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REPRINTED FROM JUNE 24, 2009

WWW.TVTECHNOLOGY.COM

USER REPORT

Linear Helps NPG Make Digital Switch

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BEND, ORE.

News-Press & Gazette (NPG) operates seven full power television stations in Oregon, Idaho, Colorado, California, Arizona and Texas that made the digital transition this month.

Like many broadcasters, NPG has elected to operate several of its stations on their post-transition frequency assignments. This resulted in a number of flash cuts, and added to the complexity of the overall transition. In addition, NPG plans to re-channel and/or construct some 100 associated translators and digital companion channels during the next year, creating additional challenges.

To meet such challenges, NPG's technical staffs sought out quality, dependable cost-effective transmission solutions. After much research, Linear Industries' transmitters were selected as the product of choice.

At NPG's KESQ-TV operation in Palm Springs, Calif., Linear's AT725P 25 W transmitter replaced an analog driver in an existing backup transmitter. This allowed the station to continue operations in digital at reduced power, while re-channeling its full power transmitter to the post-transition frequency. The AT725P was installed by station personnel with little difficulty and without the need for much test equipment.

As mentioned, NPG plans to enhance its digital coverage area with new DTV transla-

tors and has been granted a number of licenses for construction of translator digital companion channels in Idaho, Colorado, Texas and Oregon.

MINING EQUIPMENT SPACE AT TRANSLATOR SITES

It's no secret that lack of physical space is frequently an issue at a lot of remote translator sites. Combined antenna arrays and robust transmitters with a small footprint are often necessary when digital gear is added to an existing analog translator installation. As the Linear AT725P 25 W digital transmitter is self-contained and consumes very little rack space, we've found that it is very well suited to such applications.

Going beyond the smaller 25 W installations, NPG has been constructing new digital translators to extend coverage in the areas surrounding Grand Junction, Colo. In this case, Linear's 750 W translator was selected for the task. As such, a relatively high-powered translator not only extends the footprint of the full power station it's retransmitting, it can also overlay part of the main station's coverage contour.

WHO'S PSIP IS IT, ANYHOW?

An interesting, and frequently annoying, effect associated with this signal overlay is

that some receivers can see both the full power and new on-channel digital translator and have difficulty in properly locking. In such cases it's been necessary to use a device to filter the full power station's PSIP information, thus allowing the translator's channel identifier to be unique, while still passing on program schedule and other data.

From full power broadcasting, to translators and digital companion channels, the digital transition has caused NPG to face many unknowns. Continuing normal broadcasting operations while rechanneling existing facilities, creating space in crowded translator sites, and technical issues related to the overlaying of full power signals with those emanating from translators have all presented challenges. Products from Linear Industries have allowed NPG to move ahead on the digital path, despite such sometimes formidable technical challenges.

Jim DeChant is the director of technical operations for the News-Press & Gazette Co., which operates newspaper, cable and broadcasting operations throughout Missouri, Arizona, Oregon, Idaho, Colorado and California. He may be contacted at jdechant@npgco.com.

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