

## **What is Rock Island's Agreement with T-Mobile?**

When OPALCO purchased an FCC licensed frequency in 2014, we took a big step toward building a robust wireless network for San Juan County. With the acquisition of Rock Island in February of 2015, construction began to expand our fiber infrastructure to reach more of our membership for Internet connections and public safety. In 2015, Rock Island grew from primarily reselling DSL connections to serving nearly 500 households and businesses with fiber Internet services— and almost 400 of those were connected this year.

The latest step in this evolution is an agreement with T-Mobile USA, Inc. that brings together our respective assets to provide a great LTE network for wireless Internet and public safety communications

By the end of 2016, T-Mobile equipment on about 25 utility poles county-wide will provide LTE wireless Internet connections to many through Rock Island. When build-out is complete, there will be approximately 40

T-Mobile sites county-wide, giving the majority of our members either a fiber-based or an LTE-based Internet service option. Neither OPALCO nor Rock Island will provide cellular phone service, but T-Mobile will offer a new and powerful cellular phone service option for those who want it.

No monies are to be exchanged with T-Mobile and we each retain ownership and control of our own equipment and spectrum. T-Mobile provides the fixed LTE equipment, configured for our licensed frequency (700 MHz), and Rock Island installs it. Maintenance of the system is shared between the two entities. Construction costs are billed to Rock Island. OPALCO will meter and bill Rock Island for the power used to run the T-Mobile equipment. T-Mobile will manage their equipment and the network operating center, upgrading technology and the system core as new developments are available. T-Mobile also brings their own, much bigger allotment of mid-band spectrum in San Juan County. In turn, OPALCO will make its spectrum available to T-Mobile.

By working together, Rock Island not only avoids some cost and lack of technical expertise, Rock Island is able to accelerate construction of the fixed LTE network. The original plan for fixed LTE deployment on our single carrier of 700Mhz spectrum would have required 120 poles and would have taken years to complete. With T-Mobile's spectrum, equipment and expertise, the network will be complete with approximately 40 poles in a much shorter duration.

Bellevue-based T-Mobile is rapidly expanding its wireless network, more than doubling its LTE coverage in the past year. T-Mobile is committed to including rural areas in their network as they grow. San Juan County makes sense for their business plan, as they had also adopted the 700 MHz frequency for their Extended Range LTE network, which means that their equipment is configured for exactly the same frequency as we own in San Juan County.

## **FREQUENTLY ASKED QUESTIONS**

**What does this mean for residents of San Juan County?** Vastly improved communications for public safety, Internet services, economic development and individual phone services. For OPALCO members, the fixed LTE system advances our Grid Control Network, increasing automation toward a self-healing grid where power can be automatically re-routed during emergencies; and preparing the grid for

greater integration of intermittent resources (solar, electric vehicles, etc.) and the smart home devices that will be standard in the near future.

**Who pays for this development?** Rock Island and T-Mobile each invest their own resources to a mutually beneficial plan. OPALCO members will continue to pay \$3/month through December of 2016 (for a total of \$72/member over the 24-month loan period) to support the start-up costs of Rock Island Communications, a wholly-owned subsidiary of OPALCO.

**When will fixed LTE Internet service be available?** Fixed LTE services are rolling out as equipment is installed. By year end, a significant portion of the build will be complete and services will reach county-wide. Rock Island will contact residents and businesses within each service area as it becomes active. Remember: fixed LTE services will only be available when fiber connections are not feasible.

**Which service is better: fiber or fixed LTE?**

Fiber to the home or business is the gold standard of Internet connection and provides the greatest capacity and scale for long-term use. Fixed LTE wireless service is not a replacement for fiber but a limited capacity solution for customers in areas where fiber installation is not feasible. Both services will provide excellent high-speed Internet connections.

**When will T-Mobile cellular services be available?** Cellular service has already begun rolling out. In fact, T-Mobile has had cell sites in Friday Harbor, Mt. Constitution and Roche Harbor for years. By year end, T-Mobile cellular service will reach most of San Juan County.

**Who can get Fixed LTE Internet service?** Fixed LTE services will be available in hard to reach areas where fiber connections are not possible or cost effective. Fiber offers the greatest capacity and service. There will be capacity limits to the fixed LTE services available; if fiber is feasible then fixed LTE services will not be offered. Because the costs to connect with fixed LTE services will be much less than fiber, qualified low-income households will be given priority in getting connected. Households who are eligible for OPALCO's Energy Assistance Credit, will receive a similar credit on the Rock Island bill to equalize access to Internet services in our islands.

**Do I have to be a T-Mobile customer to get fixed LTE Internet service?**

No. Rock Island Communications provides the fixed LTE Internet services.

**Where will T-Mobile equipped poles be located?** Pole locations are not set in stone. In our rocky and tree-filled environment, ongoing testing is necessary to determine pole locations based on the capacity and reach of each existing site, as it becomes active. It's an organic process that takes time to make sure we maximize the effectiveness of each site and therefor minimize the number of sites required to the meet our basic coverage requirements.

**What about other cellular providers?**

Rock Island provides fiber backhaul services to Sprint and AT&T, among others, and will continue to provide services to interested businesses. T-Mobile is the only business to step up with an investment of this scale in San Juan County. T-Mobile is uniquely positioned for this collaboration because their network and equipment are built on OPALCO's frequency (700 MHz). ). T-Mobile is also a neighbor with its corporate headquarter are located in Bellevue, WA!