ENGINEERING EXHIBIT

Application for Digital Television Station Construction Permit

prepared for

Oregon TV License Company, LLC
KEZI(DT) Eugene, OR
Facility ID 34406
Ch. 9 21.4 kW 706 m

Oregon TV License Company, LLC ("OTLC") is the licensee of digital television station KEZI, Channel 9, Facility ID 34406, Eugene OR. KEZI is licensed (file# BLCDT-20090225ADH) to operate with 43.9 kW effective radiated power ("ERP") with a directional antenna at 533 meters height above average terrain ("HAAT"). *OTLC* herein proposes to relocate KEZI to a new transmitting location. As specified herein, the KEZI facility will be relocated 47.3 km and will operate with an ERP of 21.4 kW directional and 706 meters antenna HAAT.

The proposed KEZI operation will employ a new antenna system to be side-mounted on an existing tower structure associated with FCC Antenna Structure Registration ("ASR") number 1205567. No change to the overall structure height will result.

The proposed antenna is an elliptically polarized directional ERI model ALV4H3-ESOC-92 (30 percent vertical polarization). The maximum horizontally polarized ERP is 21.4 kW and the maximum vertically polarized ERP is 6.42 kW. The vertically polarized component will not exceed the horizontally polarized component at any azimuth. The directional antenna's azimuthal patterns are depicted in Figures 1 and 1A for horizontal and vertical polarization, respectively. The antenna's elevation pattern is depicted in Figures 2 and 2A.

Figure 3 supplies a map that demonstrates compliance with §73.625(a)(1) regarding coverage of the entire principal community. The proposed facility's predicted population exceeds 95 percent of the KEZI baseline facility's population as described in the *Incentive Auction Closing and Channel Reassignment Public Notice* (DA 17-317, released April 13, 2017).

Gain – Loss Analysis

Owing to the 47.3 km relocation distance, the KEZI noise limited service contour ("NLSC", 36 dBμ) will be shifted and there will be some areas of service gain and loss. A coverage contour comparison map, Figure 4, shows the NLSC gain and loss areas. The authorized post-repack NLSC of nearby stations which overlap that of the licensed and proposed KEZI are provided on the map to demonstrate the availability of other services. There is at least one other service available in all of the loss area, and nearly all of the population within the loss area has at least 5 other services available.

The proposed KEZI facility's NLSC encompasses 42,136.1 square kilometers and 1,074,679 persons (2010 Census). This is an increase over the licensed KEZI NLSC, which encompasses 41,970.9 sq km and 877,049 persons. From Figure 4 a breakout of the gain and loss populations is provided below, which shows that the loss area having less than 5 other services contains only 312 persons.

NLSC Gain – Loss Population Detail

KEZI Licensed Population 877,049
KEZI Proposed Population 1,074,679

Gain Area Total Population: 258,671
Loss Area Total Population: 61,041
Common Area Total Population: 816,008

Net Gain in Total Population: 197,630

Number of Alt Services	Population Gain	Loss	Net Gain
0	0	0	0
1	0	0	0
2	0	132	-132
3	0	63	-63
4	0	117	-117
5 or more	258,671	60,729	197,942

KEZI is an affiliate of the ABC network. Same-network (ABC) coverage contours are tinted red on Figure 4. The NLSC loss area of ABC service contains a total of 149 persons.

The NLSC loss area is within a mountainous region where actual service from the licensed KEZI experiences substantial terrain blockage. The detail maps of Figure 4A and 4B

provide color tinting that depicts areas of predicted 36 dBμ noise limited digital television service based on the Longley-Rice methodology.[1] As demonstrated on Figure 4A, the Longley-Rice analysis shows that zero population within the portion of the NLSC loss area with less than 5 other services can receive 36 dBμ or better signal levels from the licensed KEZI. Similarly, the Longley-Rice analysis in Figure 4B shows that zero population within the portion of the ABC network loss area can receive 36 dBμ or better signal levels from the licensed KEZI. Therefore, all of the population that are within the NLSC loss area of less than 5 other services as well as all of the population within the ABC network contour loss area are at locations below the 36 dBμ reception threshold and actual service from the licensed KEZI is not expected in these areas.

Interference and Allocation

Interference study per FCC OET Bulletin 69[2] shows that the proposal complies with the 0.5 percent limit of new interference caused to pertinent nearby post-auction full service and Class A television stations and reassignments as required by §73.616. The interference study output report is provided as Table 1. TVStudy analysis also shows that the proposed modification would not cause impermissible interference to any pre-auction facility that was reassigned or relinquished in the incentive auction.

Human Exposure to Radiofrequency Electromagnetic Field (Environmental)

The proposed KEZI transmitting location is on Prairie Mountain overlooking Eugene Oregon and portions of the Willamette Valley. There are several other broadcast transmitting facilities at this site area. To accurately consider the impact of all other facilities and the terrain

[1]Irregular Terrain Model / National Bureau of Standards Technical Note 101, version 1.2.2 of the Longley-Rice code. Computer code for the Longley-Rice point-to-point radio propagation model is published in an appendix of NTIA Report 82-100, "*A Guide to the Use of the ITS Irregular Terrain Model in the Area Prediction Mode,"* authors G.A. Hufford, A.G. Longley and W.A. Kissick, U.S. Department of Commerce, April 1982. Some modifications to the code were described by G.A. Hufford in a memorandum to users of the model dated January 30, 1985. With these modifications, the code is referred to as Version 1.2.2 of the Longley-Rice model.

[2]FCC Office of Engineering and Technology Bulletin number 69, *Longley-Rice Methodology for Evaluating TV Coverage and Interference*, February 6, 2004 ("OET-69"). This analysis employed the FCC's current "TVStudy" software with the default application processing template settings, 2 km cell size, and 1 km terrain increment. Comparisons of various results of this computer program (run on a Mac processor) to the FCCs implementation of TVStudy show excellent correlation.

variations, *OTLC* will conduct post-construction RF exposure measurements to evaluate the level of RF exposure resulting from the proposed KEZI facility. As necessary, based on these results and considering all emitters, appropriate exposure abatement procedures will be established and followed, in order to comply with the FCC's exposure limits. Such abatement procedures may involve the restriction of access to certain areas and/or facility modifications to reduce RF levels.

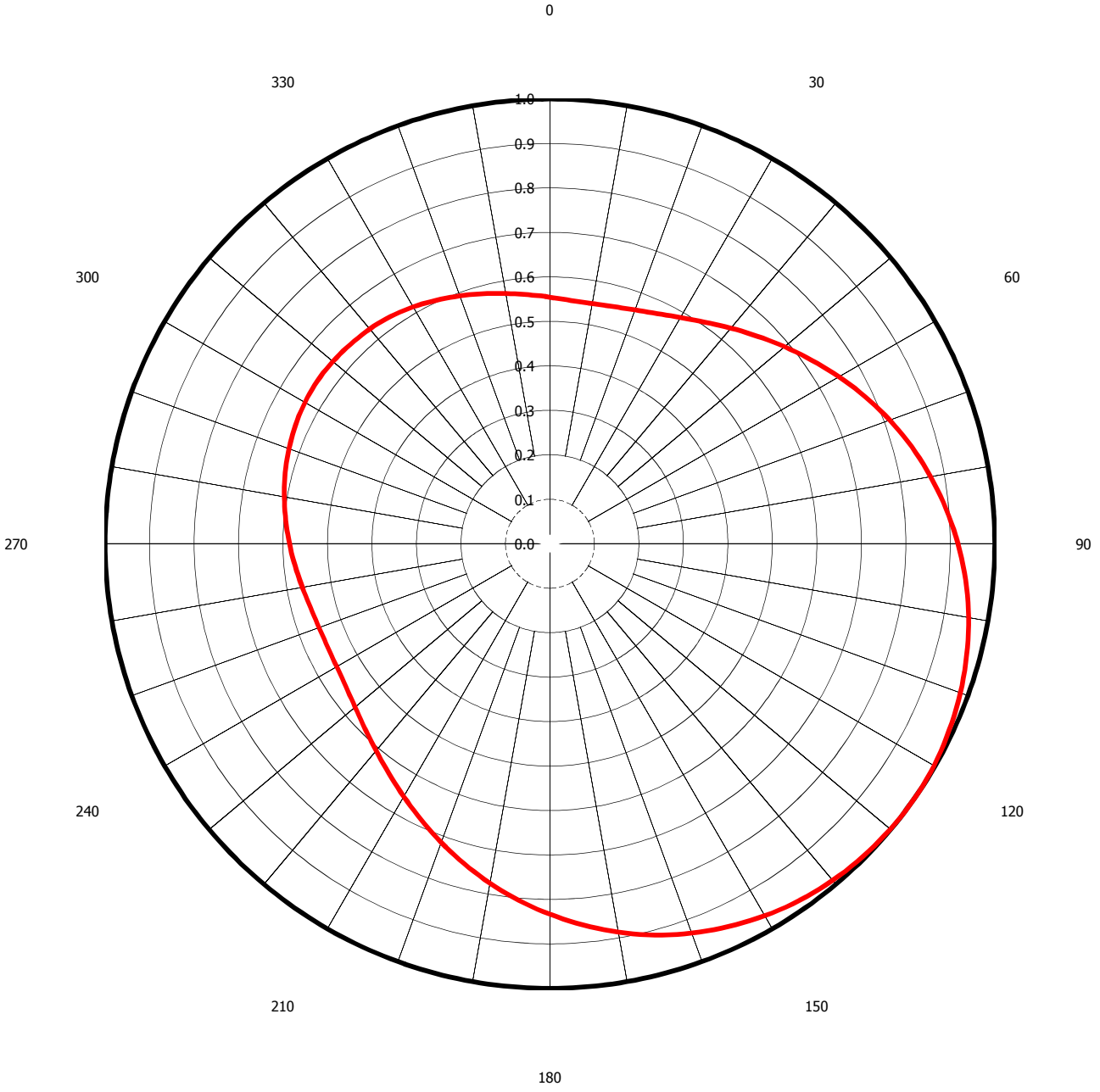
Considering the post-construction measurement and an appropriate abatement program, the general public and workers will not be exposed to RF levels attributable to the proposal in excess of the FCC's guidelines. RF exposure warning signs will be posted. With respect to worker safety, authorized personnel will be trained and/or supervised as necessary for access to any "controlled" areas. *OTLC* will coordinate exposure procedures with all pertinent stations and will reduce power or cease operation as necessary to protect persons having access to the site, tower, or antenna from RF electromagnetic field exposure in excess of FCC guidelines. This exhibit is limited to the evaluation of exposure to RF electromagnetic field.

