

TECHNICAL EXHIBIT
AMENDMENT TO
APPLICATION FOR DTV CONSTRUCTION PERMIT
FCC FILE NO. BPCDT-19980831KE
FACILITY ID 48408
STATION WPME-DT
LEWISTON, MAINE
CH 28 50 KW 241 M

Technical Narrative

This technical exhibit was prepared in support of an amendment to the pending application for construction permit for station WPME-DT on channel 28 at Lewiston, Maine (BPCDT-19980831KE). The instant amendment has been prepared in response to the FCC's letter of February 21, 2006 which indicates that the pending WPME-DT application cannot be granted based upon the second step contour overlap method in the Letter of Understanding (LOU) between the FCC and Industry Canada released September 29, 2000. Specifically, the FCC indicated that the WPME-DT application would cause additional realistic interference in excess of 2% to a co-channel Canadian DTV allotment in Coaticook, QU.¹ Therefore, WPME-DT proposes to amend its pending DTV maximization application in order to comply with the interference criteria contained in the LOU towards the Coaticook DTV channel 28 allotment as well as all other Canadian DTV and NTSC allotments, to comply with the domestic interference criteria and also with the FCC's current freeze on DTV modification applications which would result in an increase in a station's DTV service area.

By means of this instant amendment application, WPME-DT proposes to decrease the directional antenna maximum effective radiated power (ERP) from 215 kW to 50 kW, decrease the antenna height above average terrain from 251 meters to 241 meters and change antenna system. No other changes are proposed. The instant application is considered a minor change in facilities pursuant to Section 73.3572(a). Furthermore, as detailed below, the instant application is also acceptable for filing under the criteria set forth in the FCC TV/DTV freeze as there will be no increase in WPME-DT's

¹ See letter dated February 21, 2006 from Clay Pendarvis, Associate Division Chief, Video Division, Media Bureau to HMW, Inc. (In Re: BPCDT-19980831KE, WPME-DT, Facility ID: 48408, Lewiston, ME, 1800E3-TN).

DTV service area in any direction as compared to the pending WPME-DT application (BPCDT-19980831KE).²

Proposed Facilities

It is proposed to operate WPME-DT from the existing WPME-TV site (NAD27 coordinates: 43-51-06 N, 70-19-40 W) on DTV channel 28 (554-560 MHz) with a directional antenna maximum ERP of 50 kW and an antenna HAAT of 241 meters. It is proposed to utilize a Dielectric model TLP-16B directional antenna which will be mounted at the 176 meter level on the existing tower structure, will incorporate an electrical beam tilt of 1 degree and will be oriented at 200 degrees true. The proposed antenna radiation center height above mean sea level will be 318 meters (FCC Tower registration 1022678).

Antenna Data

Figure 1 provides graphs of the horizontal and vertical plane relative field patterns for the proposed Dielectric model TLP-16B, horizontally polarized, directional antenna system.

Compliance with TV Freeze Order

Figure 2 is a map which depicts the location of the predicted 41 dBu, F(50,90) contours for the pending WPME-DT application (BPCDT-19980831KE) and the herein proposed WPME-DT DTV channel 28 operation. As indicated, the 41 dBu contour for the herein proposed operation is entirely within the 41 dBu contour for the pending application. Therefore, it is believed that the instant amendment application is acceptable for filing under the criteria set forth in the FCC TV/DTV freeze as there will be no increase in WPME-DT's DTV channel 28 service area, based on the pending application facilities, in any direction.

² See FCC Public Notice dated August 3, 2004 entitled "Freeze on the Filing of Certain TV and DTV Requests for Allotment or Service Area Changes" (DA 04-2446).

City Coverage

Figure 2 also depicts the predicted 48 dBu, F(50,90) coverage contour for the herein proposed WPME-DT channel 28 operation. As indicated, Lewiston is located within the 48 dBu contour. The Lewiston city limits were derived from information contained in the 2000 U.S. Census for Maine.

The distances to the predicted 41 dBu and 48 dBu, F(50,90) coverage contours were determined in accordance with the provisions of Section 73.625. The average elevations from 3.2 to 16.1 kilometers from the transmitter site, were obtained from the NGDC 30-second terrain database and were used for determining the distances to coverage contours.

Domestic NTSC/DTV Allocation Considerations

Figure 3 is the separation study for DTV channel 28 from the proposed WPME-DT site. The study has been used to determine the domestic assignments requiring interference studies using the procedures outlined in the FCC's OET-69 bulletin. An interference analysis has been conducted using the procedures outlined in the FCC's OET-69 bulletin which demonstrates that the proposal complies with the interference protection provisions of Section 73.623(c)(2).³

Class A Allocation Considerations

A study has been conducted which indicates that the WPME-DT proposal will not create prohibited interference to other existing, authorized or proposed Class A stations.

