

## ENGINEERING STATEMENT

This application filed by New Century Broadcasting, LLC, requests a site relocation and channel change to allow the proposed translator facility to operate from the KAND(AM) transmitter site with antenna height 50 meters AGL. The presently assigned facility K285HC, FACID 200824, causes interference to KRLD(FM), FACID 1087 and to KKDA(FM), FACID 59702 , in an area surrounding the AM tower, and a change to FM Channel 227D is being proposed in this application in order to eliminate the that interference.

The proposed facility will operate with a power of 250 watts at antenna height 50 meters above ground level, (66 meters HAAT), at geographic coordinates N32-06-53.5, W96-27-47.9, (NAD83). The 3 second terrain database was used for all calculations in this application.

The proposed facility is for a translator granted as a fill in translator in the AM Revitalization proceeding and this proposal facility meets all of the Commission requirements applicable to a fill in translator. The translator and the AM facility, (KAND(AM)), are both owned by New Century Broadcasting, LLC as is required by the Commission Rules.

The attached Exhibit E-1 is a channel study that shows that the proposed facility fully protects all facilities from harmful interference. The proposed site is in full compliance with all international treaties.

The attached Exhibit E-2 is an environmental study using the FM Model for all calculations. As is shown in this exhibit, the proposed facility will fully comply with the provisions of OET Bulletin 65 which specifies radiation limits to prevent inadvertent exposure to potentially harmful radiation. The applicant will reduce power or terminate transmissions when maintenance personnel are working on the tower.

## CERTIFICATION

This engineering statement has been prepared by the undersigned and is true and correct to the best of his knowledge and belief, and is submitted in good faith. My qualifications are a matter of record before the Commission.

The undersigned is aware that this document is being submitted to the Federal Communications Commission in connection with a translator filing by New Century Broadcasting, LLC and hereby consents to its use for that purpose.

Dated this 14<sup>th</sup> day of December 2020.

Respectfully,

  
F.W.Hannel, PE

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## Exhibit E-1

### Proposed Translator Channel Study

Channel 227D Facility ID 200824

N32-06-53.5 W96-27-47.9 (NAD 83)

250 watts 50 Meters AGL 66 Meters HAAT(3 second terrain database)

Call Sign	ST	City	Freq.	Ch#	ERPower	ARN	Class	Status	D	Sep	Clr	FacID
KLIF-FM	TX	HALTOM CI	93.3	227	50000.0	BLH-20010522AAR	C2	LIC	85.40	0.00	1.51 dB	27299
KLIF-FM	TX	HALTOM CI	93.3	227	2900.0	BXLH-20010711ABS	C2	LIC	104.49	0.00	12.01 dB	27299
KBPC	TX	CROCKETT	93.5	228	50000.0	0000084773	C2	LIC	107.83	0.00	18.52 dB	3526
KRMX	TX	MARLIN	92.9	225	50000.0	BLH-20111014AAR	C2	LIC	105.28	0.00	21.34 dB	35581
KTYL-FM	TX	TYLER	93.1	226	82000.0	BLH-19980612KC	C1	LIC	143.54	0.00	22.28 dB	35711
KGSR	TX	CEDAR PAF	93.3	227	100000.0	BMLH-20140306AHQ	C	LIC	211.63	0.00	22.59 dB	23604
K228FK	TX	WACO	93.5	228	250.0	BLFT-20170117AAE	D	LIC	94.64	0.00	24.86 dB	149227
KRMX	TX	MARLIN	92.9	225	12700.0	BXLH-20111014AAS	C2	LIC	105.28	0.00	28.17 dB	35581
KIVY-FM	TX	CROCKETT	92.7	224	50000.0	BLH-19910222KB	C2	LIC	131.30	0.00	28.76 dB	15132
K226BM	TX	CLEBURNE	93.1	226	100.0	BLFT-20100617AJW	D	LIC	91.59	0.00	29.65 dB	139329
KNOR	TX	KRUM	93.7	229	43000.0	BLH-20100719AFA	C0	LIC	176.03	0.00	29.35 dB	36289
KNOR	TX	KRUM	93.7	229	55000.0	BXLH-20110705ACR	C0	LIC	176.03	0.00	29.30 dB	36289

