



**ENGINEERING STATEMENT**  
**IN SUPPORT OF**  
**REQUEST FOR SPECIAL TEMPORARY AUTHORITY**  
**AND**  
**DISPLACEMENT OF DIGITAL TRANSLATOR**  
**K51LO-D**  
**MT. POWELL, NM**

**Background and Waiver Request**

Hearst Properties Inc. (Hearst) is the licensee of digital television translator station K51LO-D (BLDTT-20110725ADN, Facility ID. 183687) near Mt. Powell, NM. The station currently operates on Ch. 51, which is outside the new core of channels allocated for television broadcasting in the US (Ch. 2-36) following the results of the 2016/2017 Incentive Auction.

The translator recently received a notice from T-Mobile (copy attached hereto) informing it that the K51LO operation is causing significant interference to its 700 MHz operation in Albuquerque, NM. T-Mobile is asking K51LO to terminate operation on Ch. 51 before the opening of the Special Displacement Window for translators.

Given the circumstances, Hearst respectfully requests a waiver of the Displacement Freeze for K51LO. While this particular situation is not directly addressed by the FCC Public Notice released on June 14, 2017 ([DA 17-584, Incentive Auction Task Force and Media Bureau Set Forth](#)

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Tools Available to LPTV/Translator Stations Displaced Prior to the Special Displacement Window), Hearst proposes to follow the same procedure detailed in the notice.

Hearst has identified Ch. 15 as a possible new channel for operation of K51LO. As specified in the Public Notice, Hearst is filing both a displacement application and a request for Special Temporary Authority for K51LO to begin operation on Ch. 15.

### **Site and Tower**

The tower is located at 35° 28' 0.7" N and 108° 14' 27.0" W (NAD83). The overall height of the tower is 18.7m AGL and, therefore, it does not require an ASR, nor notification to the FAA. The transmitting antenna will be side-mounted. This is the same site and tower that is specified in the current K51LO authorization.

Note, during the process of preparing the displacement application, it was discovered that the original construction permit application for the K51LO digital low power facility contained a typographical error in the site elevation which was listed as 2313m AMSL. The site elevation is actually 2660m ASML. This discrepancy has been corrected on the displacement application.

### **Antenna and Power**

The proposed antenna is a Scala SL-8 omni-directional radiator. The radiation center of the antenna will be at a height of 16.7m AGL (2329.7m AMSL). The ERP will be 0.9 kW and the 51 dBu F(50,90) contour will completely encompass the area of Mt. Powell, NM.

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## **Interference**

An interference study was conducted of the proposed facility parameters using the FCC TVStudy software (Version 2.2.3). The results of the study (copy attached hereto) show that potential interference is not predicted to exceed 0.49% to any full-service DTV or Class A stations or 1.99% to any low power stations as required by the Commission's Rules.

## **Environmental/RFR**

This report addresses only the conditions specified in 47CFR1.1307 that deal with Radio Frequency Radiation. Any other non-RFR conditions that might require the preparation of an EA are beyond the scope of this report; since the structure is existing and registered, such conditions should not be an issue requiring further consideration.

The location of the proposed post-incentive auction facility is assumed to currently be "in compliance" with FCC guidelines for human exposure to RFR (as defined in OET-65). The worst case ground level RFR contributed to the site by this proposal in public areas is calculated to be 0.0008697 mW/cm<sup>2</sup>, which is less than 5% of the MPE for public exposure (0.319333 mW/cm<sup>2</sup>) at Ch. 15 (476-482 MHz). The contribution to the overall RFR from the proposed facility is negligible and, therefore, the site will remain "in compliance" with FCC guidelines.

Hearst agrees to comply with the Commission's requirements regarding power adjustments or cessation of operation as may be necessary to ensure a compliant environment for worker access. Workers will be trained on RFR issues and encouraged to wear personal RFR monitors when on the structure.

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**Certification**

I hereby certify that the foregoing report or statement was prepared by me but may include work performed by others under my supervision or direction. The statements of fact contained therein are believed to be true and correct based on personal knowledge, information and belief unless otherwise stated; with respect to facts not known of my own personal knowledge, I believe them to be true and correct based on their origin from sources known to me to be generally reliable and accurate. I have prepared this document with due care and in accordance with applicable standards of professional practice.

A handwritten signature in black ink, appearing to read "Ben Pidek", is written over a horizontal line.

Benjamin L. Pidek, P.E.  
September 22, 2017

Attached:  
T-Mobile Interference Letter  
TVStudy Interference Check Report

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August 3, 2017

Gary Williams  
Director of Engineering  
KOAT-TV  
3801 Carlisle NE  
Albuquerque, NM 87107

Re: Notification of Interference from K51LO-D to 700MHz License WQLA793

Dear Mr. Williams,

T-Mobile USA, Inc. (“T-Mobile”) has deployed 4G LTE services utilizing 700MHz spectrum in the Albuquerque, NM market. However, T-Mobile is receiving interference to its 700MHz operations in Thoreau, NM from your television operations, K51LO-D, which is severely impacting T-Mobile’s 4G LTE services. T-Mobile is striving to provide improved 4G LTE service to its customers in the area and to meet the performance requirements<sup>1</sup> attached to its 700 MHz licenses. T-Mobile’s service to the Albuquerque, NM market would be significantly improved if K51LO-D can move from Ch. 51 to a lower channel.