US-Canadian LOU Compliance

The proposed transmitter site is located 159.5 kilometers from the closest point of the US/Canadian border. Hence, coordination of the proposed WPME-DT operation on

³ The du Treil, Lundin & Rackley, Inc. DTV interference analysis program is based on the program and procedures outlined by the FCC in the Sixth Report and Order; subsequent Memorandum Opinion and Order; and FCC OET Bulletin No. 69. A nominal grid size resolution of 2 km was employed. A Alpha based processor computer system was employed. The results have been found to be in very close agreement with the results of the FCC implementation of OET Bulletin No. 69.

channel 28 with Canada is a possible consideration. The proposed WPME-DT facilities are considered to be Class C for Canadian coordination purposes. As indicated on Figure 3, the proposed WPME-DT Class C operation as proposed herein does not comply with the separation requirements contained in the LOU with respect to co-channel DTV channel 28 allotments at Coaticook, QU and Cowansville, QU.

However, it is believed that the proposed WPME-DT operation complies with the contour overlap provisions of the LOU with respect to the Coaticook and Cowansville DTV channel 28 allotments. Based on the LOU, the pertinent interfering contour applicable to co-channel DTV stations is the 12.4 dBu, F(50,10) contour.⁴ Figure 4A is a map which depicts the 12.4 dBu, F(50,10) contour for WPME-DT's allotted DTV facilities (ERP 50 kW/HAAT 258 meters, DA) which have been approved by Canada. Figure 4A also depicts the interfering 12.4 dBu contour for the herein proposed WPME-DT facilities. Figure 4B is an expanded scale version of Figure 4A which depicts detail along with US-Canadian border area. As indicated on Figures 4A and 4B, the herein proposed facilities will reduce the extent of the 12.4 dBu interfering contour towards those portions of the US-Canadian border area where overlap of the allotted 12.4 dBu contour occurs. In other words, the 12.4 dBu contour for the herein proposed WPME-DT operation is less extensive towards those portions of the US-Canadian border where the allotted 12.4 dBu contour currently overlaps. Therefore, it is believed that the herein proposed WPME-DT operation complies with the contour overlap provisions of the LOU with respect to the Coaticook and Cowansville DTV channel 28 allotments.

Objectionable Interference

There are no AM stations located within 10 kilometers (6.2 miles) of the proposed transmitter site. Figure 5 provides a tabulation of all known authorized full

⁴ Pursuant to Table 3 of Appendix 2 of the LOU, the F(50,10) interfering contour is determined by subtracting 19.5 dB (D/U) from the minimum required field strength of 39 dBu and then subtracting an additional 7.1 dB to adjust for the difference between the F(10,10) and F(50,10) values [12.4=(39-19.5)-7.1]

service FM and TV stations within 16 kilometers of the proposed WPME-DT site. Although no adverse electromagnetic impact is expected, the applicant recognizes its responsibility to correct problems, which are a result of its proposed operation.

The proposed site is more than 2915 kilometers from the closest point of the Mexican border. The closest FCC monitoring station is at Belfast, ME located 119 kilometers to the northeast. The National Radio Quiet Zone (VA/WV) is 850 kilometers to the southwest. The Table Mountain Radio Quiet Zone (CO) is more than 2890 kilometers to the west. The closest radio astronomy site conducting research on TV channel 37 is at Hancock, NH located 168 kilometers to the southwest. All these separations are considered sufficient to avoid interference from the proposed operation.

Environmental Protection Act

The proposed facilities were evaluated in terms of potential radio frequency (RF) energy exposure at ground level to workers and the general public. The radiation center for the proposed DTV antenna is located 176 meters above ground level. The maximum DTV ERP is 50 kW (horizontal polarization). A "worst-case" vertical plane relative field value of 0.2 (for angles below 60 degrees downward) is assumed for the antenna's downward radiation (see Figure 1, Sheet 2). The calculated power density at a point 2 meters above ground level is 0.0022 mW/cm². This is 0.6% of the FCC's recommended limit of 0.37 mW/cm² for channel 28 for an "uncontrolled" environment. Therefore, based on the responsibility threshold of 5%, the proposal will comply with the RF emission rules.

Access to the transmitting site will be restricted and appropriately marked with RFR warning signs. Furthermore, as this is a multi-user site, an agreement will be in effect with the other stations in the event that workers or other authorized personnel enter the restricted area or climb the tower to ensure that appropriate measures will be taken to assure worker safety with respect to radio frequency radiation exposure. Such measures include reducing the average exposure by spreading out the work over a longer period of time, wearing "accepted" RFR protective clothing and/or RFR exposure.

Finally, it is noted that this technical exhibit only addresses the potential for radio frequency electromagnetic field exposure. All other aspects of the environmental processing analysis will be or already has been provided to the FCC by the tower owner as part of the tower registration process.



