texas, where STEC's 345 kV transmission line terminates on the Corporation's Bakersfield substation line dead-end structure.
3. Delivery Voltage: 345kV
4. Metered Voltage: Not applicable.
5. Normal closed: Yes
6. One-Line Diagram Attached: Yes
7. Facilities owned by STEC: STEC owns the single-circuit 345 kV transmission line (double-circuit capable) from the Bakersfield Substation to the Big Hill Substation, including bundled 1590 ACSR conductors, OPGW shielding, OPGW splices and repeater station(s) along the transmission line, transmission line structures and rights-of-way. STEC owns their transmission line dead-end insulator string and attachment hardware connecting to the Corporation's substation dead-end structure. STEC does not own any substation equipment at Bakersfield.
8. Facilities owned by the Corporation: The Corporation owns the Bakersfield Substation, including the 345 kV buses, 345 kV circuit breakers, 345 kV switches, 345 kV line switches, 345kV line surge arrestors at substation dead-end structure for the STEC 345 kV line, 345 kV instrument transformers, protection and control panels for the STEC 345 kV line, Remote Terminal Unit, communication electronics, and jumpers from the substation equipment to the STEC 345 kV transmission line at the Point of Interconnection. The Corporation owns all the substation equipment for the STEC 345 kV transmission line. The Corporation provides and owns the fiber patch panel, the fiber facility entry cable, and the fiber splice box within the Bakersfield substation for the STEC fiber.
9. Cost Responsibility: Each Party will be fully responsible for the liabilities related to the facilities it owns. STEC and the Corporation will each be responsible for all costs it incurs in connection with establishment and maintenance of the Point of Interconnection in accordance with this Facility Schedule. The Corporation will have full use of the STEC transmission line fiber for transmission utility related purposes and STEC will not charge the Corporation for the use of the STEC transmission line fiber optics.
10. Operational and Maintenance Responsibility: Each Party will be responsible for the operation and maintenance of the facilities it owns, with exception to the fiber splices

along the line which may also be maintained by the Corporation at no cost to STEC. The joint maintenance of the fiber is to aid in timely repair to return the fiber to operational status.