T-Mobile appreciates your continued work to address this interference issue and supports your action to seek Special Temporary Authority from the FCC to move K51LO-D from Ch. 51 to a new temporary channel. T-Mobile understands that K51LO-D cannot seek a permanent channel until the FCC opens the Special Displacement Window for LPTV/translator stations displaced by the incentive auction repacking process.<sup>2</sup> In the event K51LO-D must move from this temporary channel as a result of the FCC displacement proceedings, T-Mobile will pay the reasonable costs associated with this second move.<sup>3</sup>

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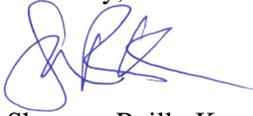
<sup>1</sup> See 47 C.F.R. § 27.14(g), licensees must provide at least 70% geographic coverage of the license area by the end of the license term.

<sup>2</sup> The FCC has said it intends to announce an opportunity for secondary licensees to apply for new channels after the primary full power and Class A television licensees have had an opportunity to apply for their preferred channel locations. See *Incentive Auction Task Force and Media Bureau Announce Procedures for the Post-Incentive Auction Broadcast Transition*, Public Notice, 32 FCC Rcd 858 ¶ 15 (MB 2017); *Incentive Auction Order* ¶¶ 552-553. To allow sufficient time for primary licensees to select their preferred locations, the so-called Special Displacement Window for LPTV licensees cannot occur until “approximately seven to eight months after release of the Closing and Channel Reassignment Public Notice on April 13, 2017,” or sometime between November and December of 2017. See *The Incentive Auction Task Force and Media Bureau Announce Procedures for Low Power Television, Television Translator and Replacement Translator Stations During the Post-Incentive Auction Transition*, Public Notice, 32 FCC Rcd 3860 ¶ 15 (MB 2017), <http://bit.ly/2sUWKgS>.

<sup>3</sup> See Letter from Steve B. Sharkey, T-Mobile USA, Inc. (US) to Marlene H. Dortch, Docket Nos. 16-306, 12-268 (July 17, 2017), available at <https://www.fcc.gov/ecfs/filing/10717150937907>. T-Mobile has notified the FCC it will compensate certain (see letter for eligibility details) low power television stations that operate on a secondary basis and are unable to obtain a permanent channel in time to accommodate T-Mobile’s rapid deployment of broadband service in the 600 MHz band. We extend this same offer to K51LO-D’s relocation to accommodate T-Mobile’s 700 MHz deployment.

If you have any questions about the foregoing, please contact Ilona Lindsay at (425) 383-4462 or by email at [Ilona.lindsay@T-Mobile.com](mailto:Ilona.lindsay@T-Mobile.com). Thank you.

Sincerely,



Shannon Reilly Kraus  
Senior Corporate Counsel  
T-Mobile USA, Inc.

## TVStudy TV Interference Check Report for K51LO on Ch. 15

Study created: 2017.09.22 09:23:53

Study build station data: LMS TV 2017-09-19 (7)

Proposal: K51LO-D D51 LD LIC MT. POWELL, NM  
File number: K51LO\_09kW\_2676.7  
Facility ID: 183687  
Station data: User record  
Record ID: 300  
Country: U.S.

Build options:

Protect records not on baseline channel

Stations affected by proposal:

Call	Chan	Svc	Status	City, State	File Number	Distance
K51DB-D	D51	LD	LIC	CORTEZ, ETC, CO	BLDTT20090522ABP	211.2 km

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D51  
Mask: Simple  
Latitude: 35 27 59.00 N (NAD83)  
Longitude: 108 14 27.20 W  
Height AMSL: 2676.7 m  
HAAT: 0.0 m  
Peak ERP: 0.900 kW  
Antenna: SCA-SL-8 (ID 23503) 0.0 deg  
Elev Pattn: Generic  
Elec Tilt: 1.75

52.1 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	0.900 kW	361.5 m	41.4 km
45.0	0.770	388.6	41.5
90.0	0.416	344.7	36.2
135.0	0.404	494.4	40.7
180.0	0.467	425.2	39.4
225.0	0.374	388.1	37.0
270.0	0.428	463.9	40.0
315.0	0.745	321.8	38.6

Database HAAT does not agree with computed HAAT

Database HAAT: 0 m Computed HAAT: 399 m

Distance to Canadian border: 1504.2 km

Distance to Mexican border: 409.3 km

Conditions at FCC monitoring station: Douglas AZ  
Bearing: 196.9 degrees Distance: 459.8 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:  
Bearing: 26.0 degrees Distance: 579.7 km

Study cell size: 1.00 km  
Profile point spacing: 1.00 km

Maximum new IX to full-service and Class A: 0.50%  
Maximum new IX to LPTV: 2.00%

No IX check failures found.