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March 20, 2006

Date **20 Mar 2006**
Call Letters **WPME-DT** Channel **28**
Location **Lewiston, ME**
Customer
Antenna Type **TLP-16B**

AZIMUTH PATTERN

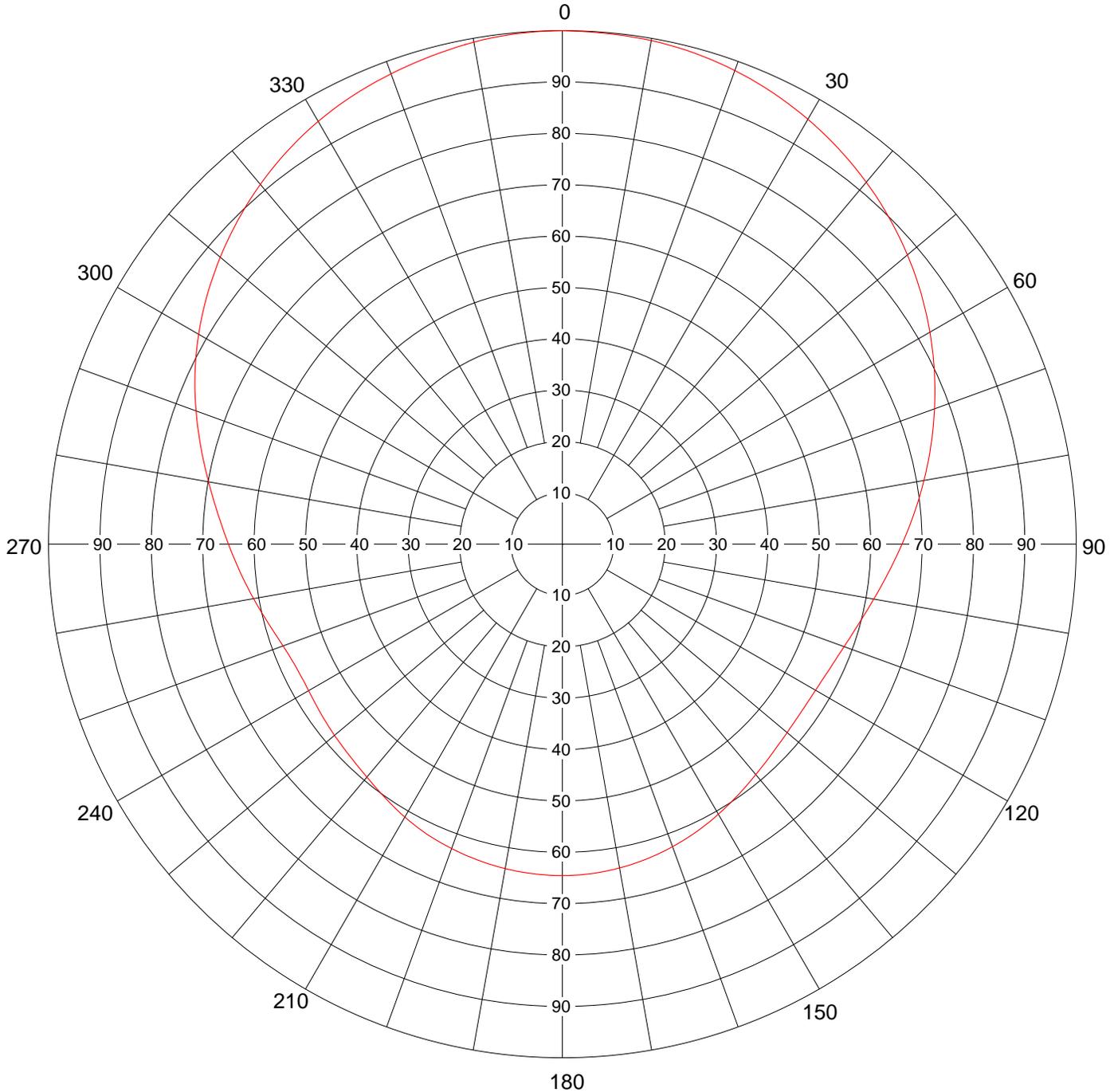
Gain
Calculated / Measured

1.70 (2.30 dB)
Calculated

Frequency
Drawing #

557 MHz
TLP-B

(200°T)