List of Attachments

Figure 1, 1A	Antenna Azimuthal Pattern
Figure 2, 2A	Antenna Elevation Pattern
Figure 3	Proposed Coverage Contours
Figure 4	Coverage Contour Comparison – Gain/Loss Analysis
Figure 4A, 4B	Loss Analysis Detail
Table 1	TVStudy Analysis of Proposal
Form 2100	Saved Version of Engineering Sections from FCC Form at Time of Upload

Chesapeake RF Consultants, LLC
Joseph M. Davis, P.E. September 28, 2018
207 Old Dominion Road Yorktown, VA 23692 703-650-9600

Azimuth Pattern - Relative Field
(True North)



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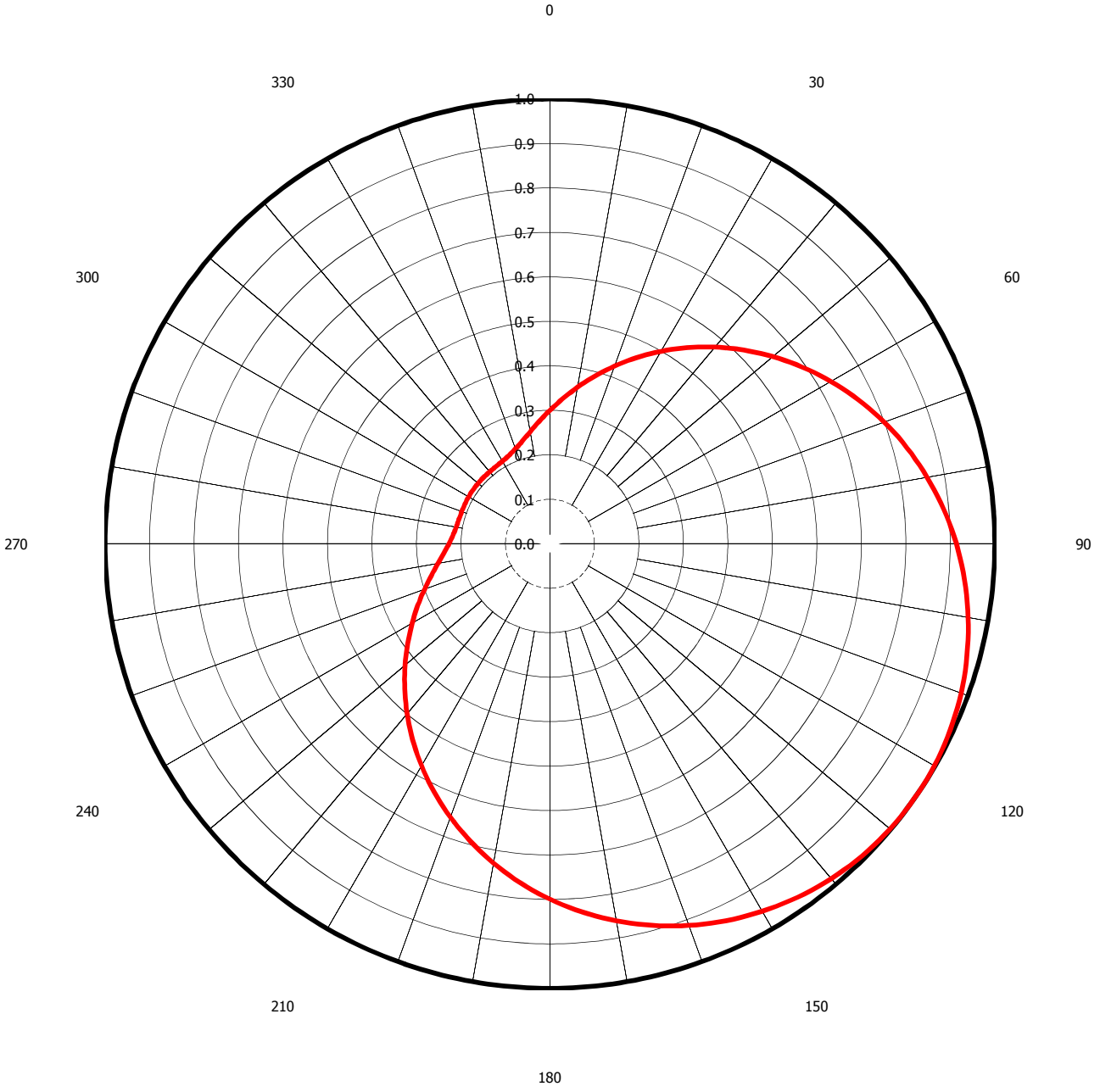
Radiofrequency Consulting Engineers
Digital Television and Radio

Figure 1
Antenna Azimuthal Pattern
Horizontal Polarization
KEZI(DT) Eugene, OR
Facility ID 34406
Ch. 9 21.4 kW 706 m

prepared for
Oregon TV License Company, LLC

September, 2018

Azimuth Pattern - Relative Field
(True North)



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Digital Television and Radio

