EXHIBIT E

ENGINEERING STATEMENT
RE DTV BROADCAST ENGINEERING DATA
APPLICATION FOR CONSTRUCTION PERMIT
WMED-DT, CALAIS, MAINE
CHANNEL 10 3.5 KW ERP 133 METERS

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COHEN, DIPPELL AND EVERIST, P.C.
CONSULTING ENGINEERS
RADIO AND TELEVISION
WASHINGTON, D.C.

This engineering statement has been prepared in support of an application for outstanding construction permit on behalf of Maine Public Broadcasting Corporation, licensee of WMED-TV, Calais, Maine. The purpose of the application is to specify the facilities authorized by the FCC Report and Order adopted May 3, 2002, for 3.5 kW effective radiated power (ERP) non-directional in accordance with the rule making, MM Docket No. 01-167 (RM-10180).

WMED-TV is licensed to operate on NTSC television Channel 13 with a maximum visual effective radiated power of 100 kW and a HAAT of 134.0 meters (439.6 feet). WMED-TV has been allocated DTV Channel 15 with facilities of 186 kW and HAAT of 134 meters in the revised DTV Table of Allotments. Accordingly based on the rulemaking, WMED-TV proposes to construct DTV facilities on Channel 10 of 3.5 kW non-directional at a height above average terrain of 133 meters.

The DTV antenna will be located on a tower that is adjacent to two towers that are taller, and therefore, it is shielded with reference to aeronautical significance. A vertical sketch, Exhibit E-1, is provided.

There are no AM stations located within 3.2 km of the proposed WMED-TV DT tower site. There are two FM stations (WMED-FM and WLRQ(FM)) and there is one full-service NTSC station (WMED-TV) and no full-service DTV facilities at the site. There are two TV translators W57AQ and W61AO also located at this site.

The TV antenna will be top-mounted on an existing tower. The WMED-TV DT antenna will be located on the existing tower having a total overall structure height above ground of 60.9 meters (200 feet). There is a taller tower at the site (within 75 feet) and its height is 92.7 meters (304 feet). The existing transmitter site is located at Conant Hill.

The geographic coordinates of the proposed site are as follows:

North Latitude: 45° 01' 45"

West Longitude: 67° 19' 25"

NAD-27

Equipment Data

Antenna: Dielectric, Model TW-7B10-R (or equivalent) antenna with 0.9° electrical beam tilt. The vertical plane pattern and other exhibits required by Section 73.625(c) are herein included as exhibits E-2a, E-2b, E-2c, E-2f, and E-2f.

Transmission Line: 60.9 meters (200 ft) of 3" coaxial, 50 ohm or equivalent

Power Data

Transmitter output	0.5 kW	-3.01 dBk
Transmission line loss	90.8%	0.419 dB
Input power to the antenna	0.454 kW	-3.42 dBk
Antenna power gain, Main Lobe	7.7	8.86 dB
Effective Radiated Power, Maximum	3.5 kW	5.44 dBk

Elevation Data

Vertical dimension for Channel 10 antenna	14.3 meters 46.9 feet
Overall height above ground of the proposed antenna structure (including beacon)	60.9 meters 200 feet
Center of radiation of Channel 10 antenna above ground	53.1 meters 174.2 feet

Elevation of site above mean sea level	147.5 meters 483.9 feet
Center of radiation of Channel 10 antenna above mean sea level	200.6 meters 658.1 feet
Overall height above mean sea level of proposed tower and stacked antenna (including beacon)	208.4 meters 683.7 feet
Antenna height above average terrain	133 meters

Note: Slight height differences may result due to conversion to metric.

Allocation

An allocation study and interference analysis has not been performed from the proposed site and is not required since the facilities requested are almost identical to that authorized in the rule making.

Coverage

The average elevation data for 3.2 to 16.1 km along each radial are based upon the WMED-DT, FCC File No. BPEDT20000203AAG for Channel 15 and the 3-second NGDC terrain data.

The F(50,90) DTV coverage contour has been computed from reference to the propagation data for Channels 7-13, as published by the FCC in Figure 10 and Figure 10a, Section 73.699 of the FCC Rules and Regulations.

Utilizing the formula in Section 73.625(b)(2) of the Rules for the effective heights, it is found that the depression angle, A_h, varies from 0.28 to 0.34 degrees. Since the relative vertical field is greater than 90% of the maximum at these depression angles, the maximum power was used in determining the distance to the DTV contour.

Table I includes the distances to the predicted 43 and 36 dBu F(50,90) coverage contour, the average elevation 3 to 16 km, and the antenna height above average terrain for the eight radials.

