

BENJAMIN F. DAWSON III, PE
THOMAS M. ECKELS, PE
STEPHEN S. LOCKWOOD, PE
DAVID J. PINION, PE
ERIK C. SWANSON, PE

THOMAS S. GORTON, PE
MICHAEL H. MEHIGAN, PE

HATFIELD & DAWSON
CONSULTING ELECTRICAL ENGINEERS
9500 GREENWOOD AVE. N.
SEATTLE, WASHINGTON 98103

TELEPHONE (206) 783-9151
FACSIMILE (206) 789-9834
E-MAIL hatdaw@hatdaw.com

JAMES B. HATFIELD, PE
CONSULTANT

MAURY L. HATFIELD, PE
(1942-2009)

PAUL W. LEONARD, PE
(1925-2011)

April 2013
BNPFT-20030313AAJ (as amended)
Skamania, Washington Channel 243D
LPFM Preclusion Study

Affected Market

Portland, OR (Spectrum Limited, Top 50)

Grid Study

The instant filing includes a technical amendment which modifies the proposed Skamania translator to the IF Channel 243D (from Channel 296D), corrects the transmitter site coordinates and elevation data to match the ASR, increases ERP to 10 watts, and adds a directional antenna pattern.

The proposed facility has an ERP of 10 watts and an antenna HAAT of 485 meters, generating a 60 dBu reference contour distance of 12.5 kilometers. The corresponding cochannel LPFM-to-translator spacing requirement is 32 kilometers, and for first-adjacent-channel it is 21 kilometers.

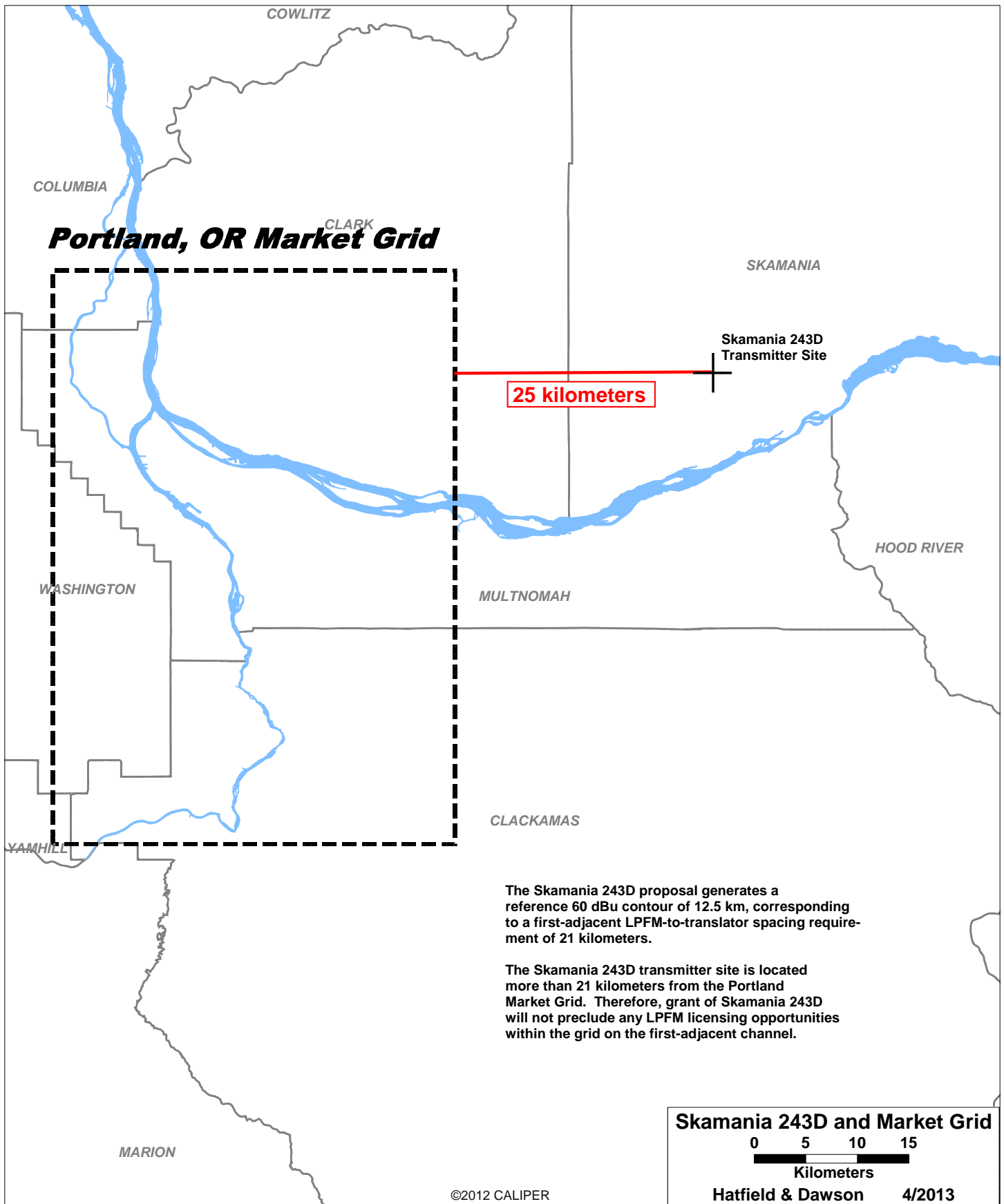
Grant of the application (as amended) would not preclude any LPFM licensing opportunities within the market grid. While the proposed transmitter site is located just 25 kilometers from the nearest edge of the market grid, the LPFM6 output indicates that there are no LPFM licensing opportunities within the market grid on the cochannel. With regard to first-adjacent-channel, the 25 kilometer distance from the market grid is greater than the corresponding LPFM-to-translator spacing requirement of 21 km.

