

**EXTRAORDINARY CIRCUMSTANCES  
IN SUPPORT OF REQUEST FOR ENGINEERING STA  
KHUH-LP, SEATTLE, WA  
Hollow Earth Radio**

**SUMMARY**

Hollow Earth Radio (“HER”) hereby submits this application for an Engineering STA for KHUH-LP. A move to a temporary location 2.13km NNW of the licensed location, is proposed. Expedited processing is requested as the station’s Silent STA expire at 12:01AM on March 7, 2024, and one year will have passed since it was last on the air. Upon approval, KHUH-LP is **ready to immediately resume operations**, preserving the license.

**EXTRAORDINARY CIRCUMSTANCES**

KHUH-LP is licensed at a rooftop location, at 21<sup>st</sup> Avenue and East Union Street (BLL-20170918AAC), where is had operated continuously since 2017. In March 2023, this site was lost due to the building owner needing to do major roof repairs. At the time, HER anticipated moving to a new location within 3 months, so it filed and was granted a Silent STA (0000211964). When access to the new site did not immediately materialize, HER filed and was granted a Silent STA Extension (0000219278), in August 2023.

In September 2023, HER filed and was granted a minor-modification CP to move to a rooftop location at 318 Eastlake Avenue (0000220194). HER anticipated beginning operations at this location in the first few weeks of 2024, but has experienced delays in obtaining final local approvals and shipments of equipment.

Since KHUH-LP must resume operations no later than 12:01AM March 7 or risk permanent cancellation of the station license, HER hereby proposes a temporary operation at the Eastlake location with 4 watts ERP, using a single bay SWR FMEC/1 nondirectional antenna. All the necessary equipment is on-hand, allowing KHUH-LP to immediately resume broadcast

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operations upon approval of this proposal.<sup>1</sup> As shown by attached **Exhibit E-1**, the proposed 60dBu STA contour is fully contained within the licensed 60dBu contour.

## **SECOND-ADJACENT ISSUES**

To the extent that a showing of 2<sup>nd</sup>-adjacent interference protection might be required in the context of an STA proposal, the two local short-spaced 2<sup>nd</sup>-adjacent stations would continue to be protected. The stations are KCMS, Edmonds, WA, and KLSW, Covington, WA. The “worst-case” station is KLSW, with 81.26dBu at the proposed STA location. The corresponding interfering contour is therefore 121.26dBu, with an isotropic distance-to-contour of 12.13m. The closest point to an adjacent building is 14m to the south, so no interference to the occupants within other buildings will occur.

Protection to occupants of the 318 Eastlake building is shown by **Exhibit E-2**, using the factory-supplied elevation pattern of the proposed antenna.

## **PUBLIC INTEREST MATTERS**

HER believes that the Public Interest is served by this Reduced Power STA proposal, allowing *survival* of the KHUH-LP license while final arrangements are made to complete construction of the CP. HER anticipates finishing construction of the CP in the next several weeks.

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<sup>1</sup>Upon resumption of operations, HER will file a Resumption Notification in LMS, and will notify Denise Williams via email, as indicated in the STA Extension approval letter.

## **SIGNIFICANT COMMUNITY SUPPORT**

HER has received significant community support in its effort to build out a new KHUH-LP facility and resume serving the public with a broadcast service that includes live programming. The station is getting volunteer support from engineers at KEXP and KUOW, the region's major non-commercial station and NPR affiliate, in addition to contractor support secured separately.

Meanwhile, a new studio location has been built for the station by The Vera Project, a major local non-profit and concert promoter, with the express purpose of providing a low-cost facility when the station was unlikely to be able to afford a similar space at market rate.

