

August 2015
FM Translator K265CW
Tucson, Arizona Channel 265D
Allocation Study

The instant application proposes to modify FM translator K265CW, to operate on Channel 265D from a tower which is approximately 450 meters from the licensed tower site atop Mount Lemmon. While K265CW holds a displacement construction permit to operate on Channel 289D from a tower site in Tucson, the licensee has determined to continue operation on the licensed channel for the time being since the full-power station triggering the displacement has not yet commenced operation.

The attached spacing study shows the spacing between the proposed translator site and the location of cochannel and adjacent channel stations and proposals. This study was made with the Commission's Class A spacing requirements, and individual situations were examined to determine the lack of prohibited contour overlap per the requirements of §74.1204 of the Rules. The attached allocation study map demonstrates compliance with the Commission's Rules for protection of FM broadcast stations and FM translators as outlined in §74.1204.

The spacing study demonstrates compliance with §73.207 of the Commission's Rules regarding spacing restrictions to stations which are 53 or 54 channels removed from the proposed operation.

KQMR 262C Globe

The proposed translator transmitter site is located within the 60 dBu protected contour of third-adjacent channel station KQMR 262C Globe. The maximum distance to the 100 dBu interfering contour, from a 47 watt operation is 481 meters per a Free Space calculation. The attached aerial photograph of the proposed transmitter site depicts the a 481 meter radius circle from the proposed facility. There is no population within this contour, which encompasses only transmitter buildings and towers. Therefore, the proposed facility is believed to satisfy the requirements of §74.1204(d) with respect to KQMR.

New LPFM 264L1 Old Pascua Village (CP)

The proposed 54 dBu F(50,10) contour overlaps (and encompasses) the authorized 60 dBu contour for a new LPFM station on Channel 264L1 at Old Pascua Village. However, as is depicted on the attached first-adjacent channel study map, the Old Pascua Village contour is also completely encompassed by the licensed K265CW 54 dBu F(50,10) contour.¹ The total overlap area caused to the LPFM permit will not increase. Therefore, the proposed facility is believed to satisfy the requirements of §74.1204(c) with respect to the Old Pascua Village permit.

KKYZ 266C3 Tanque Verde (CP)

The proposed 54 dBu F(50,10) contour overlaps the authorized 60 dBu contour for KKYZ on Channel 266C3 at Tanque Verde. However, as is depicted on the attached first-adjacent channel

¹ This situation was created by the Old Pascua Village original construction permit application, which specified a facility which is fully-spaced to K265CW under the LPFM spacing rules, but which is overlapped by the K265CW interfering contour, and indeed by the K265CW protected contour.

study map, the KKYZ contour is also overlapped by the licensed K265CW 54 dBu F(50,10) contour. The total overlap area caused to KKYZ will not increase, and will in fact be reduced. Therefore, the proposed facility is believed to satisfy the requirements of §74.1204(c) with respect to the KKYZ permit. (It should be noted that the owners of K265CW are also the principals of the licensee of KKYZ, and thus have no objection to grant of the instant application.)

Compliance with US-Mexico FM Agreement

The licensed K265CW facility operates with a maximum lobe ERP of 52 watts, which is a grandfathered power level with respect to the requirements of the US-Mexico FM Agreement. The licensed transmitter site is located just under 125 kilometers from the common border, but the 60 dBu protected contour extends more than 8.7 km in the direction of Mexico, and the 34 dBu interfering contour extends more than 32 km in the direction of Mexico.

The proposed K265CW facility has been carefully designed so that there will be:

- a) No extension of the 60 dBu F(50,50) contour in the direction of Mexico, and;
- b) No extension of the 34 dBu F(50,10) contour in the direction of Mexico.

These contours are depicted on an attached map exhibit.

SEARCH PARAMETERS

FM Database Date: 150807

Channel: 265A 100.9 MHz
 Latitude: 32 26 29
 Longitude: 110 46 55
 Safety Zone: 50 km
 Job Title: K265CW MODIFICATION