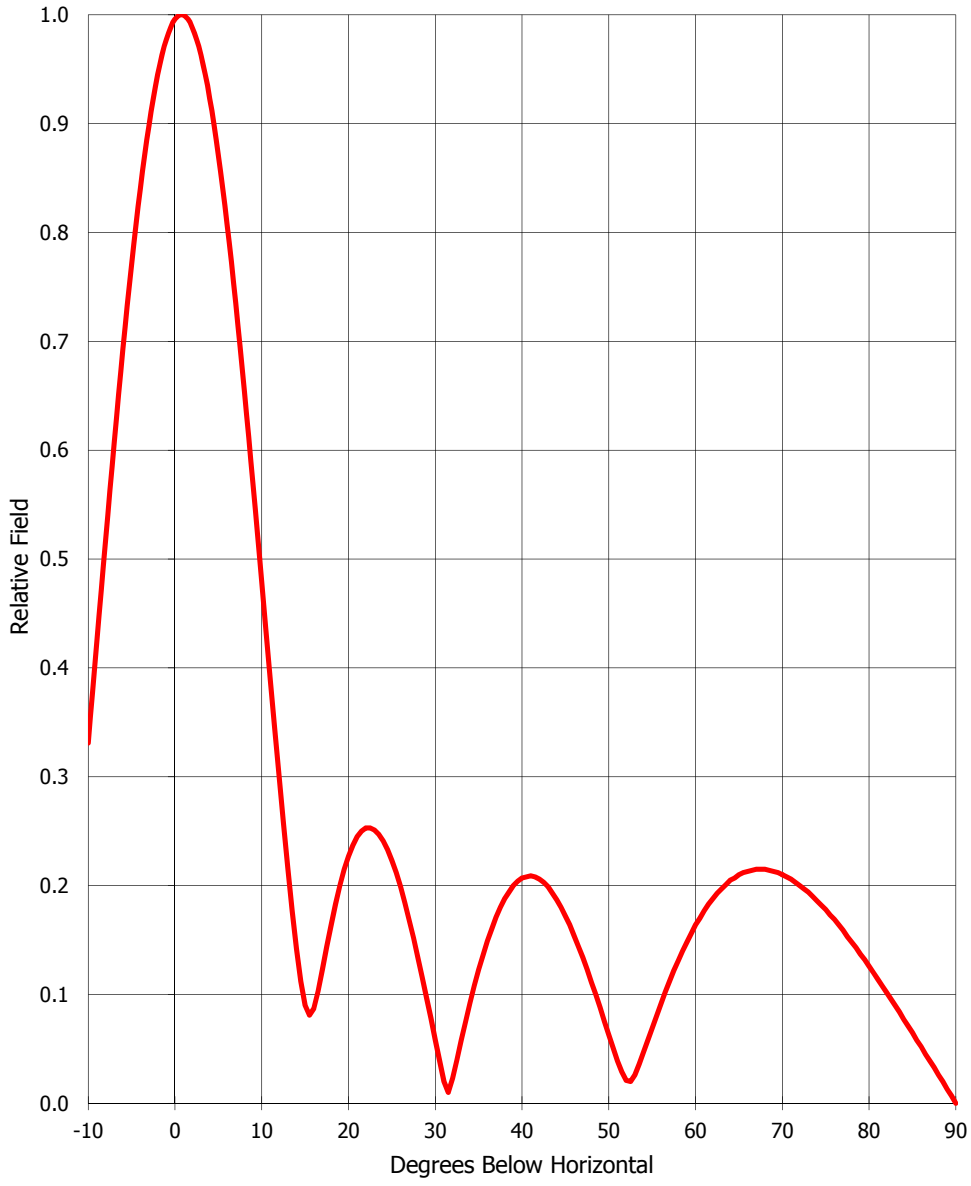
Figure 1A
Antenna Azimuthal Pattern
Vertical Polarization (Ref 30%)
KEZI(DT) Eugene, OR
Facility ID 34406
Ch. 9 21.4 kW 706 m

prepared for
Oregon TV License Company, LLC

September, 2018

Elevation Pattern

Type:	ALV4V3		**Polarization:**	Horizontal
Directivity:			**Frequency:**	9 (ATSC)
Main Lobe:	4.41 numeric	(6.44 dB)	**Location:**	Eugene, OR
Horizontal:	4.37 numeric	(6.41 dB)	**Beam Tilt:**	0.75 degrees



ELECTRONICS RESEARCH, INC. ERI

Chesapeake RF Consultants, LLC
Radiofrequency Consulting Engineers
Digital Television and Radio

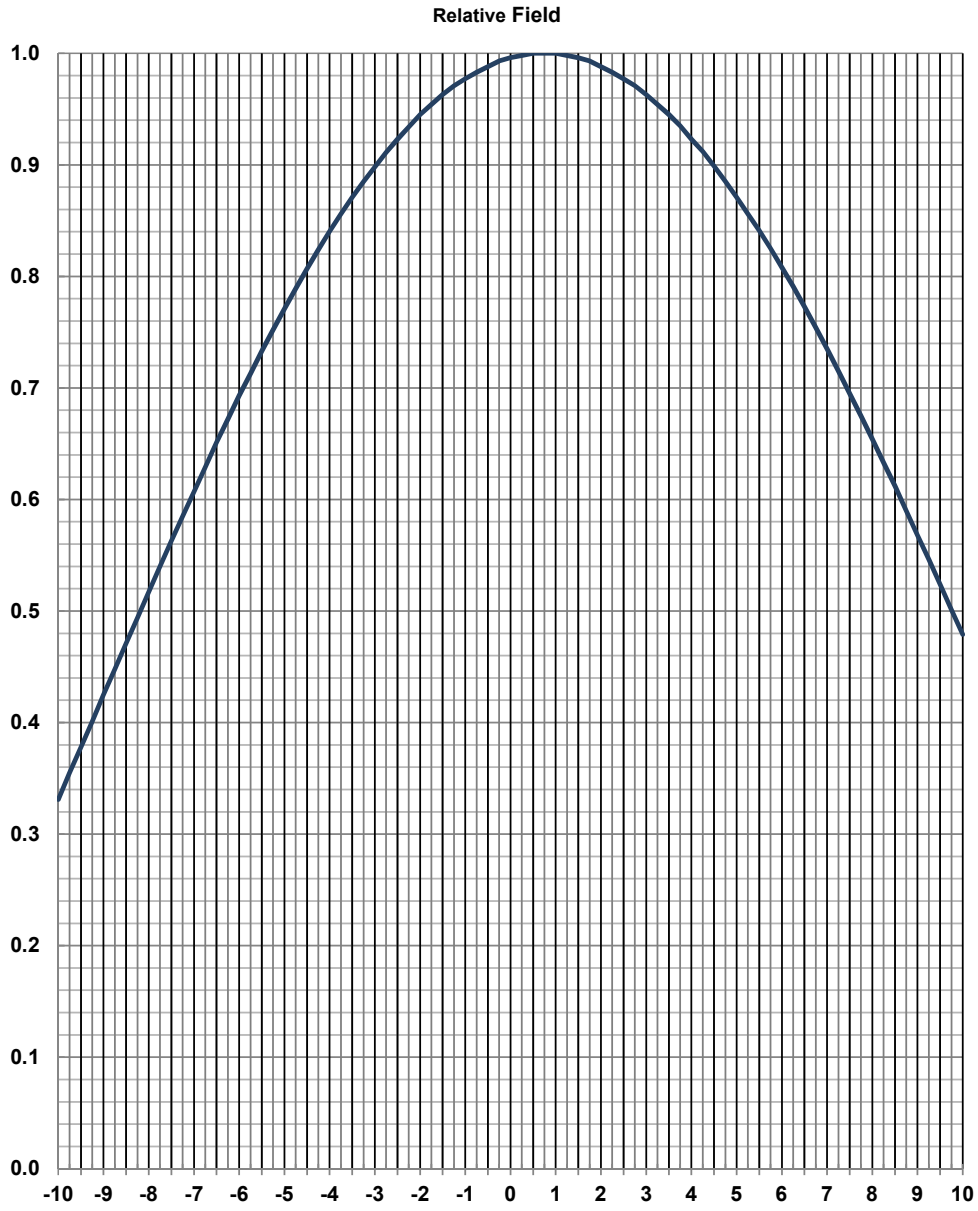
Figure 2
Antenna Elevation Pattern
KEZI(DT) Eugene, OR
Facility ID 34406
Ch. 9 21.4 kW 706 m

prepared for
Oregon TV License Company, LLC

September, 2018

Elevation Pattern

Type:	ALV4V3		**Polarization:**	Horizontal
Directivity:			**Frequency:**	9 (ATSC)
Main Lobe:	4.41 numeric	(6.44 dB)	**Location:**	Eugene, OR
Horizontal:	4.37 numeric	(6.41 dB)	**Beam Tilt:**	0.75 degrees



