

**Submission of Indicated New York Transmission
Owners
For Authority to Construct and Operate Electric
Transmission Facilities in Multiple Counties in
New York**

Case 13-M-0457

**Exhibit 5
Design Drawings**

***Leeds to Pleasant Valley 345 kV
Transmission Line Reconductoring Project
(LD-PV(R))***

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**LEEDS TO PLEASANT VALLEY 345 KV TRANSMISSION LINE
RECONDUCTORING PROJECT
(LD-PV(R))**

EXHIBIT 5: DESIGN DRAWINGS

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EXHIBIT 5: DESIGN DRAWINGS

5.0 Design Standards

The transmission structures and components will be designed in accordance with the Applicant's own standards developed through decades of experience constructing, maintaining, and operating transmission in the region in addition to applicable national and state codes and regulations. One of these is the current National Electrical Safety Code ("NESC"), which specifies both the minimum structural loads for determining the required structural capacity and appropriate clearances to energized parts and wires. Typical clearance requirements defined by the NESC include clearances to ground, adjacent transmission lines, railroads, buildings, and other facilities. The current NESC, as well as other structure criteria from the Applicant, will determine the structural loading of the transmission lines.

5.1 Design Drawings

Figure 5-2 are representative cross-section diagrams of the transmission line ROW under existing and proposed conditions.

Additional details regarding the individual components and materials for the transmission lines are included in Exhibit E-1, Description of Proposed Transmission Facilities.

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EXHIBIT 5: DESIGN DRAWINGS

LEEDS TO PLEASANT VALLEY

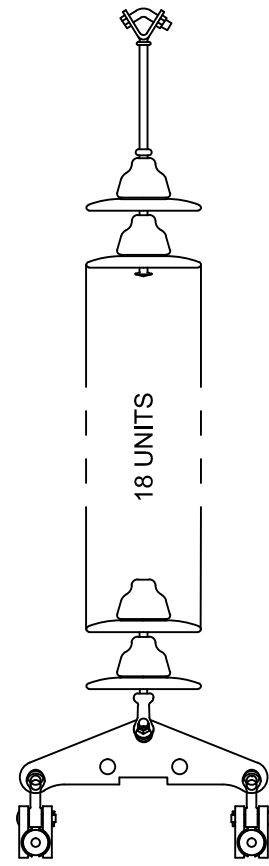
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Figure 5-1
Typical 345 kV Bundled Assemblies