11. Supplemental terms and conditions:

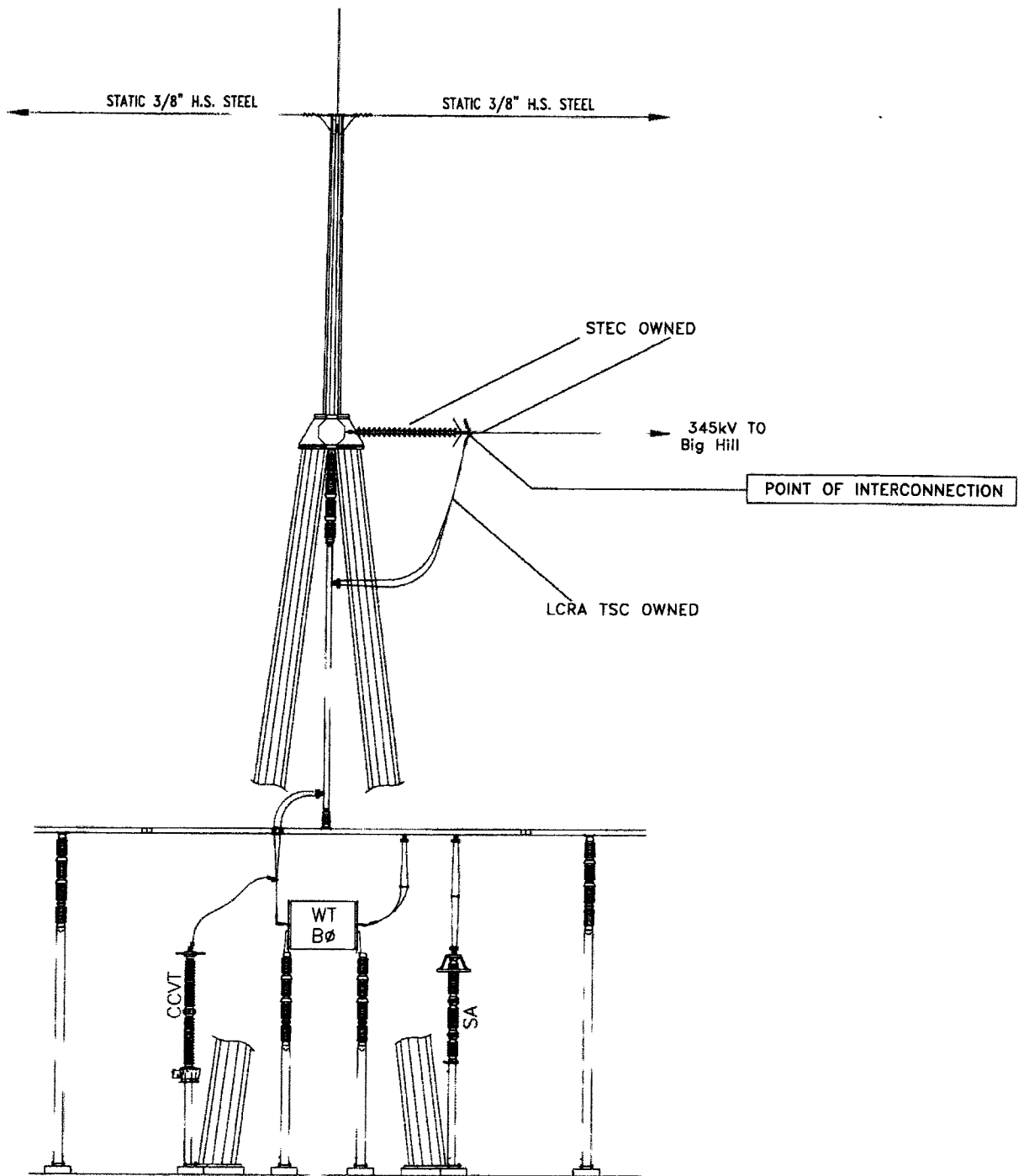
- (a) The Corporation will monitor the STEC 345 kV transmission line flows and other facilities at the Bakersfield Substation.
- (b) The Corporation will provide ICCP data from the Bakersfield Substation to ERCOT in accordance with ERCOT requirements.
- (c) STEC will provide the 345 kV transmission line design parameters and modeling information to the Corporation and to ERCOT, including the Facility Rating of the STEC line from 20 to 115 degrees Fahrenheit ambient temperature in five degree increments for Normal, Two-Hour, and Fifteen-Minute conditions. The Facility Rating of the STEC line will take into consideration the Corporation substation series elements provided by the Corporation.
- (d) The Corporation will install 3000 Amp substation series facilities so that it will not limit the STEC line rating at 105 degrees Fahrenheit ambient. The Corporation will provide the substation series equipment ratings to STEC from 20 to 115 degrees Fahrenheit ambient in five degree increments for Normal, Two-Hour, and Fifteen-Minute conditions.
- (e) The Parties will coordinate on the use of dynamic ratings for the STEC 345 kV line where the dynamic ratings are ambient temperature dependent from 20 to 115 degrees Fahrenheit in five degree increments.
- (f) The Corporation's standard 345 kV transmission line protection schemes will be applied and reviewed with STEC. Any deviations must be mutually agreed upon by STEC and the Corporation. Relay settings will be developed by the Corporation and reviewed with STEC.
- (g) Each Party will name and number their respective equipment.
- (h) Outage scheduling for the STEC 345 kV line will be coordinated through the Corporation's System Operations Control Center, as the Corporation shall direct all switching at the Point of Interconnection and coordinate all switching of the Bakersfield Substation equipment.
- (i) The Corporation will install equipment for distance-to-fault information and will make that information available to STEC for the STEC 345 kV transmission line.
- (j) STEC is responsible for NERC TADS reporting for their 345 kV line.