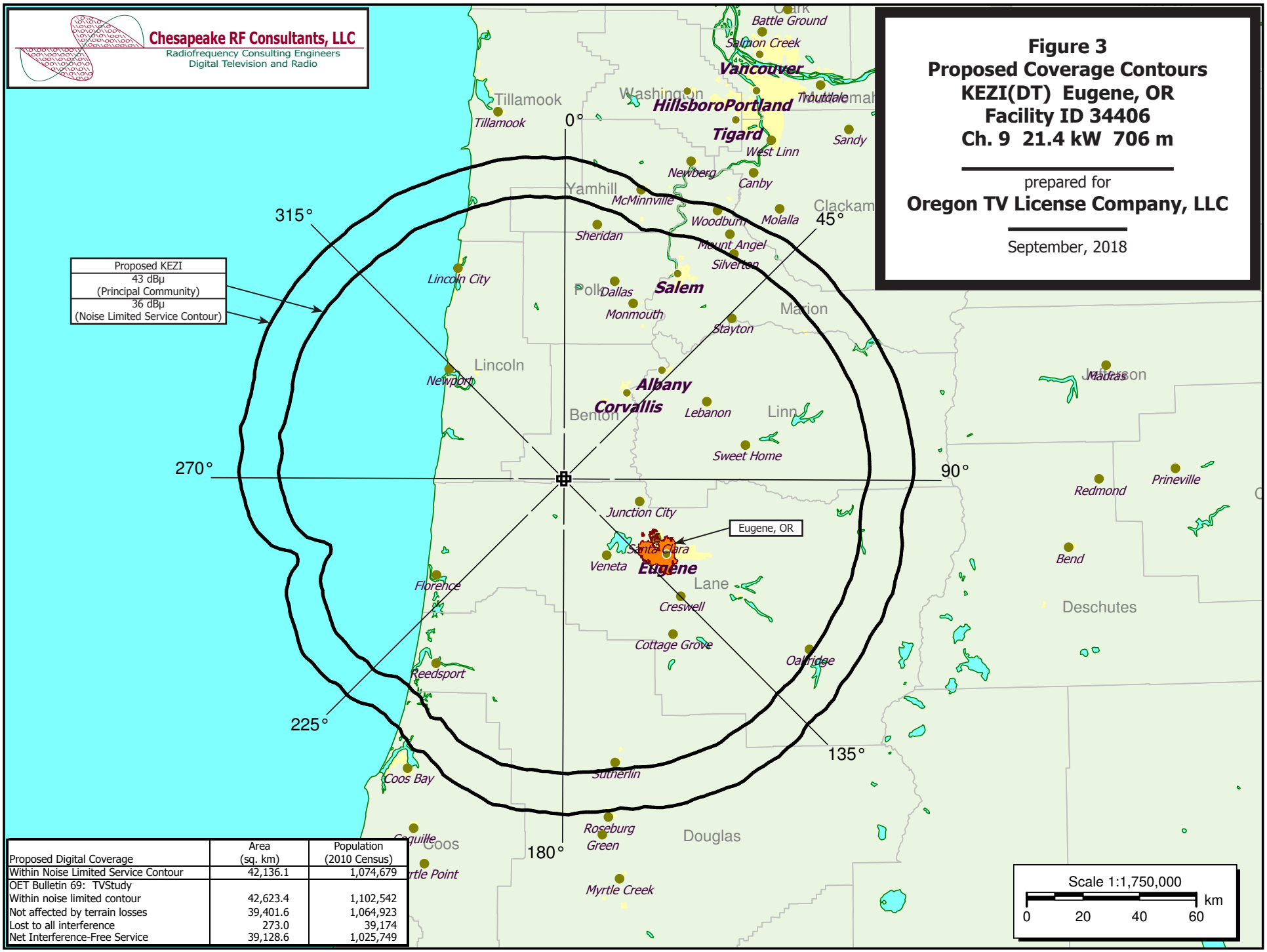
ELECTRONICS RESEARCH, INC. ERI

Chesapeake RF Consultants, LLC
Radiofrequency Consulting Engineers
Digital Television and Radio

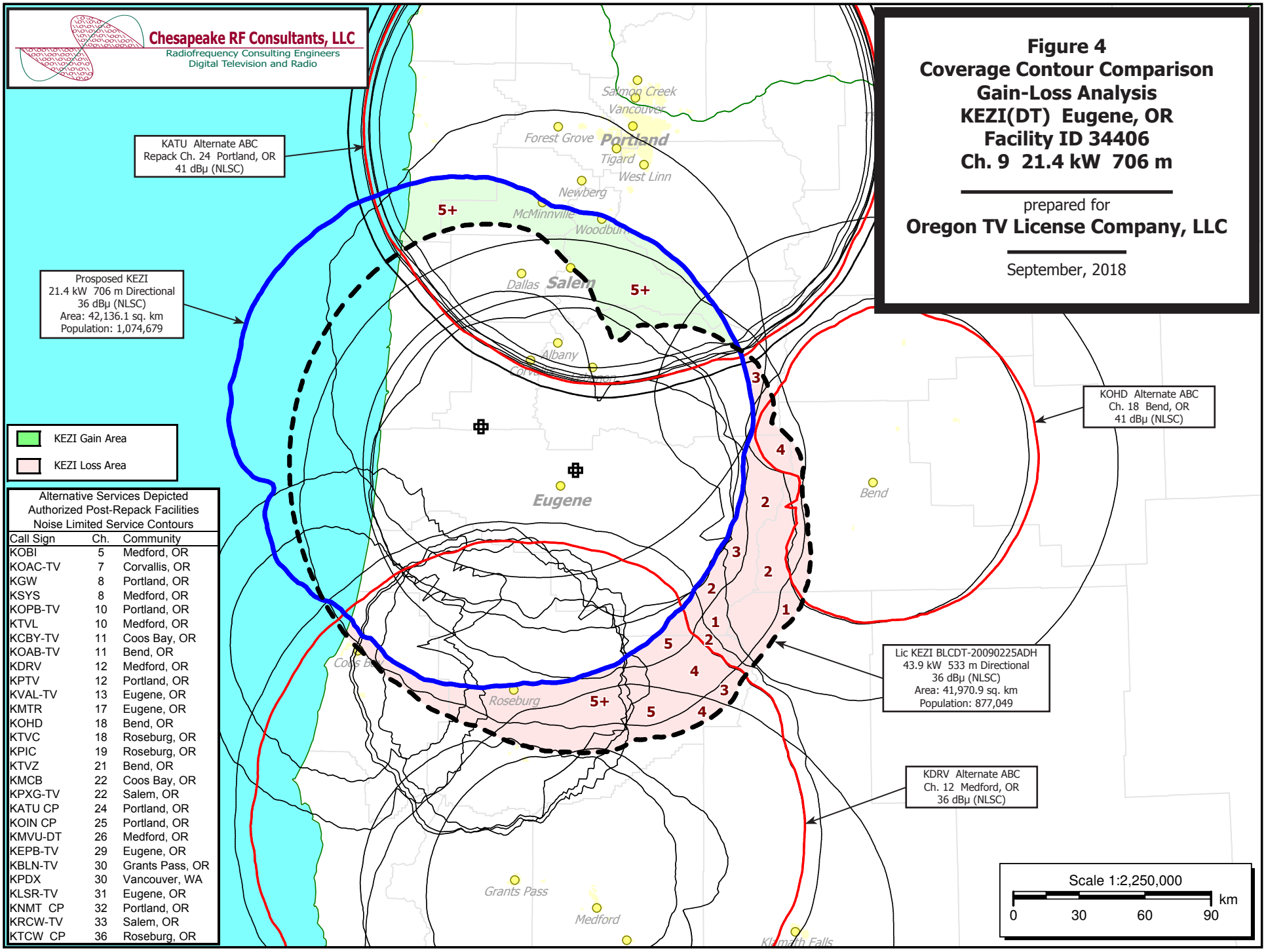
Figure 2A - Detail
Antenna Elevation Pattern
KEZI(DT) Eugene, OR
Facility ID 34406
Ch. 9 21.4 kW 706 m

prepared for
Oregon TV License Company, LLC

September, 2018



Proposed Digital Coverage	Area (sq. km)	Population (2010 Census)
Within Noise Limited Service Contour	42,136.1	1,074,679
OET Bulletin 69: TVStudy		
Within noise limited contour	42,623.4	1,102,542
Not affected by terrain losses	39,401.6	1,064,923
Lost to all interference	273.0	39,174
Net Interference-Free Service	39,128.6	1,025,749


Chesapeake RF Consultants, LLC
Radiofrequency Consulting Engineers
Digital Television and Radio
Figure 4
Coverage Contour Comparison
Gain-Loss Analysis
KEZI(DT) Eugene, OR
Facility ID 34406
Ch. 9 21.4 kW 706 m
prepared for
Oregon TV License Company, LLC
September, 2018
KATU Alternate ABC
Repack Ch. 24 Portland, OR
41 dBµ (NLSC)
Prosposed KEZI
21.4 kW 706 m Directional
36 dBµ (NLSC)
Area: 42,136.1 sq. km
Population: 1,074,679
KOHD Alternate ABC
Ch. 18 Bend, OR
41 dBµ (NLSC)
Lic KEZI BLCDT-20090225ADH
43.9 kW 533 m Directional
36 dBµ (NLSC)
Area: 41,970.9 sq. km
Population: 877,049
KDRV Alternate ABC
Ch. 12 Medford, OR
36 dBµ (NLSC)
KEZI Gain Area
KEZI Loss Area
Alternative Services Depicted
Authorized Post-Repack Facilities
Noise Limited Service Contours
Call Sign Ch. Community
KOBI 5 Medford, OR
KOAC-TV 7 Corvallis, OR
KGW 8 Portland, OR
KSYS 8 Medford, OR
KOPB-TV 10 Portland, OR
KTVL 10 Medford, OR
KCBY-TV 11 Coos Bay, OR
KOAB-TV 11 Bend, OR
KDRV 12 Medford, OR
KPTV 12 Portland, OR
KVAL-TV 13 Eugene, OR
KMTR 17 Eugene, OR
KOHD 18 Bend, OR
KTVC 18 Roseburg, OR
KPIC 19 Roseburg, OR
KTVZ 21 Bend, OR
KMCB 22 Coos Bay, OR
KPXG-TV 22 Salem, OR
KATU CP 24 Portland, OR
KOIN CP 25 Portland, OR
KMVU-DT 26 Medford, OR
KEPB-TV 29 Eugene, OR
KBLN-TV 30 Grants Pass, OR
KPDX 30 Vancouver, WA
KLSR-TV 31 Eugene, OR
KNMT CP 32 Portland, OR
KRCW-TV 33 Salem, OR
KTCW CP 36 Roseburg, OR
Salmon Creek
Vancouver
Forest Grove
Portland
Tigard
West Linn
Newberg
McMinnville
Woodburn
Dallas
Salem
Albany
Corvallis
Eugene
Bend
Roseburg
Grants Pass
Medford
Klamath Falls
5+
4
3
2
1
5
Scale 1:2,250,000
km
0
30
60
90