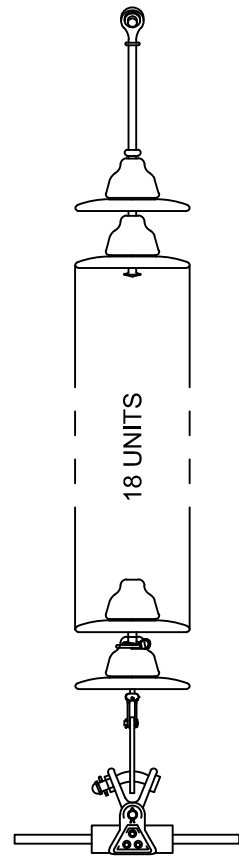
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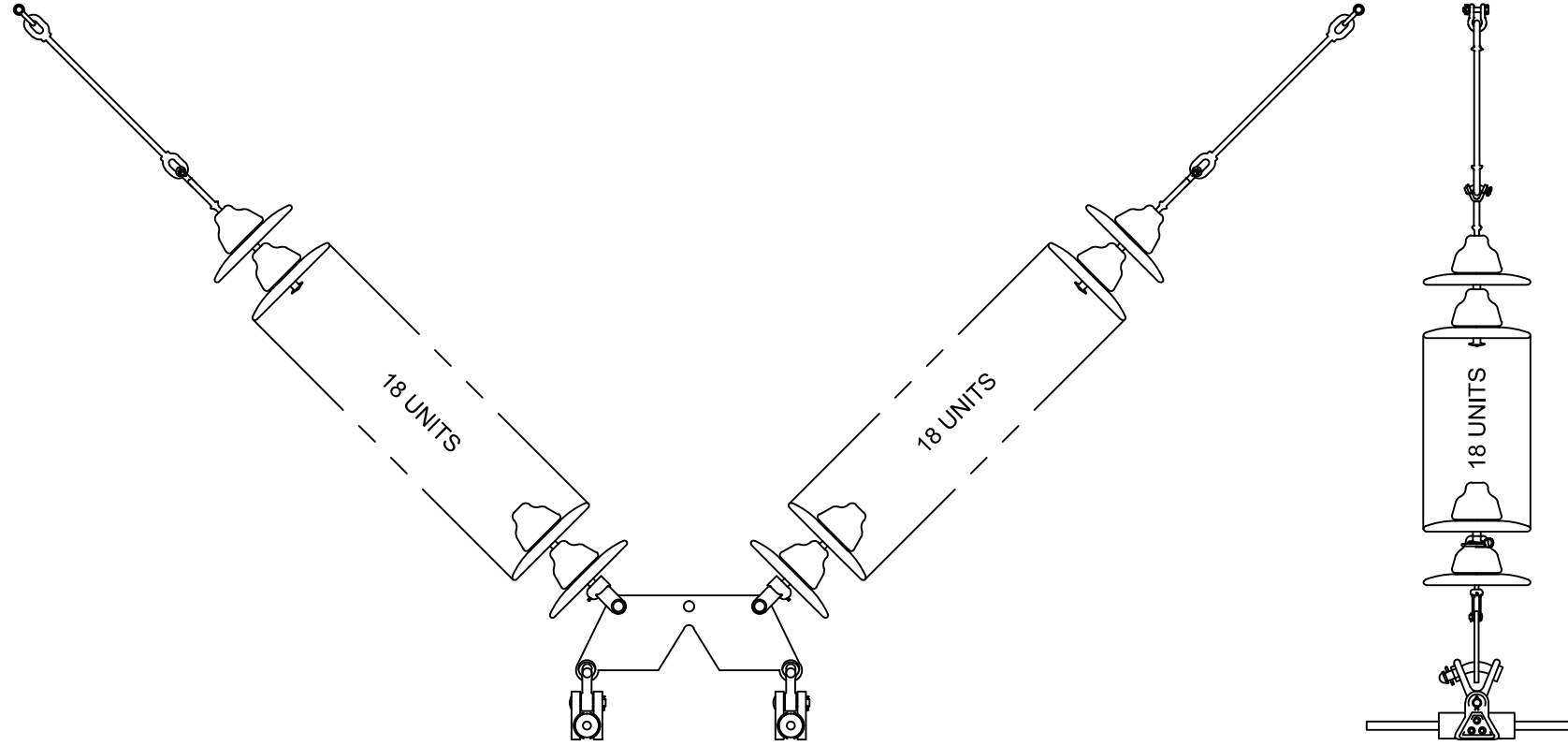
VER	DATE	VERSION DESCRIPTION	PREPARED	REVIEWED	APPROVED	VERSION
1	01/19/15	ISSUED FOR ARTICLE VII APPLICATION.	EEB	PAW	JDL	1
2						
3						
4						



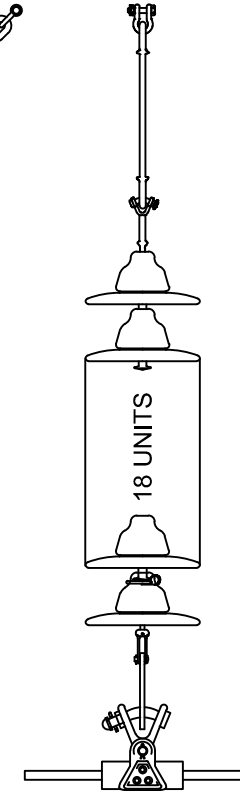
TYPICAL 345 kV TANGENT SUSPENSION ASSEMBLY