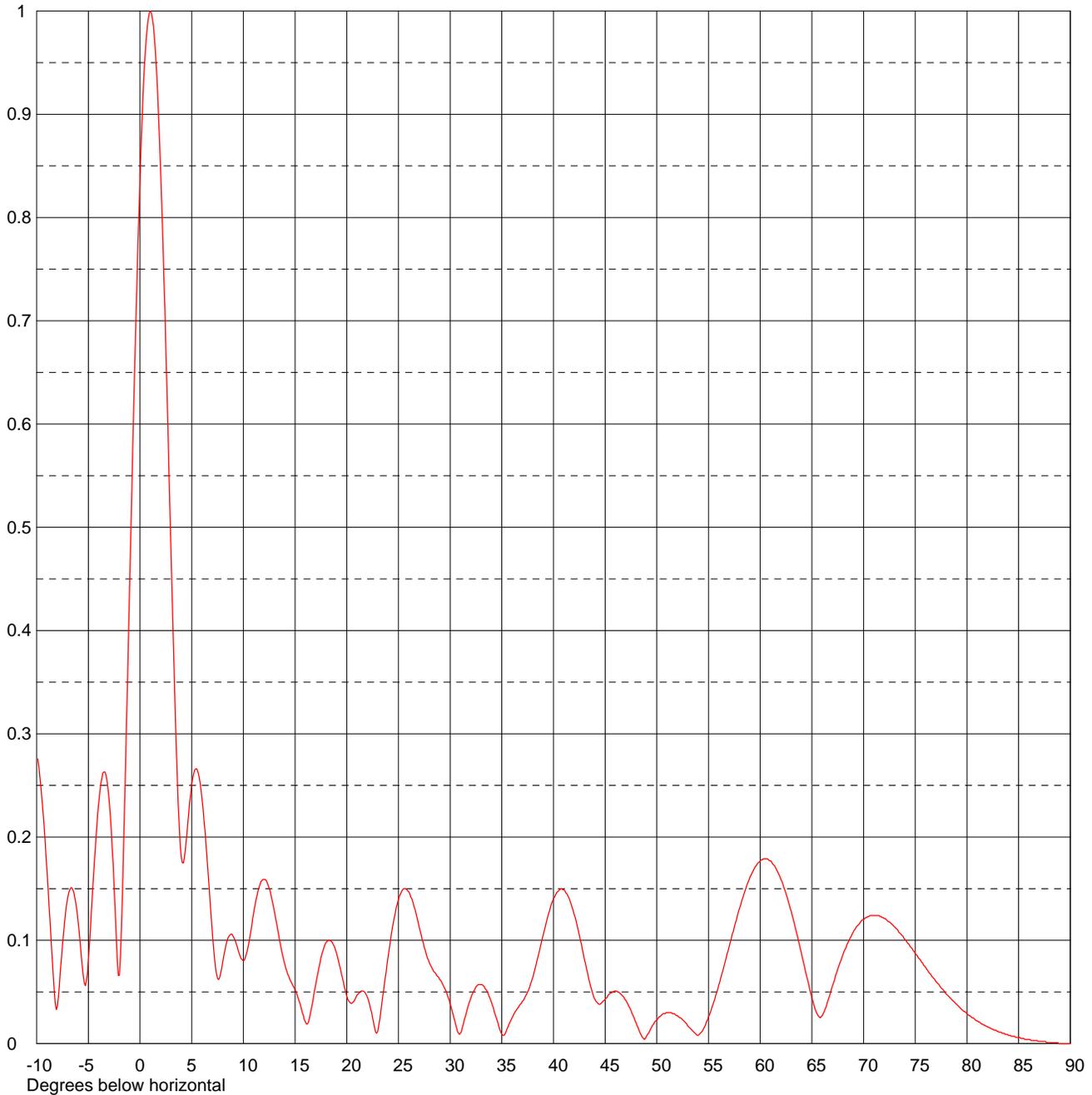
Remarks:



Date **20 Mar 2006**
Call Letters **WPME-DT** Channel **28**
Location **Lewiston, ME**
Customer
Antenna Type **TLP-16B**