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Call Status	City St	FCC File No.	Channel Freq.	ERP(kW) HAAT(m)	Latitude Longitude	Bearing deg-True	Dist (km)	Req (km)
KCDS-LP CP MOD	TUCSON AZ	BMPL-50401AER	211L1 90.1	0.050 -24.1	32-12-08 110-54-59	205.4	29.39 23.39	6 CLEAR
KQMRaux LIC	GLOBE AZ	BMLH-900328KA	262C 100.3	6.200 1018.0	33-17-21 110-49-45	357.3	94.12 0.00	0 AUX
KQMR LIC	GLOBE AZ	BMLH-50815AEE	262C 100.3	90.000 624.0	33-17-23 110-51-53	355.3	94.40 -0.60	95 SHORT
KQMRaux LIC	GLOBE AZ	BXLH-61030AJU	262C 100.3	0.900 583.0	33-17-23 110-51-53	355.3	94.40 0.00	0 AUX
KPYT-LP LIC	TUCSON AZ	BLL-50914AAY	262L1 100.3	0.100 20.6	32-07-03 111-03-47	216.3	44.62 15.62	29 CLEAR
KJIK LIC	DUNCAN AZ	BLH-30210AAC	264C1 100.7	10.000 716.0	32-53-21 109-19-20	69.6 SS	145.66 12.66	133 CLEAR
K264BB LIC	GREEN VALLEY AZ	BLFT-10520ADA	264D 100.7	0.035 138.0	31-55-45 110-59-47	199.6	60.29 0.00	0 TRANS
NEW CP	OLD PASCUA VILLAGE AZ	BNPL-31114ANZ	264L1 100.7	0.050 -31.7	32-12-10 110-57-44	212.6	31.44 -24.56	56 SHORT
KSLX-FM LIC	SCOTTSDALE AZ	BMLH-30726AAJ	264C 100.7	100.000 561.0	33-19-53 112-03-47	309.9	155.28 -9.72	165 SHORT
KSLXaux LIC	SCOTTSDALE AZ	BXLH-60809ADT	264C 100.7	12.000 543.0	33-19-53 112-03-47	309.9	155.28 0.00	0 AUX
KSLXaux LIC	SCOTTSDALE AZ	BXLH-50514ACL	264C 100.7	12.000 551.0	33-19-53 112-03-47	309.9	155.28 0.00	0 AUX
DEL	SIERRA VISTA AZ	RM-11264	265A 100.9	0.000 0.0	31-32-47 110-16-29	154.2	110.21 -4.79	115 SHORT
KZMK LIC	SIERRA VISTA AZ	BLH-7870	265A 100.9	3.000 -14.0	31-32-47 110-16-29	154.2	110.21 -4.79	115 SHORT

SEARCH PARAMETERS

FM Database Date: 150807

Channel: 265A 100.9 MHz
 Latitude: 32 26 29
 Longitude: 110 46 55
 Safety Zone: 50 km
 Job Title: K265CW MODIFICATION

Page 2

Call Status	City St	FCC File No.	Channel Freq.	ERP(kW) HAAT(m)	Latitude Longitude	Bearing deg-True	Dist (km)	Req (km)
K265CW LIC	TUCSON AZ	BLFT-20726ABL	265D 100.9	0.052 DA 1703.0	32-26-26 110-47-12	258.2	0.45	0
							0.00	TRANS
K265CW APP	TUCSON AZ	BSTA-40520AEU	265D 100.9	0.001 0.0	32-21-11 110-57-07	238.4	18.76	0
							0.00	TRANS
	SASABE SO	-	266B 101.1	0.000 0.0	31-28-19 111-32-39	213.9	129.41	125
							4.41	CLOSE
	SASABE SO	-	266B 101.1	0.000 0.0	31-28-19 111-32-39	213.9	129.41	125
							4.41	CLOSE
	SASABE SO	-	266B 101.1	0.000 0.0	31-28-00 111-32-50	213.9	130.06	125
							5.06	CLOSE
K266BO CP	CASA GRANDE AZ	BNPFT-30318AFG	266D 101.1	0.023 338.0	32-49-18 111-42-42	296.2	96.90	0
							0.00	TRANS
KOHF-LP CP	FLORENCE COMMUNITY AZ	BNPL-31113BMC	266L1 101.1	0.050 3.2	33-01-02 111-24-26	317.8	86.68	56
							30.68	CLEAR
KKYZ CP	TANQUE VERDE AZ	BPH-30306AAP	266C3 101.1	24.000 DA 49.0	32-12-01 111-01-03	219.6	34.74	89
							-54.26	SHORT

==== END OF FM SPACING STUDY FOR CHANNEL 265 ====

GILA

K265CW 265D Tucson
40 dBu F(50,10)

PINAL

GRAHAM



PIMA

COCHISE

KZMK 265A Sierra Vista
60 dBu F(50,50)