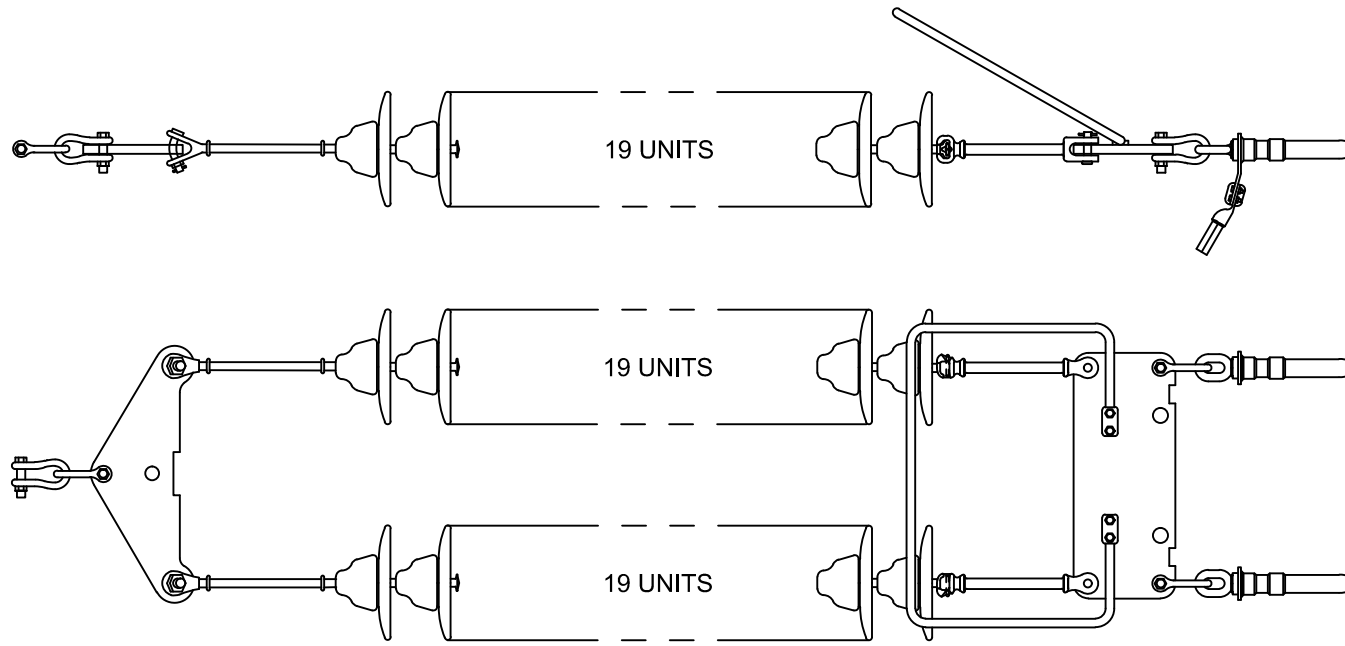
SIDE VIEW



TYPICAL 345 kV V-STRING ASSEMBLY



SIDE VIEW



TYPICAL 345 kV DEADEND ASSEMBLY

NOTES:

- DESIGN IS PRELIMINARY AND SUBJECT TO CHANGE WITH FINAL DESIGN.
- INDIVIDUAL INSULATOR ASSEMBLIES MAY BE ADJUSTED TO ACCOMMODATE APPLIED LOADS.

CONCEPTUAL - NOT FOR CONSTRUCTION

INCHES ON ORIGINAL

NEW YORK ENERGY SOLUTION
 CONDUCTOR HARDWARE DETAILS
 TYPICAL 345 kV BUNDLED ASSEMBLIES

PREPARED BY	EEB	01/19/15
REVIEWED BY	PAW	01/19/15
APPROVED BY	JDL	01/19/15
SCALE	NTS	
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Figure 5-2
Cross Section Drawings
(LD-PV XS-1 through LD-PV XS-9)

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