Population and Area Data

The population within the predicted DTV coverage contour was determined by employing a computer program using the 1990 census data. The computer program overlaid the 36 dBu contour over the land area in Calais, Maine, and determined the population within the contour by using the centroids for the pertinent census blocks. A domestic population of 33,334 people was determined. The land area of the contour was measured with a polar planimeter using the original map and the predicted F(50,90) 36 dBu contour encompasses a domestic land area of 7,117 sq. km. This information is compiled in Table II. The 43 dBu community contour extends beyond the city limits of Calais.

Other Licensed and Broadcast Facilities

No adverse technical effect is anticipated by the proposed DTV operation to any other FCC licensed facility. If required, the applicant will install filters or take other measures as necessary to resolve the problem.

FCC Rule, Section 1.1307

The proposed operation based upon the current OET Bulletin No. 65, Edition 97-01 dated August 1997 and Supplement A meets the provisions of the FCC radio frequency field ("RFF") guidelines, and thus, complies with Section 1.1307 of the FCC Rules. Provisions will be made to reduce power or to terminate the transmitter emissions, as appropriate, when it is necessary for authorized personnel to be on the tower.

The following has been supplied by Maine Public Broadcasting Corporation:

RF RADIATION COMPLIANCE
MAINE PUBLIC BROADCASTING CORPORATION

Maine Public Broadcasting Corporation ("MPBC") realizes the need for protection of the public and workers from the effects of radio frequency field levels ("RFF"). In order to insure that MPBC is in current compliance with FCC guidelines for RFF levels at all transmitter sites owned or leased, the following precautions have been undertaken.

1. Actual broadband measurements have been performed and documented in and around building areas.

2. All potential hazard areas have been fenced off, locked and marked as Radiation Hazard Areas.

3. All towers have been fenced off, locked and marked to deny access by any unauthorized personnel.

4. Narda/Loral RF Alert Units have been purchased and are provided to all workers when they will be working on any tower that is occupied by MPBC. These units exceed one-half the allowable limit and the beeping intensifies as the RF field increases.

Precautions to Protect the Public

Readings were taken in all areas accessible to the public and recorded. All areas that exceeded the prescribed 0.2 mW/cm^2 have been fenced off to protect the public. All tower locations are also protected by locked fences that are six feet high, topped with barbed wire. All sites are posted with caution signs warning of possible danger to High Power Broadcast equipment and RF Radiation.

Precautions to Workers

MPBC has purchased two Loral/Narda RF Alert meters, Model 8842C. These meters provide an audible alert when introduced into a RFF level that is one-half the allowable limit set forth by the current FCC guidelines. The intensity of the alert increases as the unit becomes exposed to higher fields. As measurements demonstrate no part of the transmitter buildings have areas that exceed the allowable limits. All employees of MPBC that have duties in and around transmitter locations have been trained on the requirements of OET 65 concerning RFF level exposure limits.

MPBC's policy concerning tower workers is as follows. All workers are required to wear the RF warning meters whenever working on any tower structure. If at anytime while working in areas on the tower well away from any radiating antennas, the Alert meter warns of RF Radiation, we will immediately cease operation of the transmitting system. When their work requires them to come in close proximity of any transmitting antennas the systems will be shut down and locked off until the workers have finished and cleared the area.

All tenants of MPBC owned towers are required to comply with this policy of ceasing operation to protect workers. Failure to comply will cause lease agreement to be terminated. This stipulation will be written into any future lease agreements. Tenants are also required to inform MPBC anytime they need to have workers on our tower structure so that we may provide the Alert meter to their tower crew and cease operation for their protection if they will be in close proximity to our antennas.

Summary of Environmental Assessment

An environmental assessment ("EA") is categorically excluded under Section 1.1306 of the FCC Rules and Regulations since the permittee licensee indicates:

(a)(1) The proposed facilities are not located in an officially designated wilderness area.

(a)(2) The proposed facilities are not located in an officially designated wildlife preserve.

(a)(3) The proposed facilities will not affect any listed threatened or endangered species or habitats.

(a)(3)(ii) The proposed facilities will not jeopardize the continued existence of any proposed endangered or threatened species or likely to result in the destruction or adverse modification of proposed critical habitats.

(a)(4) The proposed facilities will not affect any known districts, sites, buildings, structures, or objects significant in American history, architecture, archaeology, engineering, or culture.

(a)(5) The proposed facilities are not located near any known Indian religious sites.

(a)(6) The proposed facilities are not located in a flood plain.

(a)(7) The installation of the DTV facilities on an existing tower at an existing site will not involve a significant change in surface features of the ground in the vicinity of the tower.

(a)(8) Since there exists a nearby taller tower, tower lighting is not required.

(b) Workers and the general public will not be subjected to RFF levels in excess of the current FCC guidelines contained in OET Bulletin 65 (Edition 97-01) and Supplement A. Authorized personnel will be alerted to areas of the antennas where potential radiation levels are in excess of the FCC guidelines. A security fence with a locked gate precludes access to the tower site.