Optical Phase Conductor

Optical Phase Conductor (OPPC) is used as an alternative telecommunications solution when there is no existing ground wire, meaning Optical Ground Wire (OPGW) is not a viable option. The basic construction is similar to conventional OPGW, only it is designed to simulate the mechanical and electrical characteristics of the phase wire it replaces. Unlike OPGW, where the cable is not carrying continuous current, OPPC is energized along high voltage power lines. Therefore it requires specially adapted splice boxes and insulators to accommodate the live line conditions.

AFL can design a cable to accommodate your precise application. To do so, we need the properties of the phase conductor you are seeking to replace. With that, we can do the rest.

Features:
- Engineered to match existing conductors
- Available in fiber counts up to 144
- Distribution or Transmission – from 36 to 245 kV
- Suitable for any type of optical fiber, single-mode or multimode
- Designed to match electrical properties of conductor it replaces
- Uses standard fiber optic deadends and suspension grips
- Full range of hardware options available

OPPC Hardware:

Typical OPPC insulators

OPPC joint box - Cast Aluminium

OPPC joint box - Self Supporting