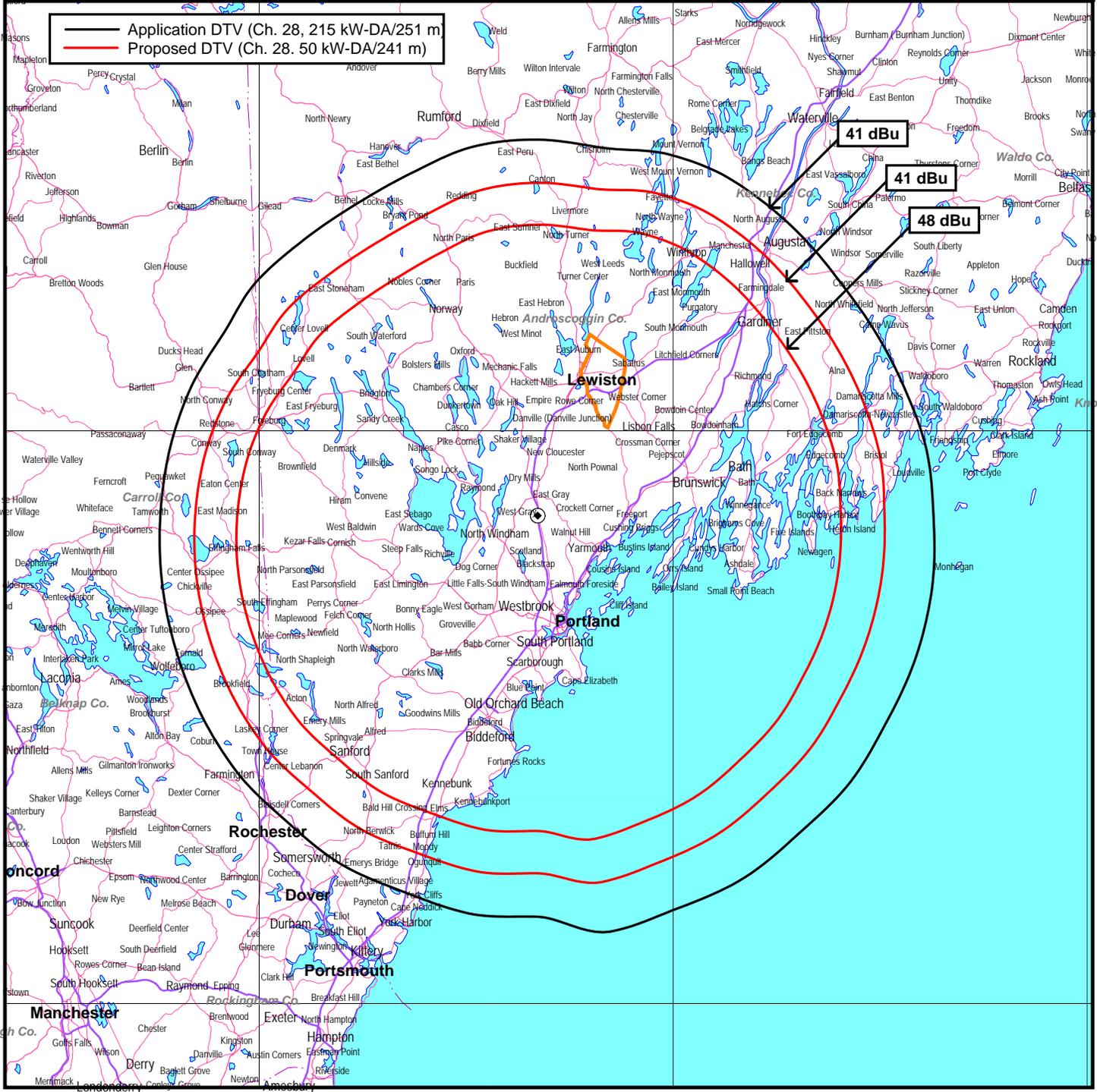
ELEVATION PATTERN

| | | | |
|------------------------|------------------------|-----------|---------------------|
| RMS Gain at Main Lobe | 16.0 (12.04 dB) | Beam Tilt | 1.00 Degrees |
| RMS Gain at Horizontal | 11.3 (10.53 dB) | Frequency | 557.00 MHz |
| Calculated / Measured | Calculated | Drawing # | 16L160100-90 |



Remarks:

