DISTRIBUTION IIB — ELLW 1141

A. Course Description

- Credits: 4.00
- Lecture Hours/Week: 2.00
- Lab Hours/Week: 2.00
- OJT Hours/Week: 0
- Prerequisites:
  - ELLW 1110: Distribution I
  - ELLW 1120: Utility Equipment and Tools
  - ELLW 1140: Distribution IIA

- Corequisites: None
- MnTC Goals: None

This course covers more of the material that is in ELLW1140 Distribution IIA. Prerequisites: ELLW1110, ELLW1120, and concurrent enrollment in ELLW1140

B. Course Effective Dates: 3/16/98 – Present

C. Outline of Major Content Areas

As noted on course syllabus

D. Learning Outcomes

1. apply and describe system coordination
2. apply armor grip suspension
3. apply bypass jumpers
4. apply deadends on on conductors
5. apply hot line knots and rigging
6. apply neutral preform ties
7. apply neutral wire hand tie
8. apply tangent and angle hand tie
9. apply tangent and angle preform ties
10. apply the use of hot line tools
11. barrel and apply preform armor rod
12. calculate wire resistances
13. calculate wire sizes
14. change out single phase insulator
15. conduct voltage checks
16. construct OCR station
17. define a loadbuster stick
18. define and describe NESC clearances
19. define and describe OSHA requirements and clearances
20. define and describe non-load breaking devices
21. define and identify load breaking devices
22. define and identify the three types of line construction
23. define in high out low
24. describe and identify automatic voltage devices
25. describe and install over current protection
26. describe and install over voltage protection
27. describe conductor fundamentals
28. describe copper wire armor rodding
29. describe copper wire hand ties
30. describe line and phase transpositions
31. describe pole compression loading
32. describe sleeve clearance requirements
33. determine guy wire leads
34. identify OCR'S and OCB'S
35. identify a NR switch
36. identify and describe other guying forms
37. identify and describe system neutral
38. identify and describe transmission static wire
39. identify and use universal clampsticks
40. identify guying requirements
41. identify pole saddles and snubbers
42. identify the types of hot line sticks
43. inspect rubber blankets and line hose
44. inspect rubber gloves and sleeves
45. install Ampact connectors
46. install a sectionalizer
47. install and use hot line sticks and saddles
48. install equipment bypasses
49. install guy guards
50. install hot line clamps
51. install overhead guys
52. install personal protective grounds
53. install pole and hardware cover up materials
54. install required protective equipment
55. install side guys
56. install terminal down guys
57. install various hot line ties
58. install various tap connection points
59. install vibration dampners
60. list and apply safe working procedures
61. list switching safety procedures
62. reconnect OCR'S
63. remove OCR's from service
64. service OCR'S
65. service a NR switch
66. service a sectionalizer

E. Minnesota Transfer Curriculum Goal Area(s) and Competencies

F. Learner Outcomes Assessment

As noted on course syllabus

G. Special Information

None noted