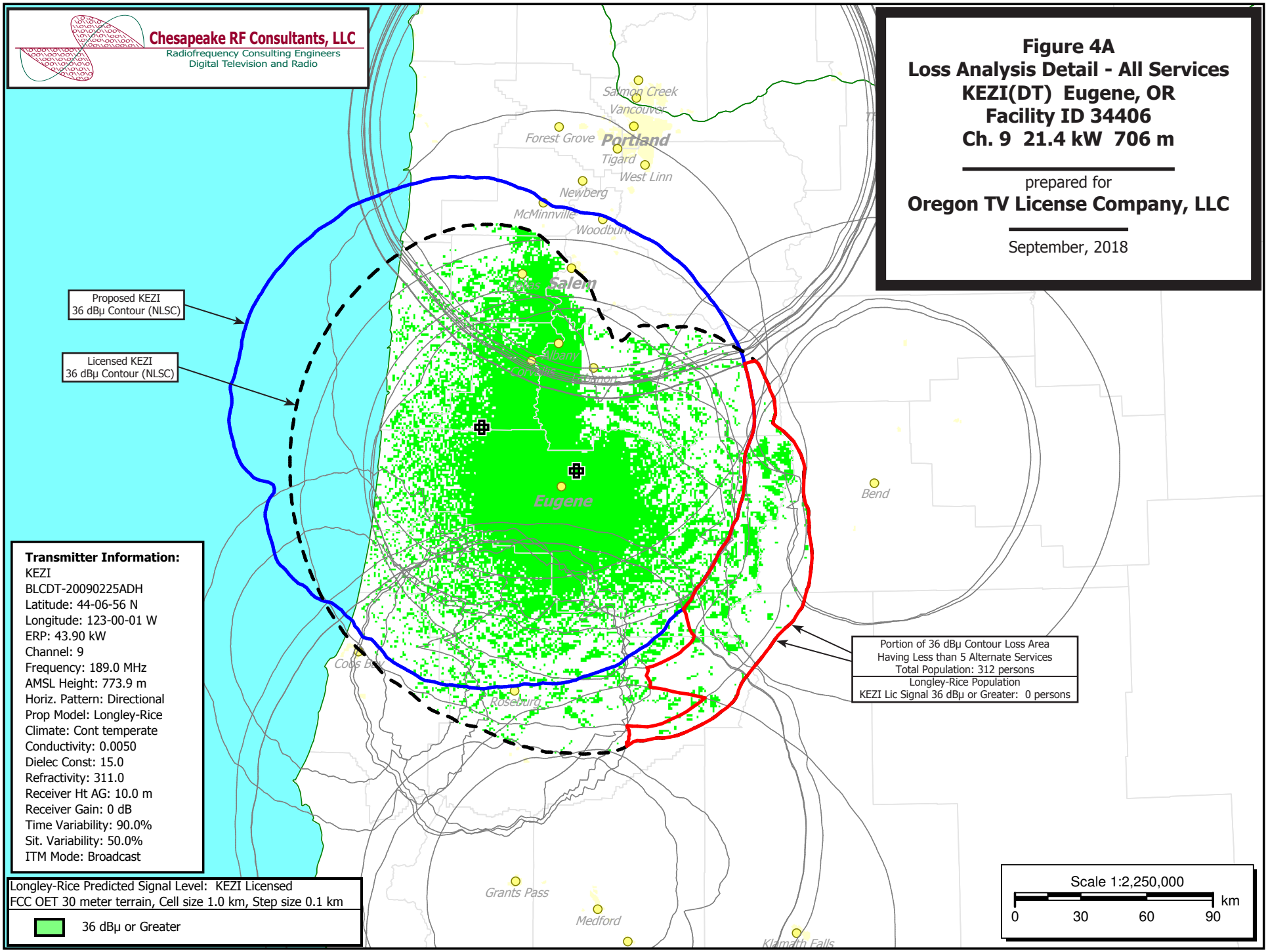

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Figure 4A
Loss Analysis Detail - All Services
KEZI(DT) Eugene, OR
Facility ID 34406
Ch. 9 21.4 kW 706 m
prepared for
Oregon TV License Company, LLC
September, 2018
Proposed KEZI
36 dBµ Contour (NLSC)
Licensed KEZI
36 dBµ Contour (NLSC)
Transmitter Information:
KEZI
BLCDT-20090225ADH
Latitude: 44-06-56 N
Longitude: 123-00-01 W
ERP: 43.90 kW
Channel: 9
Frequency: 189.0 MHz
AMSL Height: 773.9 m
Horiz. Pattern: Directional
Prop Model: Longley-Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 311.0
Receiver Ht AG: 10.0 m
Receiver Gain: 0 dB
Time Variability: 90.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Portion of 36 dBµ Contour Loss Area
Having Less than 5 Alternate Services
Total Population: 312 persons
Longley-Rice Population
KEZI Lic Signal 36 dBµ or Greater: 0 persons
Longley-Rice Predicted Signal Level: KEZI Licensed
FCC OET 30 meter terrain, Cell size 1.0 km, Step size 0.1 km
36 dBµ or Greater
Scale 1:2,250,000
km
0
30
60
90
Salmon Creek
Vancouver
Forest Grove
Portland
Tigard
West Linn
Newberg
McMinnville
Woodburn
Salem
Albany
Corvallis
Lebanon
Eugene
Bend
Roseburg
Coos Bay
Grants Pass
Medford
Klamath Falls

