

Recommended users for communication power systems



Overview

Electric power operations communicate across three distinct layers at the same time: fixed assets such as substations and switching stations, field crews dispersed along transmission and distribution lines, and a dispatch centre that needs real-time visibility into both. Part of a series of white papers on Secure Pathways for Resilient Communications. In today's rapidly changing energy landscape, achieving a more carbon-free grid will rely upon the efficient coordination of numerous distributed energy resources (DERs) such as solar, wind, storage, and loads. Telecommunications system are critical for protection, control, and coordination of the electric power. In this post, we will discuss the majority of current communication systems that are useful for providing accurate and precise control over the operation of the power system. Power system management functions are primarily divided into three interrelated areas: There are 3 distinct types of. Telecommunications are essential for drinking water and wastewater utilities during routine operations and emergencies.



Article Content

Dec 11, 2025

Power System Communication

In this post, we will discuss the majority of current communication systems that are useful for providing accurate and precise control over the operation of the power system.

Sep 05, 2025

17 Off-Grid Communication Options [From High-Tech to Low-Tech!]

We've researched 17 great off-grid communications options that will help you create off-grid telecommunications and an emergency signals infrastructure to keep you connected to family, ...

Mar 04, 2026

Session 4: Communication Technologies for Utility Operations

Technology options generally break down into four categories: Power line carrier (PLC); Broadband over Power Lines (BPL); Hard wired such as fiber or copper; and Wireless or radio frequency (RF).

Oct 31, 2025

Recommended Best Practices for Communication Tower Design, ...

Co-locate communications equipment on existing communication towers or other structures (e.g., billboard, water and transmission tower, distribution pole, or building mounts).

Apr 04, 2026

Communication System for Substations, Field Crews, Dispatch

Communication system for substations field crews and dispatch should match local coverage, using DMR Tier III or 3GPP mission-critical broadband.

Jun 09, 2026

Grid Communication Technologies

This paper describes the various communication technologies available and their limitations and advantages for different grid operational processes, aiming to assist the discussion between ...

Oct 18, 2025

What is the Best Communication Device if the Grid Goes Down?

The best communication device in a grid-down scenario is a satellite phone, which allows users to connect beyond traditional networks. While many people rely on cell phones for ...

Sep 19, 2025

Water Sector Guide to Telecommunications During Power Outages

Water utilities should consider which telecommunication technologies work best for internal communication, external communication with response partners, and customers.

Apr 02, 2026

17 Off-Grid Communication Options [From High ...

We've researched 17 great off-grid communications options that will help you create off-grid telecommunications and an ...

Feb 24, 2026

1615-2019

Purpose: This recommended practice provides direction for implementers who wish to produce interoperable and secure communications for an electric power substation network.

Contact Us

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