Exhibit 41 - Statement B

ALLOCATION CONSIDERATIONS

INTERFERENCE ANALYSIS

prepared for **Bend Licenses, Limited Partnership**

KTVZ-DT Bend, Oregon

Facility ID 55907

Ch. 18 50 kW 188 m

Bend Licenses, Limited Partnership is the permittee of KTVZ-DT, Channel 18, Bend, Oregon

(file number BPCDT-19991027AAU) and licensee of the paired analog KTVZ(TV) Channel 21 facility

(BLCT-19920820KT). The purpose of the instant application is to modify the KTVZ-DT Construction

Permit ("CP") to specify a different different directional antenna pattern, increase the antenna radiation

center above ground level by one meter, and provide corrected ground elevation data for the transmitter

site.

The DTV reference effective radiated power ("ERP") and height above average terrain ("HAAT")

of 50 kW and 197 meters, respectively, for KTVZ-DT have been established under **Appendix B** of the

Second Memorandum Opinion and Order on Reconsideration of the Fifth and Sixth Report and Orders

in MM Docket 87-268, FCC 98-315, released December 18, 1998, per §73.622(f)(1) of the

Commission's rules. The proposed KTVZ-DT facility will operate with 50 kW ERP and 188 meters

HAAT. Considering the proposed directional antenna pattern (with respect to the "reference" KTVZ-DT

replication directional pattern), the proposed ERP exceeds the reference ERP in certain azimuths.

Accordingly, as required by §73.622(f)(5) of the Commission's rules, a study per §73.623(c) was

conducted to evaluate interference to analog and DTV facilities that may be attributed to the proposed

KTVZ-DT facility.

A detailed interference study was conducted in accordance with the terrain dependent Longley-

Rice point-to-point propagation model, per the Commission's Office of Engineering and Technology

Bulletin number 69, Longley-Rice Methodology for Evaluating TV Coverage and Interference, July 2,

Cavell, Mertz & Davis, Inc.

Exhibit 41 - Statement B

ALLOCATION CONSIDERATIONS INTERFERENCE ANALYSIS

(page 2 of 4)

1997 ("OET-69").¹ The interference study examined the net change in interference as experienced by other stations that would result from the proposed facility (in lieu of the reference KTVZ-DT). All stations considered in this study are listed in **Exhibit 41 - Table 1**. The results of the interference study, also summarized in **Exhibit 41 - Table 1**, indicate that any additional interference to these stations meets the Commission's 2% / 10% interference limits to all pertinent NTSC and DTV stations and allotments.

With respect to television stations that have been granted a Class A license or CP, or are eligible for Class A status, only station KABH-CA (Channel 15, Bend, OR) is near enough the proposed facility to warrant discussion. KABH-CA is licensed (BLTTL-19950803JA) to operate with 11.9 kW ERP at a site 0.3 km from the proposed KTVZ-DT site. A CP (BPTTA-20010806ACM) authorizes KABH-CA to increase ERP to 84 kW.

Given the close proximity of KABH-CA to the proposed KTVZ-DT operation (0.3 km), these facilities can be considered to be essentially co-located. Using the D/U criteria of §73.623(c)(5)(i), it can be demonstrated that the threshold for interference is not exceeded, due to the power levels involved. For the licensed 11.9 kW KABH-CA facility, the proposed 50 kW KTVZ-DT facility would result in a D/U ratio of -6.2 dB, which does not approach the Commission's interference threshold of -34 dB D/U² by a substantial margin. Additionally, an examination of the respective transmitted power levels on an azimuth-by-azimuth basis (which considered each facility's respective directional antenna pattern) also showed that the proposed KTVZ-DT operation would not violate the Commission's -34 dB D/U requirement along any azimuth.

¹The implementation of OET-69 for this study followed the guidelines of OET-69 as specified therein. A standard cell size of 2 km was employed. Comparisons of various results of this computer program (as run on a Sun processor) to the Commission's implementation of OET-69 show excellent correlation.

²Based on the Commission's criteria, interference would occur if the predicted D/U is *less* than the -34 dB D/U threshold.

