Duke Energy Progress
Distribution Construction Standards Reference Guide

The Duke Energy Progress Distribution Construction Standards consist of the following documents available on the My Duke Energy Contractor Portal:

- DEP OH Sections 1-4 Distribution Standards
- DEP OH Sections 5-13 Distribution Standards
- DEP UG Distribution Standards

These documents contain over 1,600 pages of standards, not all of which are applicable at utility scale solar farms. Following is a list of selected standards that, based on Advanced Energy’s experience, are frequently applicable to utility scale solar farms. This list is not all inclusive of the standards Advanced Energy may reference in an MV audit, but serves as a guide to help navigate the standards.

DEP OH Sections 1-4 Distribution Standards

- 02-Poles, Guys and Anchors
  Many of the standards in the following subsections are applicable:
  - 02.02 Poles
  - 02.03 Grounds
  - 02.04 Guys and Anchors

- 03-Primary Overhead Construction
  Many of the standards in the following subsections are applicable:
  - 03.00 General
  - 03.03 Deadend, Trunion and Suspension Clamps
  - 03.04 Hand Ties/Preformed Ties/Armor Rods
  - 03.06 Insulators
  - 03.07 Crossarms
  - 03.11 Horizontal Construction
    - 03.11-100 Standard Crossarm Installation Comparison
    - 03.11-103A Three-Phase Horizontal Construction - Tangent Crossarm
    - 03.11-107A Three-Phase Horizontal Construction - Small Angle - Crossarm
    - 03.11-112A Three-Phase Horizontal Construction - Medium Angle - Double Crossarm
    - 03.11-119A Three-Phase Horizontal Construction - Buck Arm - Right Angle
    - 03.11-120A Three-Phase Horizontal Construction - Double Deadend Guyed

- 04-Overhead Primary Connectors
  Many of the standards in the following subsections are applicable:
  - 04.00 General
  - 04.02 Splices
  - 04.06 Compression Connectors
  - 04.08 Bolted Connectors
  - 04.09 Connector Application Guide
DEP OH Sections 5-13 Distribution Standards

- 05- Conductors Overhead
  Many of the standards in the following subsections are applicable:
  o 05.01 Wire and Cable Data

- 06- Pole Mount Transformers
  Many of the standards in the following subsections are applicable:
  o 06.02 Fusing
  o 06.03 Conductors and Connections
  o 06.04 Cutouts and Mounting Brackets
  o 06.06 Installation and Policies

- 08- Switches and Protective Devices
  Many of the standards in the following subsections are applicable:
  o 08.00 General
  o 08.01 Cutouts and Arresters
  o 08.06 Reclosers - Three-Phase Configurations
  o 08.10 Switches - Manual
  o FMO Drawings
    - 08.10-37 600 Amp Horizontal Air Break Switch Handle Operated 25kV (FMO)

- 10- Clearances
  o 10.06-01 Minimum Guy Clearances

- 11- Metering
  Many of the standards in the following subsections are applicable:
  o 11.01 Self-Contained Metering General
  o 11.09 Transformer-Rated Metering, Primary, Three-Phase
  o 11.11 Transformer-Rated Metering, Primary, Three-Phase - UG

DEP UG Distribution Standards

- 20- Underground General
  Many of the standards in the following subsections are applicable:
  o 20.00 Underground General and Symbols
  o 20.01 Cable Labeling and Phasing

- 21- OH-UG Transition
  Many of the standards in the following subsections are applicable:
  o 21.02 Three-Phase, Small Cable, Primary Risers
  o 21.03 Three-Phase, Large Cable, Primary Risers
  o 21.04 Secondary Conduit Risers
  o 21.05 Cable Guard, U-Guard, and Conduit Risers

- 23- Conductors UG
  o 23.01-109 Primary Cable Ampacity Ratings

- 25- Enclosures, Pedestals
  o 25.01-10A Enclosure, Three-Phase Primary Junction

- 26- Cable Accessories
  Many of the standards in the following subsections are applicable:
  o 26.03 T-Bodies/Bolted Elbows
  o 26.04 Loadbreak Elbows
- 26.05  Deadbreak Elbows
- 26.06  Cable Terminators

- **27-Pad Mount Transformers**
  *Many of the standards in the following subsections are applicable:*
  - 27.00  Pad-Mounted Transformers- General
  - 27.01  Grounding
  - 27.02  Fusing
  - 27.03  Elbow Arresters
  - 27.06  Three-Phase Pad-Mounted Transformers

- **28-Switchgear**
  *Many of the standards in the following subsections are applicable:*
  - 28.00  Pad-Mounted Switchgear General
  - 28.01  PME Three-Phase Enclosed Switchgear

- **34-Transformer Rated Metering**
  *Many of the standards in the following subsections are applicable:*
  - 34.09  Transformer-Rated Metering, Primary, Three-Phase
  - 34.11  Transformer-Rated Metering, Primary, Three-Phase - UG