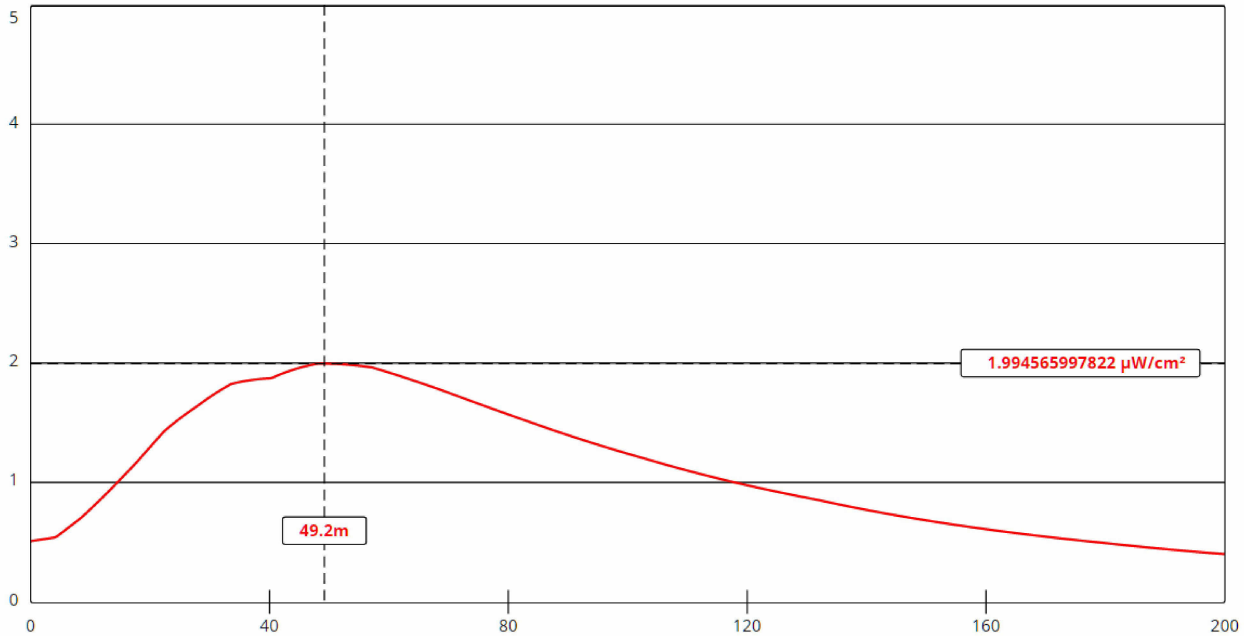
The proposed facility is fully compliant with the overlap provisions of Section 74.1204 of the Commission's Rules.

### INTERNATIONAL CONSIDERATIONS

The proposed site is 523 km from the Mexican Border and there are no border issues that have to be addressed in this application.

## Exhibit E-2

### FM Model Evaluation



Channel Selection	Channel 227 (93.3 MHz) ▼		
Antenna Type +	EPA Type 2: Opposed V Dipole ▼		
Height (m)	<input type="text" value="50"/>	Distance (m)	<input type="text" value="200"/>
ERP-H (W)	<input type="text" value="250"/>	ERP-V (W)	<input type="text" value="250"/>
Num of Elements	<input type="text" value="1"/>	Element Spacing ( $\lambda$ )	<input type="text" value="1"/>
Num of Points	<input type="text" value="500"/>	<input type="button" value="Apply"/>	

Maximum Radiation Exposure is 1.99 microwatts/ $\text{cm}^2$  at a distance of 49.2 meters from the tower base and no further analysis is required since the calculated exposure is less than 5% of the allowed 200 microwatts/ $\text{cm}^2$  specified in OET Bulletin 65.

The applicant will cooperate with other users of this site and will reduce power/terminate transmissions as required to protect maintenance personnel from inadvertent exposure to potentially harmful RF Radiation.