Figure 2



20 0 20 40 60 80 100
Kilometers

PREDICTED FCC CONTOURS

DTV STATION WPME-DT
LEWISTON, MAINE

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

CDBS TV/DTV SEPARATION STUDY

Job Title: Proposed WPME-DT, Lewiston, ME

Channel: 28

Class: B

Type: DT

Separation Buffer: 50 km

Coordinates: 43-51-06 070-19-40

Zone: I

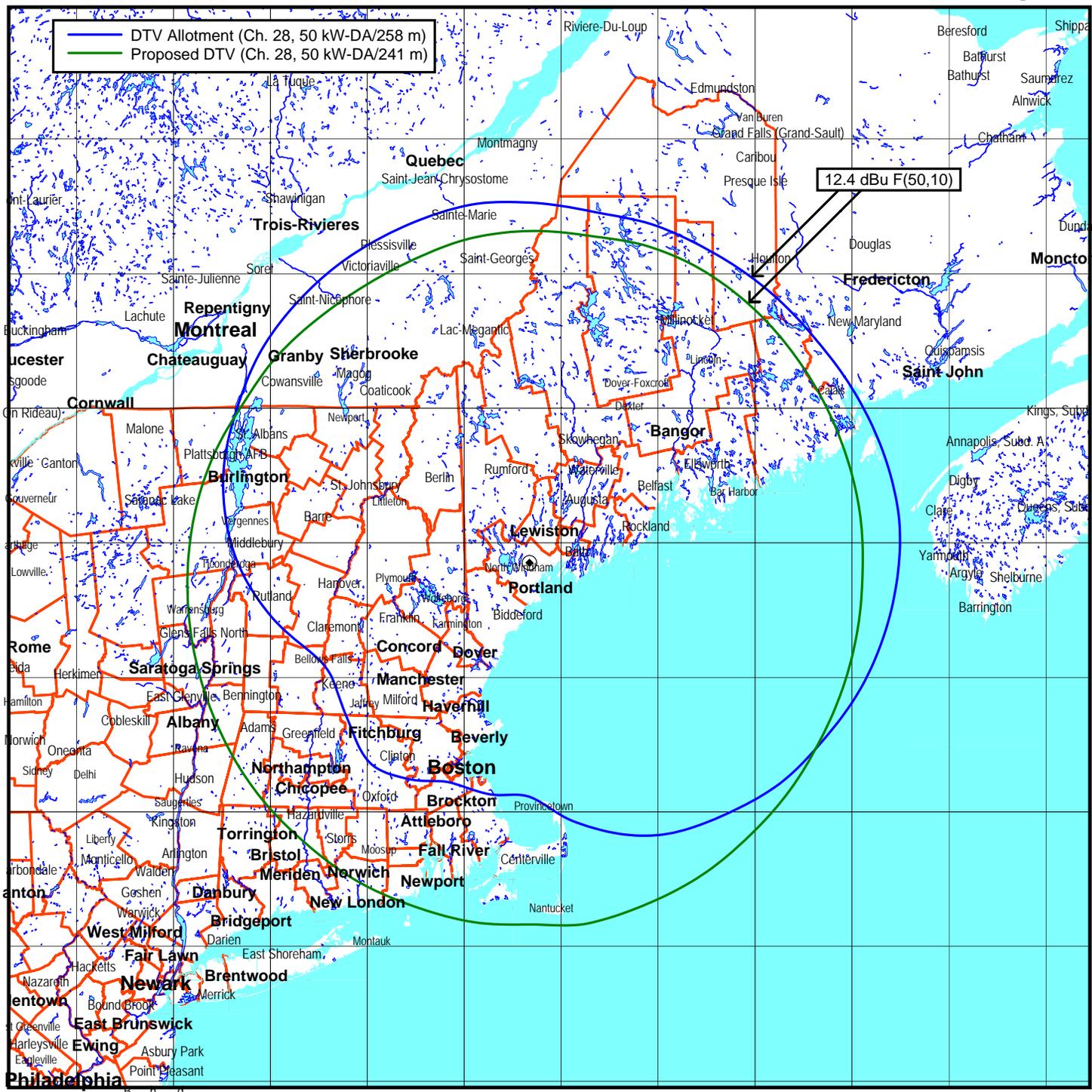
| Call Id | City St | File Status | Channel Num | ERP Zone | HAAT | DA Id | Latitude Longitude | Bear | Dist. (km) | Req. min | max |
|------------------|-------------------|----------------|---------------------|---------------|-------|------------|-----------------------|---------|-----------------|----------|-----------------------------|
| WPXG 48406 | CONCORD NH | BLCT LIC C | 21(+) 20030926AO | 2300.000 I | 344 | D 42933 | 43-11-04 071-19-12 | 227.5 | 109.2 28.73 | 24.1 | 80.5 Clear |
| WMEA-TV 39656 | BIDDEFORD ME | BLET LIC C | 26(-) 20040414AB | 133.000 I | 230.7 | D 44407 | 43-25-00 070-48-17 | 218.6 | 61.8 18.72 | 24.1 | 80.5 Short ¹ |
| WPME 48408 | LEWISTON ME | BPCDT APP C | 28() 19980831KE | 215.000 I | 251 | D 40224 | 43-51-06 070-19-40 | 90.0 | 0.0 | | |
| DWWLA | LEWISTON ME | DTV | 28() I | 50.000 I | 258 | D | 43-51-06 070-19-40 | 90.1 | 0.0 | | |
| NEW-DT 163665 | COATICOOK QU | BPFS APP C | 28(Z) 20041026AD | 0.200 II | 100 | N | 45-08-00 071-48-00 | 321.2 | 184.4 111.62 | 296.0 | 296.0 Short ² |
| | COATICOOK(6 QU | CAN | 28() I | 0.000 I | 0 | | 45-08-00 071-48-00 | A 321.2 | 184.4 111.62 | 296.0 | 296.0 Short ² |
| WVER 69946 | RUTLAND VT | BLET LIC C | 28(+) 19930715KJ | 275.000 II | 429 | | 43-39-32 073-06-25 | 265.5 | 224.8 7.55 | 217.3 | 217.3 Close |
| WLWC 3978 | NEW BEDFORD MA | BMLCT LIC C | 28(-) 20031210AB | 5000.000 I | 220 | D 18774 | 41-46-39 070-55-41 | 192.2 | 235.6 18.29 | 217.3 | 217.3 Clear |
| NEW-DT 163666 | COWANSVILLE QU | BPFS APP C | 28(Z) 20041026AD | 0.200 II | 100 | N | 45-12-00 072-45-00 | 308.8 | 244.0 52.02 | 296.0 | 296.0 Short ² |
| | COWANSVILLE QU | CAN | 28() I | 0.000 I | 0 | | 45-12-00 072-45-00 | A 308.8 | 244.0 52.02 | 296.0 | 296.0 Clear |
| WXCW-CA 2650 | HARTFORD CT | BPTTA CP C | 28(Z) 20050609AA | 5.000 | | C 69832 | 42-15-05 072-38-43 | 227.4 | 259.3 42.04 | 0.0 | 0.0 Class A ³ |
| CBVT-4 163709 | LAC-ETCHEMI QU | BPFS APP C | 28(Z) 20041027AA | 4.000 II | 150 | N | 46-24-42 070-35-37 | 355.9 | 285.3 8.27 | 277.0 | 277.0 Close |
| WPME 48408 | LEWISTON ME | BLCT LIC C | 35(-) 19970813KG | 1100.000 I | 278 | N 30292 | 43-51-06 070-19-39 | 90.0 | 0.0 24.08 | 24.1 | 80.5 Clear |

