DISTRIBUTION IIA — ELLW 1140

A. Course Description
   - Credits: 4.00
   - Lecture Hours/Week: 2.00
   - Lab Hours/Week: 2.00
   - OJT Hours/Week: 0
   - Prerequisites: None
   - Corequisites: None
   - MnTC Goals: None

   This course covers the construction aspects in the building of single-phase lines and the use of plan profiles, specification drawings, material lists, and their application to the field. It includes the equipment that will be used for this construction. Hot line work with sticks will also be introduced at this time. The hanging of guys, the stringing of conductors, anchor installations, industry framing practices, and safety in all line building, equipment operations, and material handling will be observed and practiced. Prerequisites: ELLW1110, ELLW1120, and concurrent enrollment in ELLW1141

B. Course Effective Dates: 3/19/98 – Present

C. Outline of Major Content Areas
   - As noted on course syllabus

D. Learning Outcomes
   1. identify rock anchors
   2. install by-pass jumpers
   3. install conductor running grounds
   4. install line grounds
   5. bond system neutral grounds
   6. apply bonding clips
   7. apply butt wrap ground
   8. apply conductor soft deadend
   9. apply correct radio procedures
   10. apply correct wire instruments
   11. apply full tension two piece compression sleeve
   12. apply kellum grip
13. apply long pole ground
14. apply one piece full tension compression sleeve
15. apply preform full tension conductor splice
16. apply preform full tension repair sleeve
17. apply preform three piece guy splice
18. apply sag charts
19. apply short pole ground
20. apply wire safety procedures
21. apply wire tensioning practices
22. bond guy wires
23. cant poles
24. construct single phase applications
25. distribute materials per spec
26. distribute poles for a single phase line
27. evaluate wye system and delta systems for personal and equipment protection grounding practices
28. frame with correct dimensions
29. identify conductor construction
30. identify never creep anchors
31. identify single phase construction
32. install PISA anchors
33. install by-pass jumpers
34. install ground rods
35. install grounds on wire and equipment
36. install guys
37. install helix anchors
38. install line grounds
39. install line poles
40. install log anchors
41. install patent expanding anchors
42. install preform guy grips
43. install screw anchors
44. install strain insulators
45. install stringing sheaves
46. install three bolt clamps
47. list material from spec. sheets
48. load fuse holder tubes
49. locate digger/derrick equipment
50. offset poles
51. plumb poles
52. position different wire equipment
53. rake poles
54. sag conductors
55. secure guy wire tails
56. set poles
57. string conductors
58. tamp poles
59. tension guys
60. use compression squeeze-on's
61. use different stringing rope applications
62. use guy pulling eye
63. use parallel groove clamps
64. use wire pulling grips
65. use wire pulling hoist

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

F. Learner Outcomes Assessment

   As noted on course syllabus

G. Special Information

   None noted