Exhibit 41 - Statement B

ALLOCATION CONSIDERATIONS INTERFERENCE ANALYSIS

(page 3 of 4)

The KABH-CA CP facility is authorized to operate with 84 kW ERP, using a non-directional antenna system. In this case, the maximum ERP from KTVZ-DT (50 kW) would result in a worst-case D/U of 2.3 dB, which also does not approach the Commission's interference threshold of -34 dB D/U by a considerable margin. Thus, interference protection to KABH-CA is provided using the standard protection requirements of §73.623(c)(5)(i).

For completeness, a detailed interference study was also conducted to further demonstrate protection to KABH-CA. Per §73.623(c)(5)(iii) of the Commission's Rules, a request for waiver of the standard contour protection requirements of §73.623(c)(5)(i) may be based on a more detailed analysis to show that interference is not likely. Specifically, interference protection to a Class A station from a DTV proposal may also be demonstrated using OET-69 methods. Accordingly, detailed interference studies were conducted in accordance with OET-69 to determine the impact of the proposed KTVZ-DT facility on KABH-CA.³

The results of the interference study regarding KABH-CA is summarized in **Exhibit 41 - Table 2**. As shown therein, no new interference is predicted to the Licensed or CP KABH-CA facilities. If a waiver of §73.623(c)(5)(i) is necessary, then one is respectfully requested on behalf of the applicant for the reasons stated above.

The nearest FCC monitoring station is 550.3 km distant at Ferndale, Washington. This exceeds by a great margin the threshold minimum distance specified in §73.1030(c)(3) that would suggest consideration of the monitoring station. There are no AM broadcast stations within 3.2 km (2 miles) of the proposed site, according to information extracted from the Commission's engineering database.

 $^{^3}$ For OET-69 evaluation of LPTV station service, a nominal cell size of 1 km was employed (since the LPTV station service area is much smaller than that for full-power stations). The service area for the involved analog Low Power Television facility is that area predicted to receive signal levels of at least 74 dB μ using the Longley-Rice methodology, and within the dipole factor corrected 74 dB μ F(50,50) service contour distance.

Exhibit 41 - Statement B ALLOCATION CONSIDERATIONS INTERFERENCE ANALYSIS

(page 4 of 4)

Thus, it is believed that the instant proposal complies with the Commission's allocation Rules and policies regarding NTSC, DTV, and Class A stations.

Exhibit 41 - Table 1 INTERFERENCE ANALYSIS RESULTS SUMMARY

prepared for

Bend Licenses, Limited Partnership

KTVZ-DT Bend, Oregon Facility ID 55907 Ch. 18 50 kW 188 m

DTV Facilities	<u>S</u>			Calculated "Before"	Calculated "After"	Net "New" I	nterference	Percentage Reduction of Baseline	
Stations	City, State	Distance	Baseline	Service	Service	("2 perce	ent" test)	Population	
<u>Considered</u>	<u>Channel</u>	<u>(km)</u>	<u>Population</u>	<u>Population</u>	<u>Population</u>	<u>Population</u>	<u>Percentage</u>	("10 percent" test)	
			(1)	(2)	(3)	(4)	(5)	(6)	
KMTR-DT	Eugene, OR	133.7			no interferenc	e predicted from pro	posal		
(Ref 72.7 kW)	17								
KMTR-DT	Eugene, OR	133.7			no interference	e predicted from pro	mosal		
(CP 72.7 kW)	17	133.7			no interrerene	e predicted from pro	posar		
(,									
KTVC-DT	Roseburg, OR	185.9			no interferenc	e predicted from pro	posal		
(CP 50 kW)	18								
KTVC-DT	Roseburg, OR	185.9			no interferenc	e predicted from pro	posal		
(Ref 50 kW)	18					1	1		
WEDD DE	D 1774	200.6			1 11 . 6 . 11.		• 1		
KEPR-DT (CP 36.4 kW)	Pascoe, WA 18	280.6			checklist facilit	y, evaluation not rec	juired		
(CI 50.1 KW)	10								
KEPR-DT	Pascoe, WA	280.6			no interferenc	e predicted from pro	posal		
(Ref 50 kW)	18								
KIXE-DT	Redding, CA	401.1	322,000	310,392	310,370	22	0.01	3.61	
(CP 93 kW)	18		- ,						
	5 111 61	404.4							
KIXE-DT (Ref 183.8 kW)	Redding, CA 18	401.1			no interferenc	e predicted from pro	posal		
(Kei 105.0 kW)	10								

