

## **TECHNICAL EXHIBIT**

Displacement Application for Modification  
of Digital Television Translator Station  
prepared for

Rocky Mountain Public Media, Inc.  
K44IX-D San Luis, Colorado  
Facility ID 167426  
CH 44 (digital) .25 kW

Rocky Mountain Public Media, Inc (formerly Rocky Mountain Public Broadcasting, Inc) is the licensee of digital television translator station K44IX-D, Channel 44, San Luis, Colorado, File BLDTT20101006AAX, Facility ID 167426. K44IX-D is being displaced and is hereby applying during the Special Displacement Window for a new digital channel (35).

As proposed herein K44IX-D will operate at its existing antenna location on Channel 35. The current antenna is a Scala 4DR-4S UHF that does not require replacement. The antenna is mounted on a short tower that does not require registration.

### **Contour Overlap**

The antenna location, pattern and orientation on the new channel will remain unchanged, thereby insuring that there will be contour overlap with the displaced facility.

### **Interference Analysis, International Coordination, etc.**

The results of evaluating the proposed facility for interference using the FCC TV Study program indicate that the station will comply with the FCC's interference protection requirements. These results also indicate that the station complies with the FCC's requirements for international coordination, FCC monitoring station protection, and AM transmitter protection. The proposed facility is well outside the range for coordination with the NTIA regarding the Table Mountain Quiet Zone. The TV Study results are attached to this exhibit.

### **Environmental Considerations**

The proposed facility was evaluated for human exposure to RF energy using the procedures described in FCC OET Bulletin Number 65. Based on OET-65 equations and using .3 as the relative field strength in a downward direction<sup>1</sup>, the calculated signal density near the tower at two meters above ground level attributable to the proposed facility is 3.34 uW/cm<sup>2</sup>,

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<sup>1</sup> The elevation pattern for a Scala 4DR-4S antenna shows <=.3 relative field value from 30 to 90 degrees below horizontal.

which is 0.84% of the general population/uncontrolled maximum permitted exposure limit. Thus, the public will not be exposed to RF levels attributable to the proposed facility in excess of the FCC's guidelines. The applicant will reduce power or cease operation to protect workers having access to the tower. There will be no change in overall structure height. Thus the proposed facility is categorically excluded from environmental processing.

Exhibit prepared by:

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Study created: 2018.04.25 16:33:20

Study build station data: LMS TV 2018-04-19

Proposal: K44IX-D D35 (D44) LD LIC SAN LUIS, CO  
File number: BLDTT20101006AAX  
Facility ID: 167426  
Station data: LMS TV 2018-04-19  
Record ID: b92e040277294701b952cf6212b6c0ea  
Country: U.S.

Build options:  
Protect pre-transition records not on baseline channel  
Protect baseline records from LPTV

Stations potentially affected by proposal:

IX	Call	Chan	Svc	Status	City, State	File Number	Distance
No	KSPK-LP	N28-	TX	LIC	WALSENBURG, CO	BLTTTL20050315AGL	71.2 km
No	K28ER	N28+	TX	LIC	DULCE & LUMBERTON, NM	BLTT19970421JC	139.0
No	K33BN-D	N33z	TX	LIC	Picuris Pueblo, NM	BLTT20050912AAD	90.2
No	KTLP-LP	N34z	TX	LIC	PUEBLO, CO	BLTTTL20100505AHF	150.6
No	K51DI-D	D34	LD	APP	SARGENTS, CO	BLANK0000034297	163.7
No	K34GI	N34+	TX	LIC	TRINIDAD, CO	BLTTTL20050613ABW	80.9
No	K34GI	D34	LD	CP	TRINIDAD, CO	BDFCDTL20090824ACG	80.9
No	K34FQ-D	D34	LD	LIC	ROY, NM	BLDTT20110804AAE	174.0
No	K35IX-D	D35	LD	LIC	BASALT, CO	BLDTT20091221ABH	279.6
No	K35LU-D	D35	LD	CP	BURLINGTON, CO	BNPDTL20100514AFS	348.7
No	K35CH-D	D35	LD	LIC	CORTEZ, MANCOS, ETC, CO	BLDTT20090522ABN	241.2
No	K35LJ-D	D35	LD	LIC	CRESTED BUTTE, CO	BLDTT20120522ADQ	232.3
No	KCNC-TV	D35	DT	LIC	DENVER, CO	BLCDT20090611AAQ	281.4
No	KREZ-LD	D35	LD	APP	DURANGO, CO	BLANK0000051726	218.9
No	K43AB-D	D35	LD	APP	GRAND JUNCTION, CO	BLANK0000052948	322.0
No	K35DZ-D	D35	LD	LIC	LA JUNTA, CO	BLDTT20130124AEN	184.1
No	K35JS-D	D35	LD	LIC	LAMAR, CO	BLDTT20110509ADE	279.0
No	K40DP-D	D35	LD	APP	LAS ANIMAS, CO	BLANK0000052163	215.2
No	KNME-TV	D35	DT	LIC	ALBUQUERQUE, NM	BLEDT20030218BNH	239.5
No	K35FP	D35	LD	LIC	TUCUMCARI, NM	BLANK0000001694	277.4
No	K36JB-D	D36	LD	LIC	CRIPPLE CREEK, CO	BLDTT20100108AAS	173.0
No	K48CU	D36	LD	CP	PUEBLO, CO	BDISDTT20120413AAF	129.9
No	KASY-TV	D36	DT	CP	ALBUQUERQUE, NM	BLANK0000028107	239.5
No	KASY-TV	D36	DT	BL	ALBUQUERQUE, NM	DTVBL55049	239.5
No	K36LF-D	D36	LD	LIC	TAOS, NM	BLDTT20110725ADT	90.2
No	K36KD-D	D36	LD	LIC	TIERRA AMARILLA, NM	BLDTT20111102ACA	109.5
No	K36FQ-D	D36	LD	LIC	WAGON MOUND, NM	BLDTT20101008AAM	148.0
No	KENY-LP	N39-	TX	LIC	ALAMOSA, CO	BLTTTL20050318ACO	48.7
No	K43GW-D	N43z	TX	LIC	RATON, ETC., NM	BLTT20031107AEU	107.0
No	K43IA	N43	TX	LIC	TAOS, NM	BLTT20060420ACX	90.2

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

Channel: D35  
Mask: Stringent  
Latitude: 37 12 14.00 N (NAD83)  
Longitude: 105 25 39.00 W  
Height AMSL: 2475.0 m  
HAAT: 0.0 m  
Peak ERP: 0.209 kW  
Antenna: (replication) 0.0 deg  
Elev Pattn: Generic

50.8 dBu contour:

Azimuth	ERP	HAAT	Distance
0.0 deg	0.026 kW	26.1 m	6.9 km
45.0	0.188	-318.5	11.2
90.0	0.138	-296.5	10.4
135.0	0.002	-133.8	3.7

180.0	0.000	-115.5	1.7
225.0	0.002	50.8	4.5
270.0	0.000	111.0	3.8
315.0	0.000	82.5	4.2

Database HAAT does not agree with computed HAAT  
Database HAAT: 0 m    Computed HAAT: -74 m

Distance to Canadian border: 1311.1 km

Distance to Mexican border: 610.8 km

Conditions at FCC monitoring station: Grand Island NE  
Bearing: 53.4 degrees    Distance: 731.5 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:  
Bearing: 2.6 degrees    Distance: 324.3 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.