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Bakersfield



POINT OF INTERCONNECTION DETAIL

FACILITY SCHEDULE NO. 5

1. Name: Big Hill
2. Point of Interconnection location: The Point of Interconnection is located in Schleicher County, Texas, where STEC's 345 kV transmission line substation terminates on the Corporation's Big Hill substation line dead-end structure.
3. Delivery Voltage: 345kV
4. Metered Voltage: Not applicable.
5. Normal closed: Yes
6. One-Line Diagram Attached: Yes
7. Facilities owned by STEC: STEC owns the single-circuit 345 kV transmission line (double-circuit capable) from the Bakersfield Substation to the Big Hill Substation, including bundled 1590 ACSR conductors, OPGW shielding, OPGW splices and repeater station(s) along the transmission line, transmission line structures and rights-of-way. STEC owns their transmission line dead-end insulator string and attachment hardware connecting to the Corporation's substation dead-end structure. STEC does not own any substation equipment at Corporation's Big Hill.
8. Facilities owned by the Corporation: The Corporation owns the Big Hill Substation, including the 345 kV buses, 345 kV circuit breakers, 345 kV switches, 345 kV line switches, 345kV line surge arrestors at substation dead-end structure for the STEC 345 kV line, 345 kV instrument transformers, protection and control panels for the STEC 345 kV line, Remote Terminal Unit, communication electronics, and jumpers from the substation equipment to the STEC 345 kV transmission line at the Point of Interconnection. The Corporation owns all the substation equipment for the STEC 345 kV transmission line. The Corporation provides and owns the fiber patch panel, the fiber facility entry cable, and the fiber splice box within the Big Hill substation for the STEC fiber.
9. Cost Responsibility: Each Party will be fully responsible for the liabilities related to the facilities it owns. STEC and the Corporation will each be responsible for all costs it incurs in connection with establishment and maintenance of the Point of Interconnection in accordance with this Facility Schedule. The Corporation will have full use of the STEC transmission line fiber for transmission utility related purposes and STEC will not charge the Corporation for the use of the STEC transmission line fiber optics.
10. Operational and Maintenance Responsibility: Each Party will be responsible for the operation and maintenance of the facilities it owns, with exception to the fiber splices

