

Rohde & Schwarz delivers turnkey repack solution for WPBT



WPBT celebrates over 60 years of bringing quality arts, education and public affairs programming to over a million South Florida viewers, serving Miami-Dade and Broward counties.

At a glance

One of the stations included in Phase 2 of the FCC repack, WPBT South Florida PBS, is facing a relatively tight transition deadline of April 12, 2019. The station chose Rohde&Schwarz to provide a turnkey solution for its transition since the repack offers an opportunity to update existing equipment and prepare for ATSC 3.0. Part of the transition includes the installation of a new R&S®THU9evo liquid-cooled transmitter.

Executive summary

- **Customer:** WPBT South Florida PBS, Miami, FL, USA
- **Task:** Upgrade transmitter and facilities in compliance with FCC repack requirements, coordinate multi-phase installation
- **Solution:** Hire Rohde&Schwarz to provide a turnkey solution, including installation of R&S®THU9evo liquid-cooled transmitter
- **Key advantages of this solution:** Working with partner Dermac Group, Rohde&Schwarz provides comprehensive project management and full documentation to meet FCC requirements



The R&S®THU9evo UHF high-power transmitters is the perfect solution to replace current IOT transmitters.

“Rohde & Schwarz offered a real turnkey solution, the total package of services that I would need in addition to just buying a transmitter. Rohde & Schwarz was there for me throughout the initial process, is continuing to work with me today, and will be there through the completion of the project.” Gene Talley, WPBT Vice President of Engineering and Operations

The project

As part of Phase 2 of the FCC repack, WPBT South Florida PBS, the PBS member station serving Miami-Ft. Lauderdale (DMA #16), is facing a relatively tight transition deadline of April 12, 2019. Once the station confirmed it would be affected by the repack, Gene Talley, WPBT Vice President of Engineering and Operations, chose Rohde&Schwarz to provide a turnkey solution for its transition.

“It’s a challenging time for us, but it’s also a fantastic opportunity to update our existing systems and become current. We can also use this opportunity to get ready for our next transition to ATSC 3.0,” Talley explained.

Dermac Group, a separate company created specifically to support Rohde&Schwarz installation services, provides comprehensive project management and full documentation to meet FCC requirements. WPBT is one of the more complex projects Dermac is managing because of its multi-phase installation. Robert “Mac” McAfee, Executive Vice President and COO of Dermac Group, said the transition will include replacing the station’s auxiliary transmitter with an interim transmitter that can service at least 85 percent of the current coverage area since extensive changes to the station’s infrastructure could require several months to complete.

Site survey

In May, Dermac conducted WPBT’s site survey and provided detailed drawings, specifications, permit-ready plans, placement locations for all the new equipment and a transition schedule to ensure a smooth changeover to the new facility. The station used the site survey data when it submitted FCC Form 399, which is required to claim reimbursements of repack-related expenses from the federal government.

Talley was complimented by an engineering consulting firm hired by the FCC to review applications for providing a “well documented and detailed request”. “A lot of that was due to the team of Dermac Group and Rohde&Schwarz working with our internal team,” he noted.

“Most stations, even beyond smaller markets, have limited resources,” explained Erik Balladares, Director of the Broadcast & Media Division, Rohde&Schwarz USA. “They simply don’t have the manpower to handle the extra workload required by the FCC repack. Through our partnership with Dermac Group, Rohde&Schwarz offers a turnkey solution that keeps your transition on track, maximizes your budget and leads to faster FCC reimbursement.”

Contingency plans

After a detailed site survey, Dermac provides a scope of work (SOW) and assigns a dedicated project manager, so stations have a single point of contact. Dermac can install equipment, decommission old equipment and dispose of hazardous materials, and coordinate efforts with other contractors when necessary.

“As a partner of Rohde&Schwarz, we support the end-to-end needs of their customers for any aspect of the repack process,” explained McAfee. “We have the most knowledgeable team in the industry, and we analyze every aspect of the job and account for contingencies.”

For WPBT, the company created emergency plans in case a hurricane or other severe weather pattern threatened the station. “Our top priority is to eliminate risk to the customer,” McAfee said, “so we take into account all the things that could happen.”