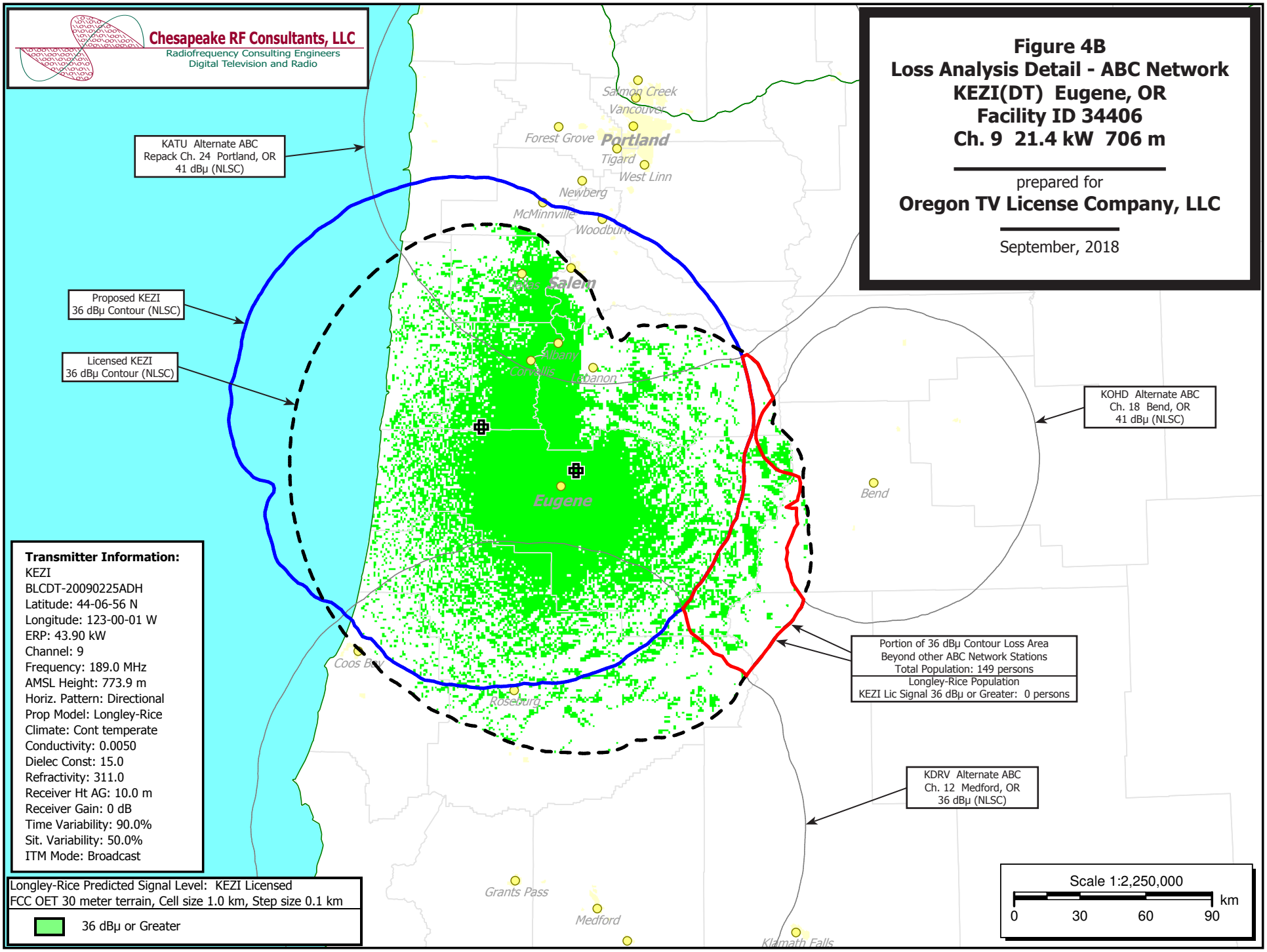
Chesapeake RF Consultants, LLC
Radiofrequency Consulting Engineers
Digital Television and Radio
Figure 4B
Loss Analysis Detail - ABC Network
KEZI(DT) Eugene, OR
Facility ID 34406
Ch. 9 21.4 kW 706 m
prepared for
Oregon TV License Company, LLC
September, 2018
KATU Alternate ABC
Repack Ch. 24 Portland, OR
41 dBµ (NLSC)
Proposed KEZI
36 dBµ Contour (NLSC)
Licensed KEZI
36 dBµ Contour (NLSC)
KOHD Alternate ABC
Ch. 18 Bend, OR
41 dBµ (NLSC)
Portion of 36 dBµ Contour Loss Area
Beyond other ABC Network Stations
Total Population: 149 persons
Longley-Rice Population
KEZI Lic Signal 36 dBµ or Greater: 0 persons
KDRV Alternate ABC
Ch. 12 Medford, OR
36 dBµ (NLSC)
Transmitter Information:
KEZI
BLCDT-20090225ADH
Latitude: 44-06-56 N
Longitude: 123-00-01 W
ERP: 43.90 kW
Channel: 9
Frequency: 189.0 MHz
AMSL Height: 773.9 m
Horiz. Pattern: Directional
Prop Model: Longley-Rice
Climate: Cont temperate
Conductivity: 0.0050
Dielec Const: 15.0
Refractivity: 311.0
Receiver Ht AG: 10.0 m
Receiver Gain: 0 dB
Time Variability: 90.0%
Sit. Variability: 50.0%
ITM Mode: Broadcast
Longley-Rice Predicted Signal Level: KEZI Licensed
FCC OET 30 meter terrain, Cell size 1.0 km, Step size 0.1 km
36 dBµ or Greater
Scale 1:2,250,000
0 30 60 90 km
Salmon Creek
Vancouver
Forest Grove
Portland
Tigard
West Linn
Newberg
McMinnville
Woodburn
Salem
Albany
Corvallis
Lebanon
Eugene
Bend
Coos Bay
Roseburg
Grants Pass
Medford
Klamath Falls