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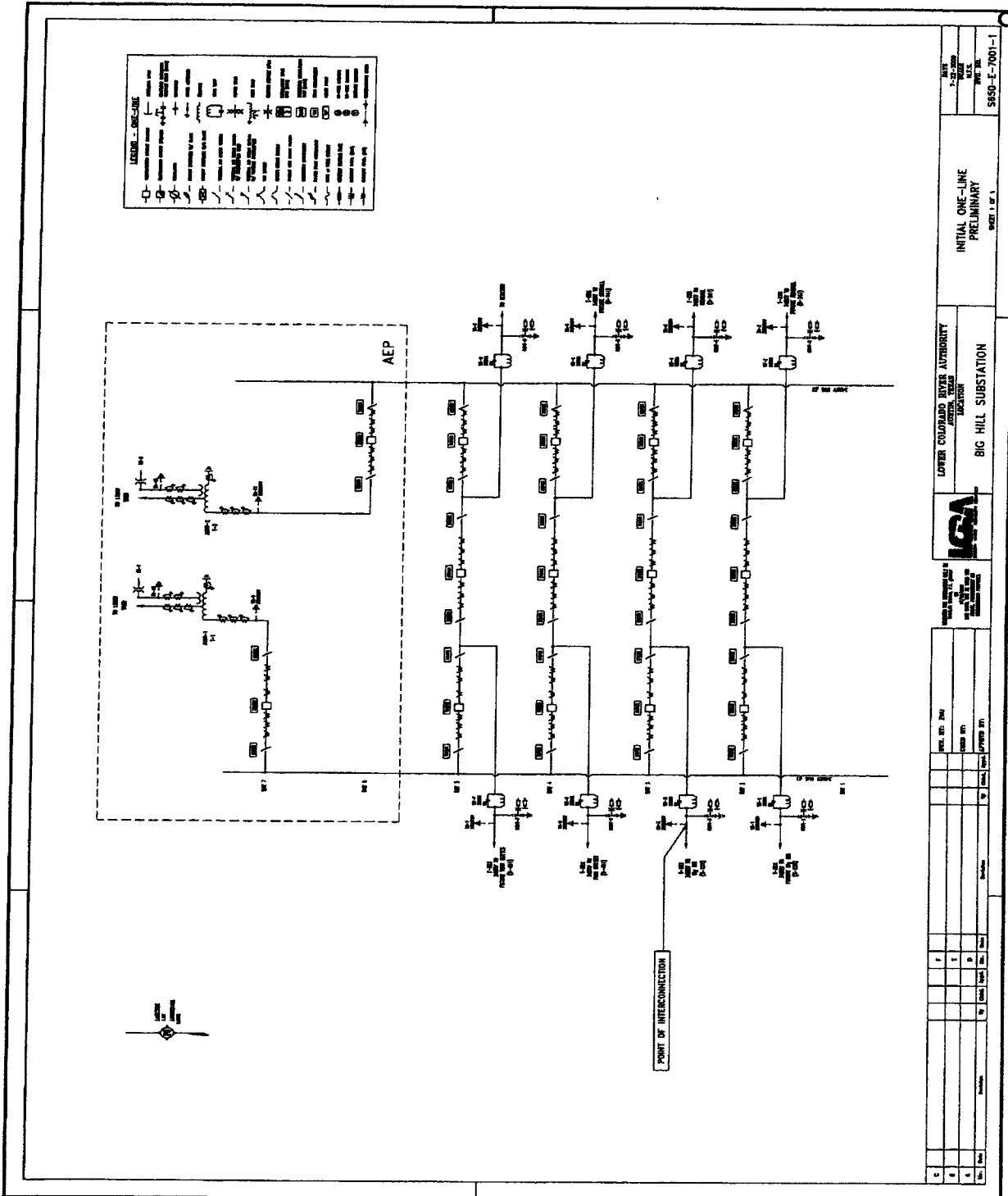
along the line which may also be maintained by the Corporation at no cost to STEC. The joint maintenance of the fiber is to aid in timely repair to return the fiber to operational status.

11. Supplemental terms and conditions:

- (a) The Corporation will monitor the STEC 345 kV transmission line flows and other facilities at the Big Hill Substation.
- (b) The Corporation will provide ICCP data from the Big Hill Substation to ERCOT in accordance with ERCOT requirements.
- (c) STEC will provide the 345 kV transmission line design parameters and modeling information to the Corporation and to ERCOT, including the Facility Rating of the STEC line from 20 to 115 degrees Fahrenheit ambient in five degree increments for Normal, Two-Hour, and Fifteen-Minute conditions. The Facility Rating of the STEC line will take into consideration the Corporation substation series elements provided by the Corporation.
- (d) The Corporation will install 3000 Amp substation series facilities so that it will not limit the STEC line rating at 105 degrees Fahrenheit ambient. The Corporation will provide the substation series equipment ratings to STEC from 20 to 115 degrees Fahrenheit ambient in five degree increments for Normal, Two-Hour, and Fifteen-Minute conditions.
- (e) The Parties will coordinate on the use of dynamic ratings for the STEC 345 kV line where the dynamic ratings are ambient temperature dependent from 20 to 115 degrees Fahrenheit in five degree increments.
- (f) The Corporation's standard 345 kV transmission line protection schemes will be applied and reviewed with STEC. Any deviations must be mutually agreed upon by STEC and the Corporation. Relay settings will be developed by the Corporation and reviewed with STEC.
- (g) Each Party will name and number their respective equipment.
- (h) Outage scheduling for the STEC 345 kV line will be coordinated through the Corporation's System Operations Control Center, as the Corporation shall direct all switching at the Point of Interconnection and coordinate all switching of the Big Hill Substation equipment.
- (i) The Corporation will install equipment for distance-to-fault information and will make that information available to STEC for the STEC 345 kV transmission line.
- (j) STEC is responsible for NERC TADS reporting for their 345 kV line.