Portland, OR
Latitude 45-31-23
Longitude 122-38-25
Grid Size 31 x 31
Micro FM 100 Watts at 30m HAAT
Co-Channel and 1st Adjacent Protected
2nd Adjacent Channel Not Protected
3rd Adjacent Channel Not Protected
I.F. Not Protected
TV Channel 6 Not Protected
CP Records Protected
APP Records Protected
FM Translators Protected
TV Channel 6 Translators/LP Not Protected
Auc83 FX App Records Not Protected

Chan	Avail	Chan	Avail	Chan	Avail	Chan	Avail	Chan	Avail
200	0	220	66	240	24	260	257	280	0
201	0	221	0	241	0	261	0	281	0
202	0	222	0	242	0	262	0	282	0
203	0	223	0	243	0	263	0	283	2
204	0	224	81	244	810	264	550	284	176
205	0	225	0	245	0	265	0	285	0
206	0	226	0	246	0	266	0	286	0
207	0	227	0	247	0	267	0	287	0
208	0	228	2	248	623	268	550	288	530
209	0	229	0	249	0	269	0	289	0
210	0	230	0	250	0	270	0	290	0
211	0	231	0	251	0	271	0	291	0
212	1	232	61	252	325	272	1	292	110
213	0	233	0	253	0	273	76	293	0
214	0	234	0	254	0	274	33	294	0
215	0	235	0	255	0	275	278	295	0
216	77	236	933	256	916	276	0	296	31
217	0	237	0	257	0	277	0	297	0
218	0	238	0	258	0	278	0	298	0
219	0	239	0	259	0	279	59	299	0
								300	111

Out of Grid Transmitter Site

While Portland, OR is a Top 50 market, the proposed translator transmitter site is located outside the Arbitron market boundaries. Therefore, an out-of-grid study is not required for this application.



The Skamania 243D proposal generates a reference 60 dBu contour of 12.5 km, corresponding to a first-adjacent LPFM-to-translator spacing requirement of 21 kilometers.

The Skamania 243D transmitter site is located more than 21 kilometers from the Portland Market Grid. Therefore, grant of Skamania 243D will not preclude any LPFM licensing opportunities within the grid on the first-adjacent channel.

Skamania 243D and Market Grid

051015

Kilometers

Hatfield & Dawson **4/2013**