SANTA CRUZ

Mexico

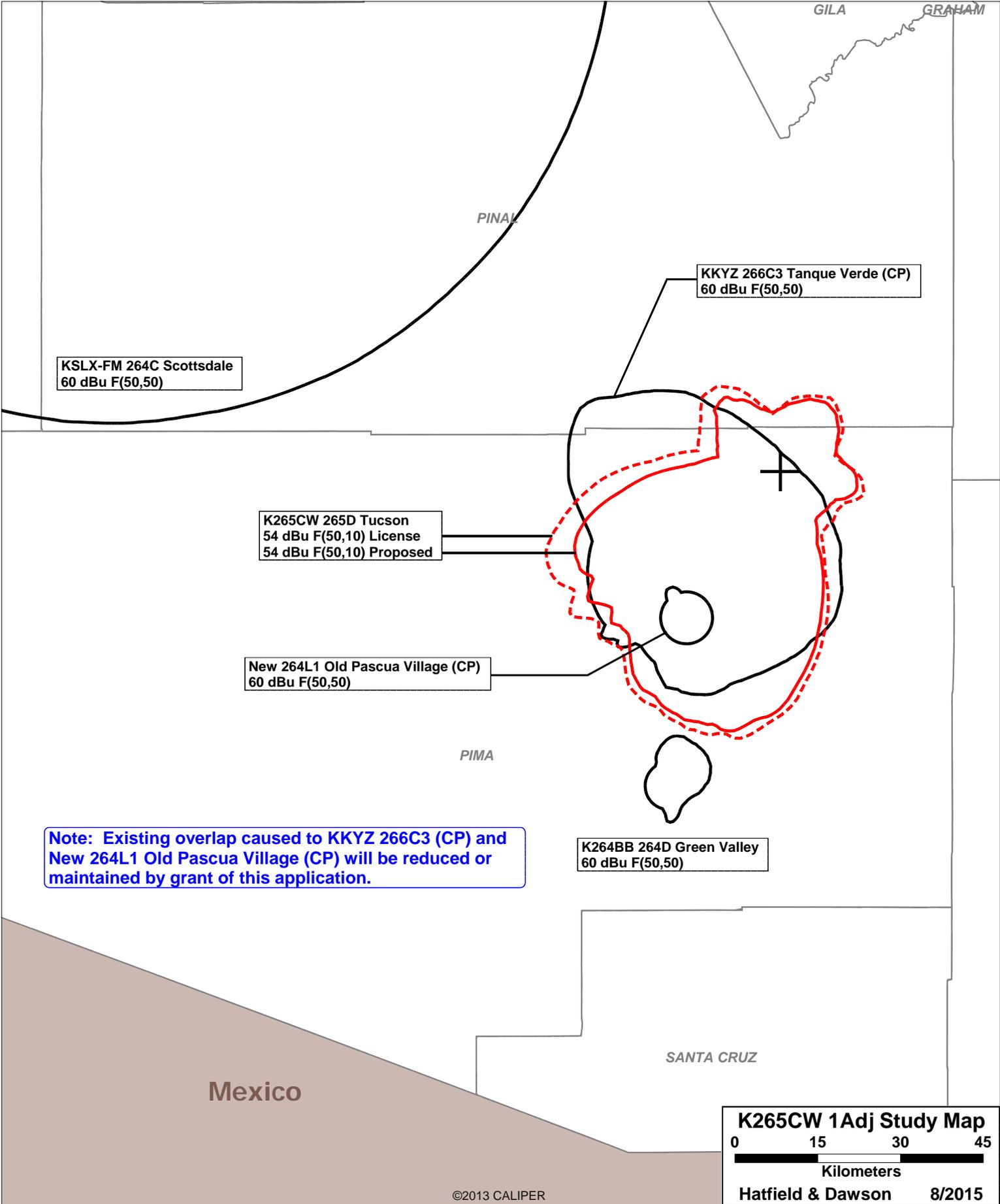
K265CW Cochannel Study Map

0 15 30 45

Kilometers

Hatfield & Dawson

8/2015



KSLX-FM 264C Scottsdale
60 dBu F(50,50)

KKYZ 266C3 Tanque Verde (CP)
60 dBu F(50,50)

K265CW 265D Tucson
54 dBu F(50,10) License
54 dBu F(50,10) Proposed

New 264L1 Old Pascua Village (CP)
60 dBu F(50,50)

K264BB 264D Green Valley
60 dBu F(50,50)

