The convergence of radio, wireless, and SIP communications is fundamentally changing the way that utilities operate today. Developing a forward-looking strategy for building a communications infrastructure of tomorrow requires careful analysis and consideration. For many utilities, smoothly and incrementally migrating to an IP-based communications infrastructure has emerged as the best approach to deploying a next-generation communications network without sacrificing service quality or reliability. REDCOM technology enables utilities to continue using legacy networks while leveraging the benefits of next-generation VoIP and unified communications systems, all without the worry of implementing a costly “rip and replace” solution.

Maximum interoperability
As utilities begin to modernize their networks and communications infrastructure, maintaining interoperability with existing communications is essential. That’s why REDCOM offers a portfolio of reliable, field-proven hybrid switches designed specifically for mission-critical communications.

REDCOM’s hybrid switches, the HDX and SLICE® 2100, are built on the industry-standard SIP-based architecture, and include an integrated Call Controller, Media Gateway, Media Gateway Controller, and Legacy Support, providing connections to both TDM and IP networks.

Bridge VoIP and radio networks
REDCOM’s Radio Gateway, available on both the SLICE 2100 and HDX platforms, provides a simple and reliable means of bridging radios into both legacy and VoIP networks. REDCOM’s intelligent Radio Gateway solutions are far more powerful than simple converter boxes. They include full switching and routing capabilities along with radio features such as PTT pass-through, REDCOM’s patented PTT over IP, VOX and COR, and conferencing. REDCOM’s Radio Gateway supports interoperability between the following:

- Disparate radio networks
- HF, VHF, and UHF radio nets
- VoIP
- SIP, T1, E1, E&M, and LSRD trunking
- Fixed line/PBX subscribers
- REDCOM Sigma® Client for Android™ with PTT
Unified Communications
REDCOM Sigma® Core is a complete software-based Unified Communications (UC) solution with a focus on interoperability, reliability, and security. Sigma Core has passed rigorous tests by the US Defense Information Systems Agency (DISA), making it highly suitable for serious enterprise deployments. Highlights include:

- IP Trunking
- Video (P2P)
- Chat/XMPP with Presence
- Hosted PBX
- Conference Bridge
- Unified Messaging
- Voice Mail to Email
- Enterprise features
- Hardware neutral: can be deployed on any appliance, including ruggedized servers
- Small software footprint & minimal system requirements

Your office anywhere
Stay connected no matter where you are with REDCOM’s Sigma Client, available for both Windows® and Android™. The Sigma Client provides users with access to powerful UC functions — including secure voice, video, and chat with presence — from the convenience of a PC, tablet, or smartphone.

Advanced routing & translations
REDCOM systems feature powerful carrier-grade routing functions. Each system can be configured with multiple alternate routes over IP, satellite, and terrestrial networks to ensure critical assets always stay connected. In the event of a connection failure, this ensures essential voice communications can get through. Users can also easily set up inbound/outbound trunk groups and flexible digit manipulation for numbering and dialing plan compliance.

Secure VoIP, UC, and Radio Communications
SIP trunking made easy
REDCOM’s extensive SIP trunking capabilities allow utilities to scale their telecom system faster and more cost-effectively than with traditional phone lines. SIP trunks are used to connect two sites together and to connect them to the Internet. With proper network assessment planning and implementation, SIP trunks can deliver high quality and reliable service with substantial cost savings that directly impact the bottom line of utilities.

Multi-technology conferencing
REDCOM’s Multi-Technology Conferencing delivers advanced voice collaboration tools for the enterprise. With REDCOM, companies can quickly set up secure conferences within a corporate cloud.

Several conferencing styles are available, including progressive (participants added one at a time), meet-me (scheduled), and preset (Blast Dial). Some or all of these elements can be combined into a single conference.

Secure communications
Protect confidential discussions and avoid corporate espionage with REDCOM’s proven secure communications solutions. All REDCOM platforms support Secure Real-Time Transport Protocol (SRTP) and Transport Layer Security (TLS) to encrypt VoIP traffic to ensure confidential communications.

Standards-based interoperability
REDCOM will not lock you into a proprietary ecosystem. We follow industry standards in order to interoperate with third party phones, soft clients, and gateways.

Connecting substations
The utility industry relies on critical communications systems to ensure that remote sites stay connected to the headquarters. Regardless of whether you are located in a substation or in the corporate office, reliability, interoperability, and scalability of your communications system is paramount. The right system must be able to connect to other substations via Power Line Carrier (PLC) communications as well as IP and TDM. That’s why the ideal solution for power utilities is a hybrid switch such as the REDCOM HDX or SLICE 2100.