¹ The proposed WPME-DT operation complies with the FCC's 2%/10% interference requirements using the procedures outlined in FCC OET-69 Bulletin. See Technical Narrative.

² It is believed that the proposed WPME-DT operation complies with the requirements of the Letter of Understanding (LOU) between the FCC and Industry Canada. See Technical Narrative and Figures 4A and 4B.

³ The proposed WPME-DT operation complies with the FCC's 0.5% interference requirements applicable to Class A stations using the procedures outlined in FCC OET-69 Bulletin. See Technical Narrative.

Figure 4A

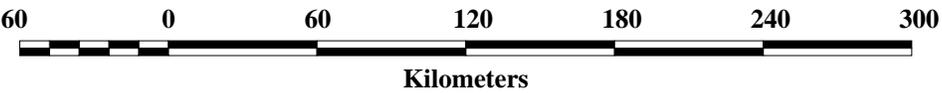
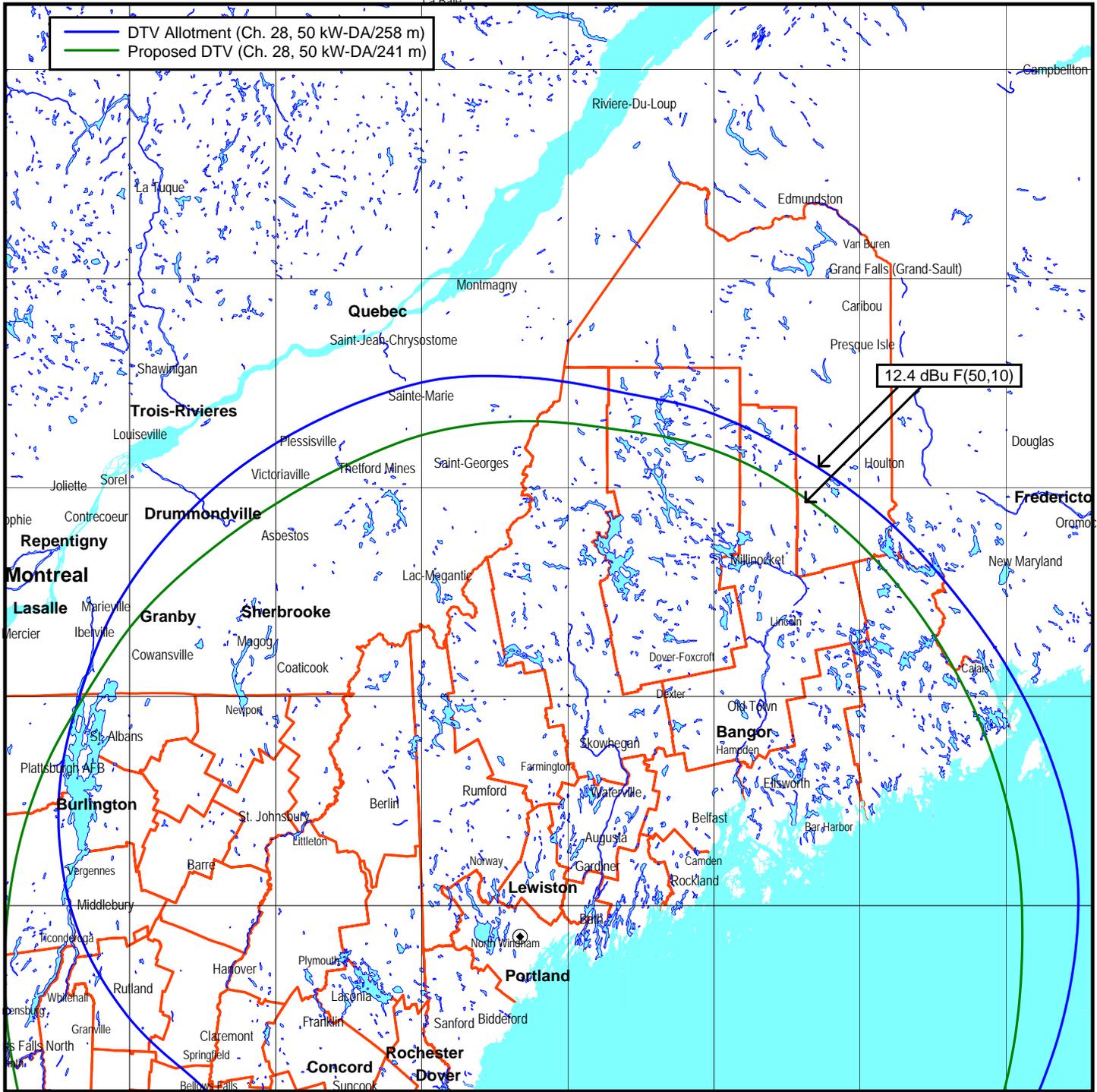


