TECHNICAL EXHIBIT FOR A NEW DIGITAL REPLACEMENT TRANSLATOR FOR STATION KIDK REXBURG, IDAHO CH 38 4 KW (MAX-DA)

Technical Narrative

This Technical Exhibit supports an application for a new digital replacement translator for digital television (DTV) station KIDK at Idaho Falls, Idaho. Station KIDK was formerly authorized to operate on analog channel 3, with a non-directional antenna maximum visual effective radiated power (ERP) of 100 kilowatts (kW) and an antenna radiation center height above average terrain (HAAT) of 488 meters.¹ Station KIDK is authorized to operate on digital channel 36, with a directional antenna maximum ERP of 200 kW and an antenna radiation center HAAT of 489 meters.¹ The antenna structure registration number is 1039483. The site coordinates are 43-29-51 N, 112-39-50 W (NAD-27).

The applicant is the licensee of a full-service television station that experienced a loss of service affecting former analog viewers located in Rexburg, Idaho after it transitioned to its final, post-transition DTV facility. The applicant proposes to construct a replacement digital translator facility near the loss area (designated with red triangles in the coverage map excerpted from the FCC's June 2009 signal loss report, which is attached at Figure 1) in order to provide replacement service to these viewers. The contour of the requested facility will not extend beyond the service area of the applicant's former analog facility. The applicant accordingly is eligible to receive a permit to construct the requested facility.

 $^{^{\}rm 1}$ See BLCT-853 and BPCDT-20080617ADL

du Treil, Lundin & Rackley, Inc.

Consulting Engineers Page 2 KIDK Replacement Translator

Proposed Facilities

This application proposes digital operation on channel 38 with a directional antenna maximum ERP of 4 kW and an antenna radiation center above mean sea level (RCAMSL) of 1545.3 meters is proposed (see Figure 2). A Scala, model SL-8 antenna will be oriented at 45° True. The proposed coordinates are 43-43-16 N, 111-56-30 W (NAD-27). The antenna structure registration number is 1042948.

Figure 3 is a map showing the formerly licensed KIDK 47 dBu analog coverage contour as well as the proposed digital translator 51 dBu contour.

Allocation Considerations

A study has been conducted to assure that the proposal will not create prohibited interference with other licensed, authorized or pending digital TV or analog or digital LPTV/translator/Class A stations. Pending LPTV/translator stations were ignored unless they were displacement applications or other replacement translators, as such proposals are not afforded protection from replacement translators. Using the procedures outlined in the FCC's OET-69 Bulletin, a standard 1 kilometer grid and 1 kilometer terrain distance increment, and 2000 U.S. Census, the proposal complies with the current FCC policy (i.e., less than 0.5% or 2% new interference caused to other pertinent assignments).

The applicant recognizes the proposal is secondary to other authorized full-service analog and DTV operations. The applicant understands that it must correct and/or eliminate prohibited interference that may result from its proposed operation.

Radiofrequency Electromagnetic Field Exposure

The proposed digital facilities were evaluated in terms of potential radio frequency (RF) energy exposure at ground level to workers and the general public. The radiation

du Treil, Lundin & Rackley, Inc.

Consulting Engineers Page 3 KIDK Replacement Translator

center for the antenna is located 76.2 meters above ground level. The proposed ERP is 4 k kW. Based on a conservative downward relative field of 0.5, the calculated power density at a point 2 meters (6.6 feet) above ground level will not exceed 5% of the FCC's recommended limit of 0.41 mW/cm² for channel 38 for an "uncontrolled" environment.

Access to the transmitting site will be restricted and appropriately marked with warning signs. As this is a multi-user site and agreement will control site access. In the event that workers or other authorized personnel enter restricted areas or climb the tower, appropriate measures will be taken to assure worker safety with respect to radio frequency radiation exposure. Such measures include reducing the average exposure by spreading out the work over a longer period of time, wearing "accepted" RFR protective clothing and/or RFR exposure monitors or scheduling work when the stations are at reduced power or shut down.

It is noted that this statement only addresses the potential for radiofrequency electromagnetic field exposure. All other aspects of the environmental processing analysis will be or already have been provided to the FCC by the tower owner.

ym.a

Jonathan N. Edwards du Treil, Lundin & Rackley, Inc. 201 Fletcher Avenue Sarasota, Florida 34237 (941) 329-6000

July 13, 2010

TV Station KIDK • Analog Channel 3, DTV Channel 36 • Idaho Falls, ID

Approved Post-Transition Operation: Granted Construction Permit

Digital CP (solid): 200 kW ERP at 489 m HAAT, Network: CBS vs. Analog (dashed): 100 kW ERP at 488 m HAAT, Network: CBS



Market: Idaho Falls-Pocatello, ID



PROPOSED ANTENNA AND SUPPORTING STRUCTURE

REPLACEMENT TRANSLATOR FOR KIDK

REXBURG, IDAHO

CH 38 4 KW (MAX-DA)

du Treil, Lundin & Rackley, Inc Sarasota, Florida

Figure 3



PREDICTED COVERAGE CONTOURS

REPLACEMENT TRANSLATOR FOR KIDK

REXBURG, IDAHO

CH 38 4 KW (MAX-DA)

du Treil, Lundin & Rackley, Inc Sarasota, Florida