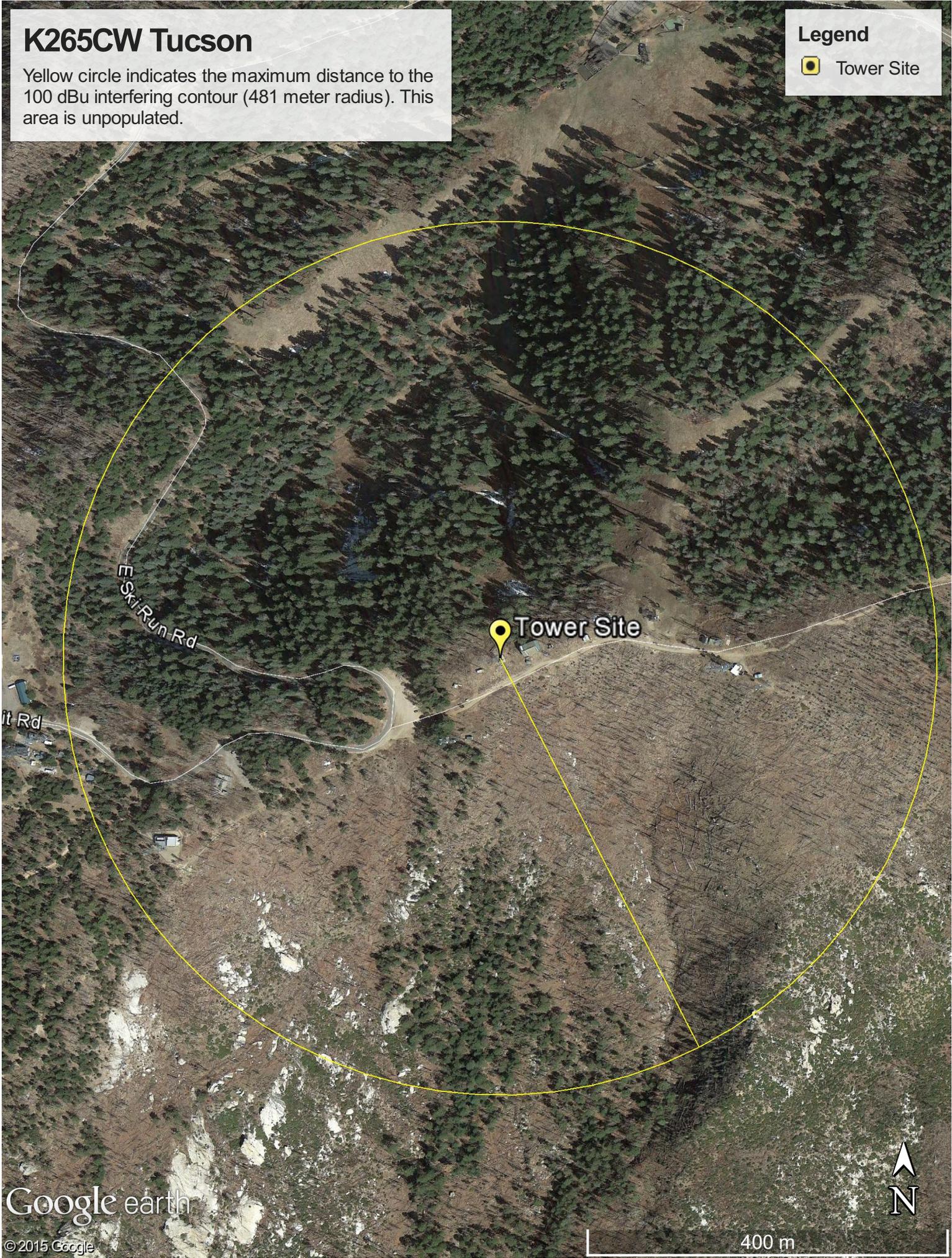
Note: Existing overlap caused to KKYZ 266C3 (CP) and New 264L1 Old Pascua Village (CP) will be reduced or maintained by grant of this application.