CANADIAN ALLOCATION STUDY

STATION WPME-DT
LEWISTON, MAINE

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

Figure 4B



CANADIAN ALLOCATION STUDY

STATION WPME-DT
LEWISTON, MAINE

du Treil, Lundin & Rackley, Inc. Sarasota, Florida

du Treil, Lundin, and Rackley

Proposed WPME-DT, Lewiston, ME

Coordinates: 43-51-06 070-19-40 Channel Range: -

Range: 16

Date: 3/20/2006

CDBS Tv Inquiry List

Page: 1

| Rec Type | Facility Id | Call | Status | Chan | Svc Class | Class | City | St | DA | Latitude | Longitude | ERP (kW) | HAAT (m) | RCAMSL (m) | Bearing | Dist. (km) |
|----------|-------------|--------|--------|------|-----------|-------|----------|----|----|----------|-----------|----------|----------|------------|---------|------------|
| C | 48408 | WPME | APP | 28 | DT | | LEWISTON | ME | D | 43-51-06 | 070-19-40 | 215.000 | 251 | 328 | 0 | 0 |
| C | 53065 | WPXT | LIC | 51 | TV | | PORTLAND | ME | D | 43-51-06 | 070-19-40 | 3020.00 | 280 | 359 | 0 | 0 |
| C | 53065 | WPXT | CP | 43 | DT | | PORTLAND | ME | N | 43-51-06 | 070-19-40 | 750.000 | 265 | 342 | 0 | 0 |
| C | 48408 | WPME | LIC | 35 | TV | | LEWISTON | ME | N | 43-51-06 | 070-19-39 | 1100.00 | 278 | 345 | 89.99 | 0.02 |
| C | 25683 | WGME-T | APP | 38 | DT | | PORTLAND | ME | D | 43-55-28 | 070-29-28 | 1000.00 | 465 | 581 | 301.7 | 15.42 |
| C | 25683 | WGME-T | CP | 38 | DT | | PORTLAND | ME | D | 43-55-28 | 070-29-28 | 1000.00 | 491 | 607 | 301.7 | 15.42 |
| C | 25683 | WGME-T | LIC | 13 | TV | | PORTLAND | ME | N | 43-55-29 | 070-29-29 | 295.000 | 462 | 606 | 301.8 | 15.45 |

du Treil, Lundin, and Rackley

Proposed WPME-DT, Lewiston, ME **Coordinates: 43-51-06 070-19-40** **Frequency Range: -** **Range: 16**

Date: 3/20/2006

CDBS FM Inquiry List

Page: 1

| Rec Type | Fac Id | Call | Status | Chan | Svc Class | Class | City | St | DA | Latitude | Longitude | ERP (kW) | HAAT (m) | RCAMSL (m) | Bear | Dist. (km) |
|-----------------|---------------|-------------|---------------|-------------|------------------|--------------|-------------|-----------|-----------|-----------------|------------------|-----------------|-----------------|-------------------|-------------|-------------------|
| C | 3134 | WJBQ | LIC | 250 | FM | B | PORTLAND | ME | | 43-51-06 | 070-19-40 | 16.000 | 271.0 | 351.0 | 0.0 | 0.0 |
| C | 59534 | WHXR | LIC | 294 | FM | A | NORTH | ME | D | 43-51-06 | 070-19-40 | 0.810 | 190.0 | 268.0 | 0.0 | 0.0 |
| C | 17483 | WMSJ | LIC | 207 | FM | B1 | FREEPORT | ME | N | 43-45-45 | 070-19-30 | 7.500 | | | 178.7 | 9.9 |
| C | 49982 | WPOR | LIC | 270 | FM | B | PORTLAND | ME | N | 43-45-45 | 070-19-30 | 33.000 | 184.0 | 236.0 | 178.7 | 9.9 |
| C | 24949 | WTHT | LIC | 260 | FM | B | AUBURN | ME | N | 43-57-07 | 070-17-46 | 28.500 | 196.0 | 288.0 | 12.8 | 11.4 |
| C | 68282 | WSJB-F | LIC | 218 | FM | A | STANDISH | ME | | 43-49-32 | 070-29-03 | 0.360 | 26.0 | 129.0 | 257.0 | 12.9 |
| C | 22878 | WBLM | LIC | 275 | FM | C | PORTLAND | ME | N | 43-55-29 | 070-29-29 | 100.000 | 435.0 | 551.0 | 301.8 | 15.5 |