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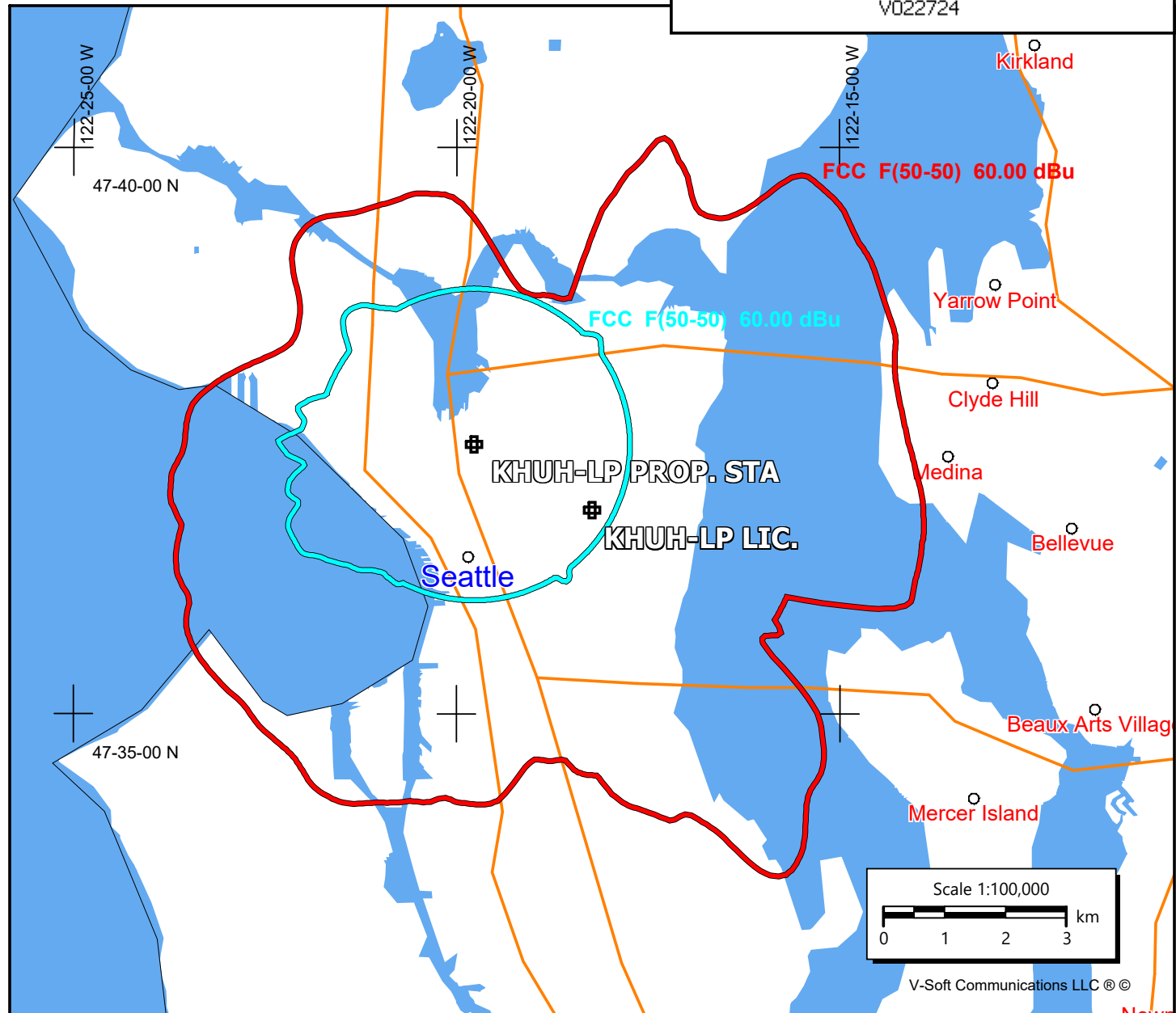
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EXHIBIT E-1  
Proposed STA vs Licenced 60dBu Contours  
KHUH-LP, Seattle, WA  
V022724

**KHUH-LP PROP. STA**  
0000220194  
Latitude: 47-37-22.70 N  
Longitude: 122-19-46.30 W  
ERP: 0.004 kW  
Channel: 285  
Frequency: 104.9 MHz  
AMSL Height: 51.5 m  
Elevation: 43.344 m  
Horiz. Pattern: Omni  
Vert. Pattern: No  
Prop Model: None

 KHUH-LP PROP. STA (285)  
 KHUH-LP LIC. (285)



## EXHIBIT E-2

### SECOND-ADJACENT INTERFERENCE PROTECTION TO OCCUPANTS OF THE 318 EASTLAKE BUILDING WITH ANTENNA ELEVATION PATTERN CONSIDERED

The highest populated surface in this building is 5m below the roof, and 6.5m below the proposed antenna rad center.

2nd ADJACENT INTERFERENCE PROTECTION TO POPULATED AREAS WITHIN BUILDING SUPPORTING THE ANTENNA	
CALL LETTERS OR FILE NUMBER	KHUH-LP
PROPOSED COMMUNITY OF LICENSE	SEATTLE
INTERFERING CONTOUR OF PROPOSAL - dBu	121.26
INTERFERING CONTOUR OF PROPOSAL - <V/m	1.1561
2nd-ADJ STN REQUIRING INTERFERENCE PROT. (worst case)	KLSW, Covington, WA
PROP. ERP (W)	4
ANTENNA MODEL	SWR FMEC/1
NOTES	1 BAY 104.9MHz

Depression Angle Below Horizon (dg)	Relative Field	ERP (W)	Angular Dist. to IX Contour (m)	Vertical Dist. to IX (below antenna)(m)	Horiz Dist. to IX Contour (m)	Vertical Dist Below Antenna to Uppermost Populated Area (m)	Clearance of IX Above Populated Areas (m)
0	1	4.00	12.13	0.0	12.1	6.5	6.5
5	0.997	3.98	12.09	1.1	12.0	6.5	5.4
10	0.986	3.89	11.96	2.1	11.8	6.5	4.4
15	0.969	3.76	11.75	3.0	11.4	6.5	3.5
20	0.946	3.58	11.47	3.9	10.8	6.5	2.6
25	0.916	3.36	11.11	4.7	10.1	6.5	1.8
30	0.879	3.09	10.66	5.3	9.2	6.5	1.2
35	0.837	2.80	10.15	5.8	8.3	6.5	0.7
40	0.789	2.49	9.57	6.2	7.3	6.5	0.3
45	0.736	2.17	8.93	6.3	6.3	6.5	0.2
50	0.679	1.84	8.23	6.3	5.3	6.5	0.2
55	0.616	1.52	7.47	6.1	4.3	6.5	0.4
60	0.55	1.21	6.67	5.8	3.3	6.5	0.7
65	0.48	0.92	5.82	5.3	2.5	6.5	1.2
70	0.408	0.67	4.95	4.6	1.7	6.5	1.9
75	0.333	0.44	4.04	3.9	1.0	6.5	2.6
80	0.256	0.26	3.10	3.1	0.5	6.5	3.4
85	0.178	0.13	2.16	2.2	0.2	6.5	4.3
90	0	0.00	0.00	0.0	0.0	6.5	6.5

Therefore, the “worst-case” 121.26dBu interfering contour will not reach any populated areas.

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