K265CW 1Adj Study Map
 0 15 30 45
 Kilometers
 Hatfield & Dawson 8/2015

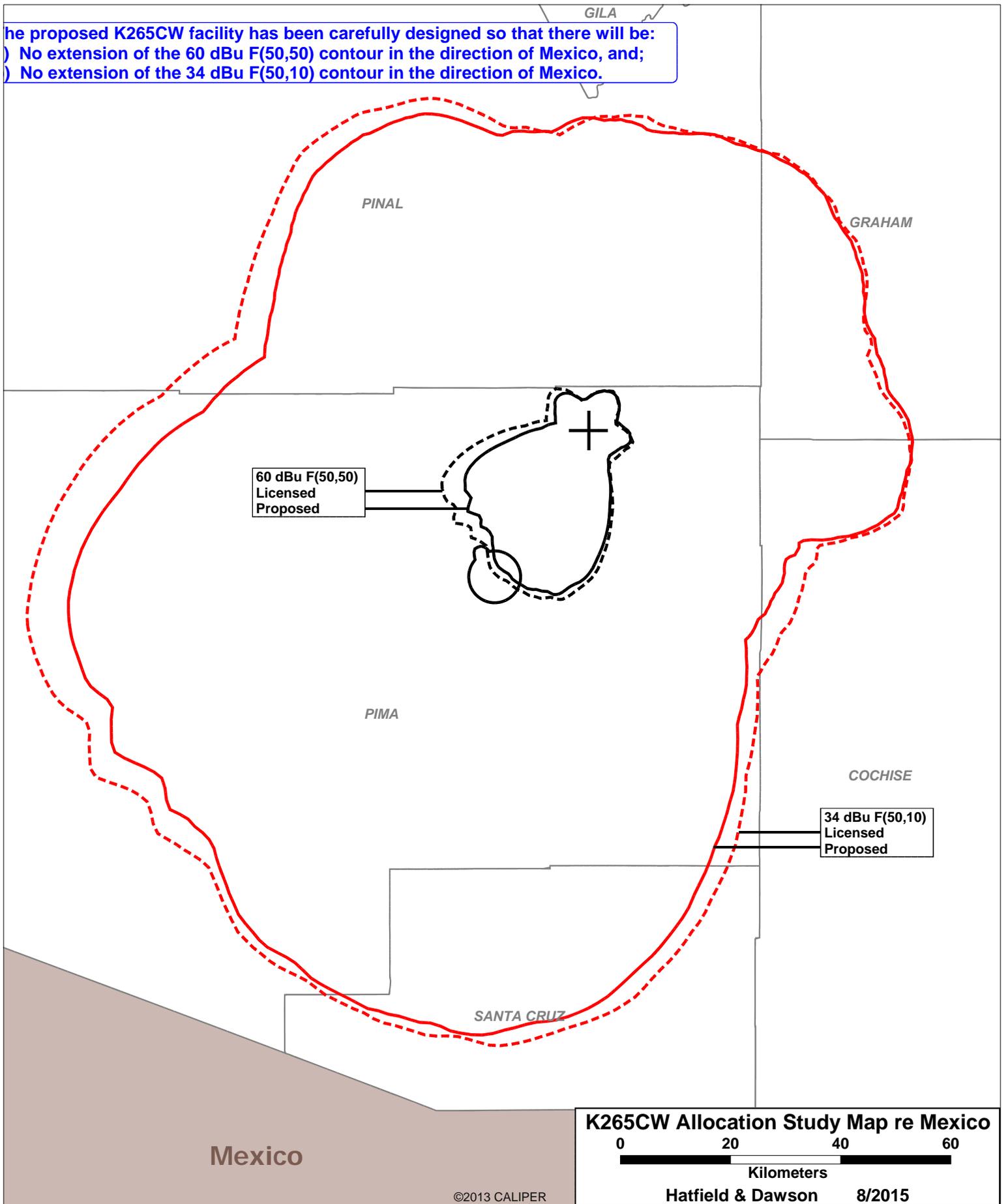
K265CW Tucson

Yellow circle indicates the maximum distance to the 100 dBu interfering contour (481 meter radius). This area is unpopulated.

Legend
Tower Site



The proposed K265CW facility has been carefully designed so that there will be:
1) No extension of the 60 dBu F(50,50) contour in the direction of Mexico, and;
2) No extension of the 34 dBu F(50,10) contour in the direction of Mexico.



60 dBu F(50,50)
Licensed
Proposed

34 dBu F(50,10)
Licensed
Proposed

K265CW Allocation Study Map re Mexico

0 20 40 60

Kilometers

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FM Translator K265CW
Tucson, Arizona Channel 265D
RF Exposure Study

Facilities Proposed

The proposed operation will be on Channel 265D (100.9 MHz) with a maximum lobe effective radiated power of 47 watts. Operation is proposed with an antenna to be mounted on an existing tower on Mount Lemmon.

The proposed antenna support structure does not exceed 60.96 meters (200 feet) above ground and does not require notification to the Federal Aviation Administration. Therefore, this structure does not require an Antenna Structure Registration Number.

RF Exposure Calculations

Section 1.1307(b)(1) of the Commission's Rules exempts FM translators and boosters operating with an effective radiated power of 100 watts or less from the requirement to submit an Environmental Assessment to determine compliance with FCC specified guidelines for human exposure to radiofrequency electromagnetic fields. The applicant proposes operation with a maximum lobe effective radiated power of 94 watts (47 watts H + 47 watts V) and therefore no calculations have been submitted. Nonetheless, public access to the site is restricted and all station personnel and contractors are required to follow appropriate safety procedures, including turning off the transmitter if necessary, prior to commencing work on the antenna tower.