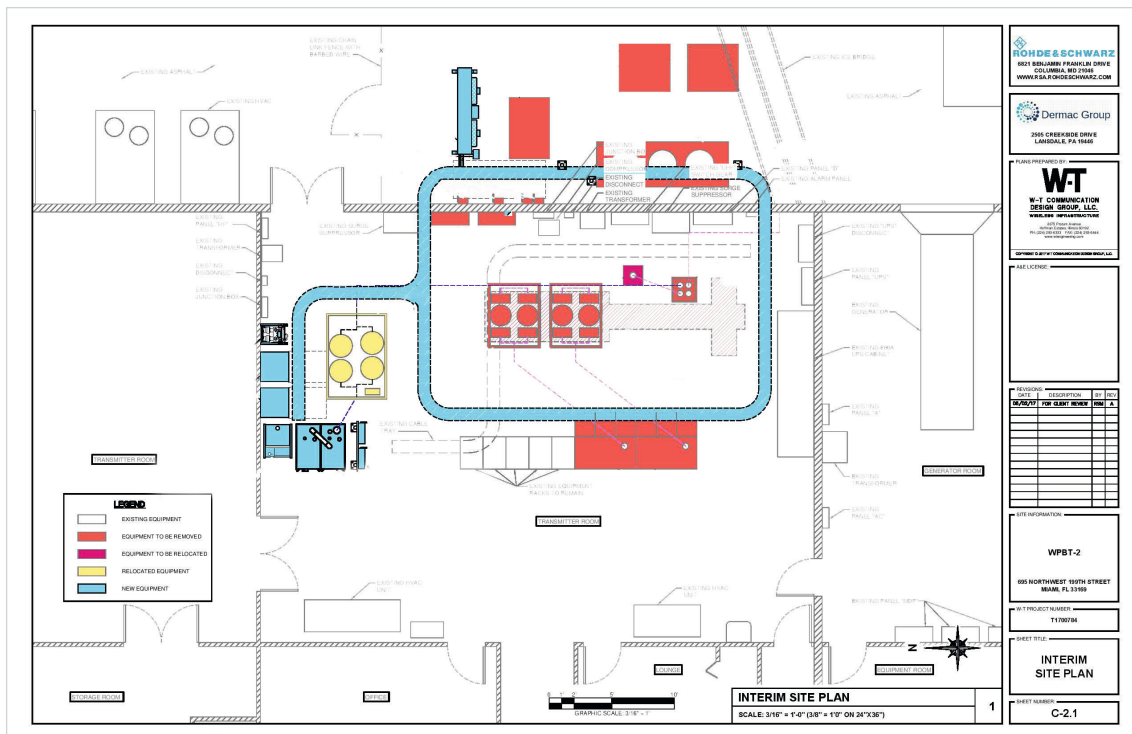
WPBT relies on the Rohde&Schwarz solution.

Liquid-cooled advantages

As part of its repack transition, WPBT will be replacing its aging IOT transmitter with a liquid-cooled R&S®THU9evo, which delivers energy efficiency values of up to 43 percent for ATSC and 40 percent for COFDM (i.e. ATSC 3.0). Based on the established R&S®THU9 platform, it offers the highest power density on the market. In Doherty operation, stations can save up to 50 percent of energy costs compared to conventional transmitters.

Talley said the solid-state transmitter is more efficient than WPBT’s old tube transmitter, and that efficiency will translate to significant power savings. Plus, the R&S®THU9evo provides configuration flexibility and scalability in a very small footprint, which results in further cost reductions over the system lifetime. The station’s upgrades also include a new antenna with vertical polarization (V-pol), which will help WPBT deliver its signal to mobile devices when ATSC 3.0 is adopted.

“Rohde&Schwarz offered a real turnkey solution, the total package of services that I would need in addition to just buying a transmitter,” Talley added. “Rohde&Schwarz was there for me throughout the initial process, is continuing to work with me today, and will be there through the completion of the project.”



For the first time WPBT uses a liquid-cooled transmitter as visible on the site plan.

Service that adds value

- | Worldwide
- | Local and personalized
- | Customized and flexible
- | Uncompromising quality
- | Long-term dependability

About Rohde & Schwarz

The Rohde & Schwarz electronics group offers innovative solutions in the following business fields: test and measurement, broadcast and media, secure communications, cybersecurity, monitoring and network testing. Founded more than 80 years ago, the independent company which is headquartered in Munich, Germany, has an extensive sales and service network with locations in more than 70 countries.

Sustainable product design

- | Environmental compatibility and eco-footprint
- | Energy efficiency and low emissions
- | Longevity and optimized total cost of ownership

Certified Quality Management

ISO 9001

Certified Environmental Management

ISO 14001

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