Table 1 KEZI TVStudy Analysis of Proposal


```
tvstudy v2.2.5 (4uoc83)
Database: localhost,  Study: KEZI prop 21.4kW,  Model: Longley-Rice
Start: 2018.09.28 17:11:08

Study created: 2018.09.28 17:11:07

Study build station data: LMS TV 2018-09-26

    Proposal: KEZI D9 DT APP EUGENE, OR
 File number: KEZI prop 21.4kW
 Facility ID: 34406
Station data: User record
   Record ID: 2325
     Country: U.S.
        Zone: II

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

Search options:
Baseline record excluded if station has CP

Stations potentially affected by proposal:

IX   Call      Chan       Svc Status  City, State              File Number             Distance
Yes  KSYS      D8         DT  LIC     MEDFORD, OR              BLEDT20090520ABE        179.5 km
Yes  KGW       D8         DT  LIC     PORTLAND, OR             BLCDT20091223AMO        150.4
Yes  KIXE-TV   D9         DT  LIC     REDDING, CA              BLEDT20080909ABK        416.4
No   KCTS-TV   D9         DT  LIC     SEATTLE, WA              BLEDT20090612AAN        381.6
No   KTVL      D10        DT  APP     MEDFORD, OR              BLANK0000035804         254.4
Yes  KOPB-TV   D10        DT  LIC     PORTLAND, OR             BLEDT20120727AAA        150.4

No non-directional AM stations found within 0.8 km

No directional AM stations found within 3.2 km

Record parameters as studied:

    Channel: D9
   Latitude:  44 17 27.40 N (NAD83)
  Longitude: 123 32 22.30 W
Height AMSL: 1022.9 m
       HAAT: 706.3 m
   Peak ERP: 21.4 kW
    Antenna: ERI ALV-OC 125.0 deg
Elev Pattrn: Generic
  Elec Tilt: 0.75

36.0 dBu contour:
Azimuth      ERP       HAAT   Distance
  0.0 deg   6.60 kW   763.2 m  113.4 km
 45.0       9.32      710.9    115.3
 90.0       18.0      735.3    122.7
135.0       21.2      653.3    121.7
180.0       14.8      660.8    118.2
225.0       7.40      562.8    108.1
270.0       7.34      768.5    114.5
315.0       8.60      795.8    116.5

Distance to Canadian border: 437.2 km

Distance to Mexican border: 1403.0 km

Conditions at FCC monitoring station: Ferndale WA
Bearing: 7.9 degrees   Distance: 523.9 km

Proposal is not within the West Virginia quiet zone area

Conditions at Table Mountain receiving zone:
Bearing: 100.7 degrees   Distance: 1570.0 km

Study cell size: 2.00 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%

Interference to BLEDT20090520ABE LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KSYS	D8	DT	LIC	MEDFORD, OR	BLEDT20090520ABE	
Undesireds:	KEZI	D9	DT	BL	EUGENE, OR	DTVBL34406	159.3 km
	KEZI	D9	DT	APP	EUGENE, OR	KEZI prop 21.4kW	179.5
	KQSL	D8	DD	APP	FORT BRAGG, CA	BLANK0000058621	334.5
	KGW	D8	DT	LIC	PORTLAND, OR	BLCDT20091223AMO	316.9

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
47690.2	519,209	37978.4	443,204	37762.8	441,549	37767.0	441,556	-0.01	-0.00

Undesired	Total IX		Unique IX, before		Unique IX, after	
KEZI D9 DT BL	76.1	683	44.0	88		
KEZI D9 DT APP	67.9	256			39.9	81
KQSL D8 DD APP	20.0	4	20.0	4	20.0	4
KGW D8 DT LIC	151.5	1,563	119.4	968	123.5	1,388

Interference to BLEDT20090520ABE LIC scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KSYS	D8	DT	LIC	MEDFORD, OR	BLEDT20090520ABE	
Undesireds:	KEZI	D9	DT	BL	EUGENE, OR	DTVBL34406	159.3 km
	KEZI	D9	DT	APP	EUGENE, OR	KEZI prop 21.4kW	179.5
	KQSL	D8	DT	LIC	FORT BRAGG, CA	BLCDT20090610AAS	334.5
	KGW	D8	DT	LIC	PORTLAND, OR	BLCDT20091223AMO	316.9

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
47690.2	519,209	37978.4	443,204	37762.8	441,549	37767.0	441,556	-0.01	-0.00

Undesired	Total IX		Unique IX, before		Unique IX, after	
KEZI D9 DT BL	76.1	683	44.0	88		
KEZI D9 DT APP	67.9	256			39.9	81
KQSL D8 DT LIC	20.0	4	20.0	4	20.0	4
KGW D8 DT LIC	151.5	1,563	119.4	968	123.5	1,388

Interference to BLCDT20091223AMO LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KGW	D8	DT	LIC	PORTLAND, OR	BLCDT20091223AMO	
Undesireds:	KEZI	D9	DT	BL	EUGENE, OR	DTVBL34406	157.6 km
	KEZI	D9	DT	APP	EUGENE, OR	KEZI prop 21.4kW	150.4
	KOAC-TV	D7	DT	LIC	CORVALLIS, OR	BLEDT20090619AAE	106.5
	KSYS	D8	DT	LIC	MEDFORD, OR	BLEDT20090520ABE	316.9

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
47398.0	3,058,216	35817.2	2,881,387	34576.7	2,777,916	34568.6	2,777,453	0.02	0.02

Undesired	Total IX		Unique IX, before		Unique IX, after	
KEZI D9 DT BL	282.3	15,557	0.0	0		
KEZI D9 DT APP	516.7	32,257			8.0	463
KOAC-TV D7 DT LIC	1152.6	102,655	779.0	85,342	608.2	70,526
KSYS D8 DT LIC	290.6	4,511	67.9	816	83.9	816

Interference to BLEDT20080909ABK LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KIXE-TV	D9	DT	LIC	REDDING, CA	BLEDT20080909ABK	
Undesireds:	KEZI	D9	DT	BL	EUGENE, OR	DTVBL34406	391.5 km
	KEZI	D9	DT	APP	EUGENE, OR	KEZI prop 21.4kW	416.4
	KQSL	D8	DD	APP	FORT BRAGG, CA	BLANK0000058621	128.1
	KVIE	D9	DT	APP	SACRAMENTO, CA	BLANK0000035686	277.1

	KTVL	D10	DT	LIC	MEDFORD, OR			BLCDT20090612AGJ		164.4	

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
51583.0	502,959	41969.3	457,651	41290.6	436,094	41290.6	436,094	0.00	0.00

Undesired		Total IX	Unique IX, before		Unique IX, after	
KEZI D9 DT BL	4.0	0	0.0	0		
KEZI D9 DT APP	0.0	0			0.0	0
KQSL D8 DD APP	116.5	58	108.6	58	108.6	58
KVIE D9 DT APP	432.9	21,322	425.0	21,322	425.0	21,322
KTVL D10 DT LIC	137.1	177	133.1	177	137.1	177

Interference to BLEDT20080909ABK LIC scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KIXE-TV	D9	DT	LIC	REDDING, CA	BLEDT20080909ABK	
Undesireds:	KEZI	D9	DT	BL	EUGENE, OR	DTVBL34406	391.5 km
	KEZI	D9	DT	APP	EUGENE, OR	KEZI prop 21.4kW	416.4
	KQSL	D8	DT	LIC	FORT BRAGG, CA	BLCDT20090610AAS	128.1
	KVIE	D9	DT	APP	SACRAMENTO, CA	BLANK0000035686	277.1
	KTVL	D10	DT	LIC	MEDFORD, OR	BLCDT20090612AGJ	164.4

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
51583.0	502,959	41969.3	457,651	41290.6	436,094	41290.6	436,094	0.00	0.00

Undesired		Total IX	Unique IX, before		Unique IX, after	
KEZI D9 DT BL	4.0	0	0.0	0		
KEZI D9 DT APP	0.0	0			0.0	0
KQSL D8 DT LIC	116.5	58	108.6	58	108.6	58
KVIE D9 DT APP	432.9	21,322	425.0	21,322	425.0	21,322
KTVL D10 DT LIC	137.1	177	133.1	177	137.1	177

Interference to BLEDT20080909ABK LIC scenario 3

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KIXE-TV	D9	DT	LIC	REDDING, CA	BLEDT20080909ABK	
Undesireds:	KEZI	D9	DT	BL	EUGENE, OR	DTVBL34406	391.5 km
	KEZI	D9	DT	APP	EUGENE, OR	KEZI prop 21.4kW	416.4
	KQSL	D8	DD	APP	FORT BRAGG, CA	BLANK0000058621	128.1
	KVIE	D9	DT	LIC	SACRAMENTO, CA	BMLEDT20100913ABV	277.1
	KTVL	D10	DT	LIC	MEDFORD, OR	BLCDT20090612AGJ	164.4

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
51583.0	502,959	41969.3	457,651	41290.6	436,094	41290.6	436,094	0.00	0.00

Undesired		Total IX	Unique IX, before		Unique IX, after	
KEZI D9 DT BL	4.0	0	0.0	0		
KEZI D9 DT APP	0.0	0			0.0	0
KQSL D8 DD APP	116.5	58	108.6	58	108.6	58
KVIE D9 DT LIC	432.9	21,322	425.0	21,322	425.0	21,322
KTVL D10 DT LIC	137.1	177	133.1	177	137.1	177

Interference to BLEDT20080909ABK LIC scenario 4

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KIXE-TV	D9	DT	LIC	REDDING, CA	BLEDT20080909ABK	
Undesireds:	KEZI	D9	DT	BL	EUGENE, OR	DTVBL34406	391.5 km
	KEZI	D9	DT	APP	EUGENE, OR	KEZI prop 21.4kW	416.4
	KQSL	D8	DT	LIC	FORT BRAGG, CA	BLCDT20090610AAS	128.1
	KVIE	D9	DT	LIC	SACRAMENTO, CA	BMLEDT20100913ABV	277.1
	KTVL	D10	DT	LIC	MEDFORD, OR	BLCDT20090612AGJ	164.4

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
51583.0	502,959	41969.3	457,651	41290.6	436,094	41290.6	436,094	0.00	0.00

Undesired		Total IX	Unique IX, before		Unique IX, after	
KEZI D9 DT BL	4.0	0	0.0	0		

KEZI D9 DT APP	0.0	0			0.0	0
KQSL D8 DT LIC	116.5	58	108.6	58	108.6	58
KVIE D9 DT LIC	432.9	21,322	425.0	21,322	425.0	21,322
KTVL D10 DT LIC	137.1	177	133.1	177	137.1	177

Interference to BLEDT20080909ABK LIC scenario 5

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KIXE-TV	D9	DT	LIC	REDDING, CA	BLEDT20080909ABK	
Undesireds:	KEZI	D9	DT	BL	EUGENE, OR	DTVBL34406	391.5 km
	KEZI	D9	DT	APP	EUGENE, OR	KEZI prop 21.4kW	416.4
	KQSL	D8	DD	APP	FORT BRAGG, CA	BLANK0000058621	128.1
	KVIE	D9	DT	APP	SACRAMENTO, CA	BLANK0000035686	277.1
	KTVL	D10	DT	APP	MEDFORD, OR	BLANK0000035804	164.4

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
51583.0	502,959	41969.3	457,651	41234.1	436,094	41234.1	436,094	0.00	0.00

Undesired		Total IX		Unique IX, before		Unique IX, after	
KEZI D9 DT BL	4.0	0		0.0	0		
KEZI D9 DT APP	0.0	0				0.0	0