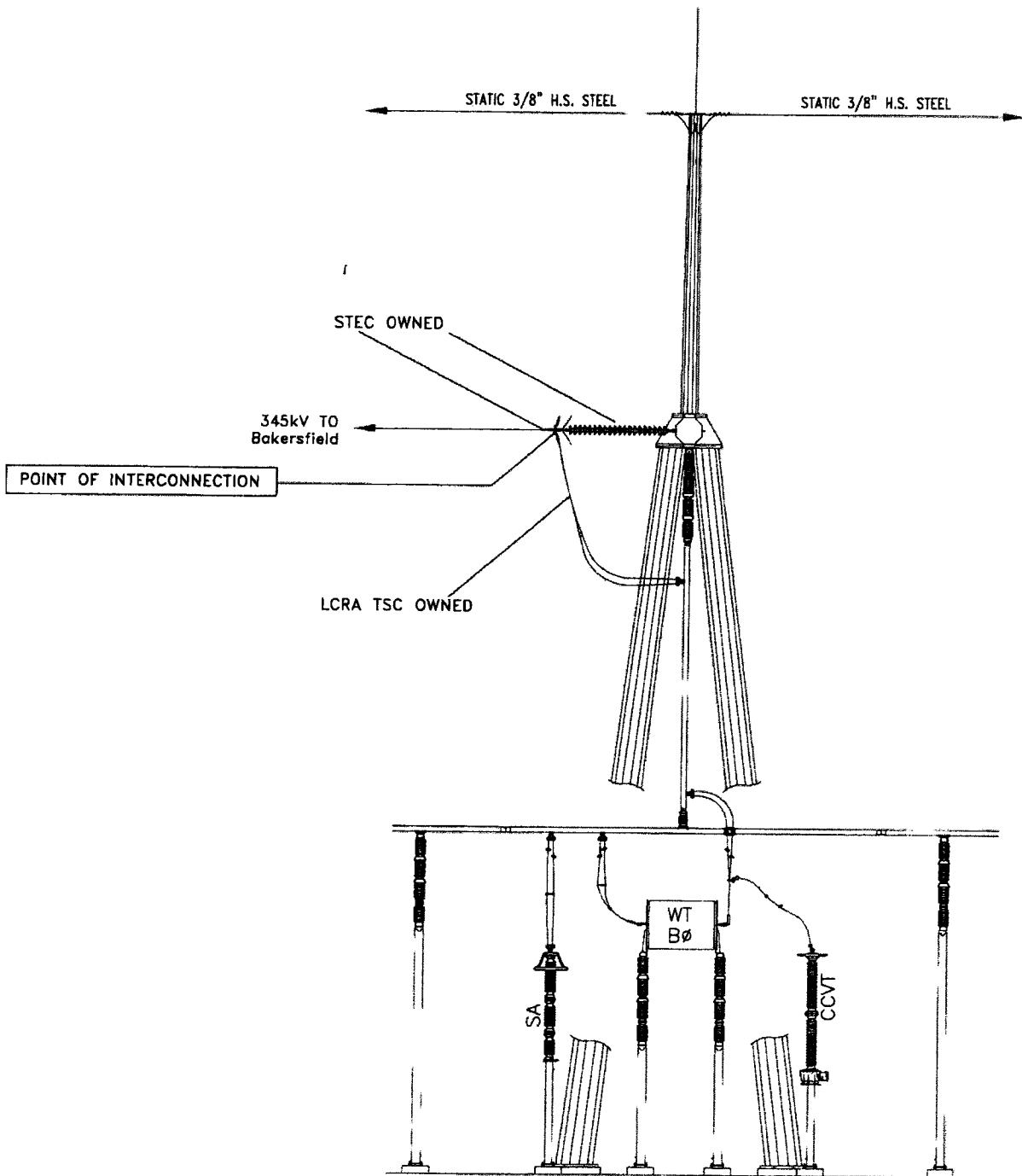
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FACILITY SCHEDULE NO. 5 ONE LINE DIAGRAM



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Big Hill



POINT OF INTERCONNECTION DETAIL

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