Exhibit 41 - Table 1 INTERFERENCE ANALYSIS RESULTS SUMMARY

(page 2 of 3)

DTV Facilitie Stations Considered	City, State Channel	Distance (km)	Baseline Population (1)	Calculated "Before" Service Population (2)	Calculated "After" Service Population (3)		Interference ent" test) <u>Percentage</u> (5)	Percentage Reduction of Baseline Population ("10 percent" test) (6)
KCPQ-DT (Ref 602.8 kW)	Tacoma, WA 18	402.4			no interferenc	e predicted from pro	oposal	
KCPQ-DT (Lic 600 kW)	Tacoma, WA 18	402.4			no interferenc	e predicted from pro	oposal	
KPIC-DT (Ref 50 kW)	Roseburg, OR 19	185.0			no interferenc	e predicted from pro	oposal	
KPIC-DT (CP 50 kW)	Roseburg, OR 19	185.9			no interference	e predicted from pro	oposal	

Exhibit 41 - Table 1 INTERFERENCE ANALYSIS RESULTS SUMMARY

(page 3 of 3)

NTSC Facilities

Stations Considered	City, State Channel	Distance (<u>km)</u>	Baseline Population (1)	Calculated "Before" Service Population (2)	Calculated "After" Service Population (3)		Interference cent" test) Percentage (5)	Total Inte from DT ("10 perce <u>Population</u> (7)	ΓV only	
KMTR(TV) (Lic)	Eugene, OR 16	133.7			no interference p	predicted from pro	posal			
Notes:	(1) (2) (3) (4) (5) (6) (7) (8)	For DTV stations, greater of NTSC or DTV Service Population, from FCC Table For NTSC stations, total population within noise-limited contour Service population after reduction from terrain and interference losses, before consideration of proposal Service population after reduction from terrain and interference losses, considering proposal Net change in population receiving interference resulting from proposal, equals (2) minus (3). A number in parenthesis indicates a reduction in interference. Proposal's impact in terms of percentage, equals (4)/(1) times 100 percent: not to exceed de minimis limit of 2.0 percent Total interference to DTV stations: equals 100 percent minus [(3)/(1) X 100%]; proposal may not add interference above 10% total. Zero total interference is indicated if (3) is greater than (1). NTSC station total population subject to interference from DTV only sources (considering proposal) Proposal's impact to NTSC station in terms of percentage, equals (7)/(1) times 100 percent; proposal may not add interference above 10% total								

The determination of stations for consideration and the determination of baseline population and interference percentages were made as described in the Commission's August 10, 1998 Public Notice "Additional Application Processing Guidelines for Digital Television"

Exhibit 41 - Table 2

CLASS A STATION INTERFERENCE ANALYSIS RESULTS SUMMARY

prepared for

Bend Licenses, Limited Partnership

KTVZ-DT Bend, Oregon Facility ID 55907 Ch. 18 50 kW 188 m

Stations	City, State	Distance	Baseline	Service	Unique Interference from proposal		
Considered	<u>Channel</u>	<u>(km)</u>	Population (1)	Population (2)	Population (3)	Percentage (4)	
KABH-CA (Lic)	Bend, OR	0.3	58,207	58,004	0	0.00	
KABH-CA (CP)	Bend, OR	0.3	70,160	69,714	0	0.00	

OET-69 Class A station analysis notes:

- (1) Population within dipole-corrected 74 dBu service contour
- (2) Service population after reduction from terrain and interference losses, before consideration of proposal
- (3) Net change in population receiving interference resulting from proposal. A number in parenthesis indicates a *reduction* in interference.
- (4) Proposal's impact in terms of percentage, equals (3)/(1) times 100 percent: not to exceed zero when rounded to the nearest whole percent