KQSL D8 DD APP	116.5	58	108.6	58	108.6	58	
KVIE D9 DT APP	432.9	21,322	425.0	21,322	425.0	21,322	
KTVL D10 DT APP	193.6	177	189.6	177	193.6	177	

Interference to BLEDT20080909ABK LIC scenario 6

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KIXE-TV	D9	DT	LIC	REDDING, CA	BLEDT20080909ABK	
Undesireds:	KEZI	D9	DT	BL	EUGENE, OR	DTVBL34406	391.5 km
	KEZI	D9	DT	APP	EUGENE, OR	KEZI prop 21.4kW	416.4
	KQSL	D8	DT	LIC	FORT BRAGG, CA	BLCDT20090610AAS	128.1
	KVIE	D9	DT	APP	SACRAMENTO, CA	BLANK0000035686	277.1
	KTVL	D10	DT	APP	MEDFORD, OR	BLANK0000035804	164.4

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
51583.0	502,959	41969.3	457,651	41234.1	436,094	41234.1	436,094	0.00	0.00

Undesired		Total IX		Unique IX, before		Unique IX, after	
KEZI D9 DT BL	4.0	0		0.0	0		
KEZI D9 DT APP	0.0	0				0.0	0
KQSL D8 DT LIC	116.5	58	108.6	58	108.6	58	
KVIE D9 DT APP	432.9	21,322	425.0	21,322	425.0	21,322	
KTVL D10 DT APP	193.6	177	189.6	177	193.6	177	

Interference to BLEDT20080909ABK LIC scenario 7

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KIXE-TV	D9	DT	LIC	REDDING, CA	BLEDT20080909ABK	
Undesireds:	KEZI	D9	DT	BL	EUGENE, OR	DTVBL34406	391.5 km
	KEZI	D9	DT	APP	EUGENE, OR	KEZI prop 21.4kW	416.4
	KQSL	D8	DD	APP	FORT BRAGG, CA	BLANK0000058621	128.1
	KVIE	D9	DT	LIC	SACRAMENTO, CA	BMLEDT20100913ABV	277.1
	KTVL	D10	DT	APP	MEDFORD, OR	BLANK0000035804	164.4

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
51583.0	502,959	41969.3	457,651	41234.1	436,094	41234.1	436,094	0.00	0.00

Undesired		Total IX		Unique IX, before		Unique IX, after	
KEZI D9 DT BL	4.0	0		0.0	0		
KEZI D9 DT APP	0.0	0				0.0	0
KQSL D8 DD APP	116.5	58	108.6	58	108.6	58	
KVIE D9 DT LIC	432.9	21,322	425.0	21,322	425.0	21,322	
KTVL D10 DT APP	193.6	177	189.6	177	193.6	177	

Interference to BLEDT20080909ABK LIC scenario 8

Table 1 KEZI TVStudy Analysis of Proposal

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KIXE-TV	D9	DT	LIC	REDDING, CA	BLEDT20080909ABK	
Undesireds:	KEZI	D9	DT	BL	EUGENE, OR	DTVBL34406	391.5 km
	KEZI	D9	DT	APP	EUGENE, OR	KEZI prop 21.4kW	416.4
	KQSL	D8	DT	LIC	FORT BRAGG, CA	BLCDT20090610AAS	128.1
	KVIE	D9	DT	LIC	SACRAMENTO, CA	BMLEDT20100913ABV	277.1
	KTVL	D10	DT	APP	MEDFORD, OR	BLANK0000035804	164.4

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
51583.0	502,959	41969.3	457,651	41234.1	436,094	41234.1	436,094	0.00	0.00

Undesired	Total IX		Unique IX, before		Unique IX, after	
KEZI D9 DT BL	4.0	0	0.0	0		
KEZI D9 DT APP	0.0	0			0.0	0
KQSL D8 DT LIC	116.5	58	108.6	58	108.6	58
KVIE D9 DT LIC	432.9	21,322	425.0	21,322	425.0	21,322
KTVL D10 DT APP	193.6	177	189.6	177	193.6	177

Interference to BLEDT20120727AAA LIC scenario 1

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KOPB-TV	D10	DT	LIC	PORTLAND, OR	BLEDT20120727AAA	
Undesireds:	KEZI	D9	DT	BL	EUGENE, OR	DTVBL34406	157.6 km
	KEZI	D9	DT	APP	EUGENE, OR	KEZI prop 21.4kW	150.4
	KTVL	D10	DT	LIC	MEDFORD, OR	BLCDT20090612AGJ	382.5

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
47646.1	3,059,231	35616.6	2,875,815	35366.0	2,867,520	35159.5	2,856,263	0.58	0.39

Undesired	Total IX		Unique IX, before		Unique IX, after	
KEZI D9 DT BL	242.6	8,275	159.1	6,404		
KEZI D9 DT APP	449.2	19,532			365.7	17,661
KTVL D10 DT LIC	91.4	1,891	7.9	20	7.9	20

Interference to BLEDT20120727AAA LIC scenario 2

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KOPB-TV	D10	DT	LIC	PORTLAND, OR	BLEDT20120727AAA	
Undesireds:	KEZI	D9	DT	BL	EUGENE, OR	DTVBL34406	157.6 km
	KEZI	D9	DT	APP	EUGENE, OR	KEZI prop 21.4kW	150.4
	KTVL	D10	DT	APP	MEDFORD, OR	BLANK0000035804	382.5

Service area		Terrain-limited		IX-free, before		IX-free, after		Percent New IX	
47646.1	3,059,231	35616.6	2,875,815	35358.1	2,867,475	35151.6	2,856,245	0.58	0.39

Undesired	Total IX		Unique IX, before		Unique IX, after	
KEZI D9 DT BL	242.6	8,275	131.3	5,964		
KEZI D9 DT APP	449.2	19,532			337.8	17,194
KTVL D10 DT APP	127.2	2,376	15.9	65	15.9	38

Interference to proposal scenario 1
3.68% interference received

	Call	Chan	Svc	Status	City, State	File Number	Distance
Desired:	KEZI	D9	DT	APP	EUGENE, OR	KEZI prop 21.4kW	
Undesireds:	KSYS	D8	DT	LIC	MEDFORD, OR	BLEDT20090520ABE	179.5 km
	KGW	D8	DT	LIC	PORTLAND, OR	BLCDT20091223AMO	150.4
	KOPB-TV	D10	DT	LIC	PORTLAND, OR	BLEDT20120727AAA	150.4

Service area		Terrain-limited		IX-free		Percent IX	
42623.4	1,102,542	39401.6	1,064,923	39128.6	1,025,749	0.69	3.68

Undesired	Total IX		Unique IX		Prcnt Unique IX	
KSYS D8 DT LIC	43.6	925	43.6	925	0.11	0.09
KGW D8 DT LIC	169.1	7,625	0.0	0	0.00	0.00
KOPB-TV D10 DT LIC	229.4	38,249	60.4	30,624	0.15	2.88

Channel and Facility Information

Section	Question	Response
Proposed Community of License	Facility ID	34406
	State	Oregon
	City	EUGENE
	DTV Channel	9
Facility Type	Facility Type	Commercial
	Station Type	Main
Zone	Zone	2

Antenna Location Data

Section	Question	Response
Antenna Structure Registration	Do you have an FCC Antenna Structure Registration (ASR) Number?	Yes
	ASR Number	1205567
Coordinates (NAD83)	Latitude	44° 17' 27.4" N+
	Longitude	123° 32' 22.3" W-
	Structure Type	GTOWER-Guyed Structure Used for Communication Purposes
	Overall Structure Height	60.9 meters
	Support Structure Height	60.9 meters
	Ground Elevation (AMSL)	998.5 meters
Antenna Data	Height of Radiation Center Above Ground Level	24.4 meters
	Height of Radiation Center Above Average Terrain	706.3 meters
	Height of Radiation Center Above Mean Sea Level	1022.9 meters
	Effective Radiated Power	21.4 kW

Antenna Technical Data

Section	Question	Response
Antenna Type	Antenna Type	Directional Custom
	Do you have an Antenna ID?	No
	Antenna ID	
Antenna Manufacturer and Model	Manufacturer:	ERI
	Model	ALV4H3-ESOC-92
	Rotation	125 degrees
	Electrical Beam Tilt	0.75
	Mechanical Beam Tilt	Not Applicable
	toward azimuth	
	Polarization	Elliptical
DTV and DTS: Elevation Pattern	Does the proposed antenna propose elevation radiation patterns that vary with azimuth for reasons other than the use of mechanical beam tilt?	No
	Uploaded file for elevation antenna (or radiation) pattern data	

Directional Antenna Relative Field Values (Pre-rotated Pattern)

Degree	V_A (Authorized Value)	Degree	V_A (Authorized Value)	Degree	V_A (Authorized Value)	Degree	V_A (Authorized Value)
0	1.000	**90**	0.631	**180**	0.638	**270**	0.608
10	0.995	**100**	0.588	**190**	0.634	**280**	0.660
20	0.979	**110**	0.560	**200**	0.624	**290**	0.719
30	0.950	**120**	0.551	**210**	0.604	**300**	0.782
40	0.911	**130**	0.557	**220**	0.582	**310**	0.842
50	0.861	**140**	0.575	**230**	0.562	**320**	0.894
60	0.805	**150**	0.596	**240**	0.549	**330**	0.938
70	0.745	**160**	0.616	**250**	0.552	**340**	0.970
80	0.685	**170**	0.631	**260**	0.571	**350**	0.991

Additional Azimuths

Degree	V_A

Construction Permit Certifications

Section	Question	Response
Post-Incentive Auction Expedited Processing	It will operate on the DTV channel for this station as established in the post-incentive auction channel reassignment public notice.	Yes
	It will operate post-incentive auction facilities that do not expand the noise-limited service contour in any direction beyond that established by the post-incentive auction channel reassignment public notice.	No
	It will operate post-incentive auction facilities that match or reduce by no more than five percent with respect to predicted population from those defined in the post-incentive auction channel reassignment public notice.	Yes
	The antenna structure to be used by this facility has been registered by the Commission and will not require re-registration to support the proposed antenna, OR the FAA has previously determined that the proposed structure will not adversely affect safety in air navigation and this structure qualifies for later registration under the Commission's phased registration plan, OR the proposed installation on this structure does not require notification to the FAA pursuant to 47 C.F.R. Section 17.7.	Yes
Environmental Effect	Would a Commission grant of Authorization for this location be an action which may have a significant environmental effect? (See Section 1.1306 of 47 C.F.R.)	No
Broadcast Facility	The proposed facility complies with the applicable engineering standards and assignment requirements of 47 C. F.R. Sections 73.616, 73.622(i), 73.623(e), 73.625, 73.1030, and 73.1125.	Yes