

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of COMMUNITY TELEVISION, INC., licensee of full-power digital television station WATC-DT, Channel 41 in Atlanta, Georgia, in support of its request for Special Temporary Authority to operate on its post-repack channel, Channel 34, with an interim facility while it constructs the facility granted by the FCC in Construction Permit 34436. No change in site location is proposed herein.

It is proposed to mount a Dielectric omnidirectional, elliptically-polarized antenna at the 43.6-meter level of the existing 60-meter WATC-DT tower. The proposed effective radiated power for the facility is 288 kW in the horizontal plane, which is the allotted repack power level for WATC-DT. Exhibit B is a map upon which the predicted service contours are plotted. As shown, the community of Atlanta is completely encompassed by the proposed 48 dBu city-grade service contour. In Exhibit C, we provide a comparison between the proposed STA facility's service contour and that of the WATC-DT facility authorized in Construction Permit 34436. From this exhibit it is clear that the proposed STA facility's contour is completely contained within that of the authorized facility. Accordingly, no interference study is included herein.

An elevation pattern for the proposed antenna is provided in Exhibit D and a power density calculation appears as Exhibit E.

Due to the diminutive height of the existing WATC-DT tower and because no change in the overall height or location of the tower is proposed herein, the Federal Aviation Administration has not been notified of this application.

EXHIBIT A

In addition, and for the same reasons, antenna structure registration of the tower with the Federal Communications Commission is not required.

I declare under penalty of perjury that the foregoing statements and the attached exhibits, which were prepared by me or under my immediate supervision, are true and correct to the best of my knowledge and belief.

A handwritten signature in blue ink, appearing to read 'K. T. Fisher', with a stylized, elongated horizontal stroke at the end.

KEVIN T. FISHER

August 16, 2019

CONTOUR POPULATION
2015 U.S. CENSUS DATA
CITY-GRADE : 5,585,578 (2,189,809 HH)
NOISE-LIMITED : 6,044,392 (2,370,799 HH)

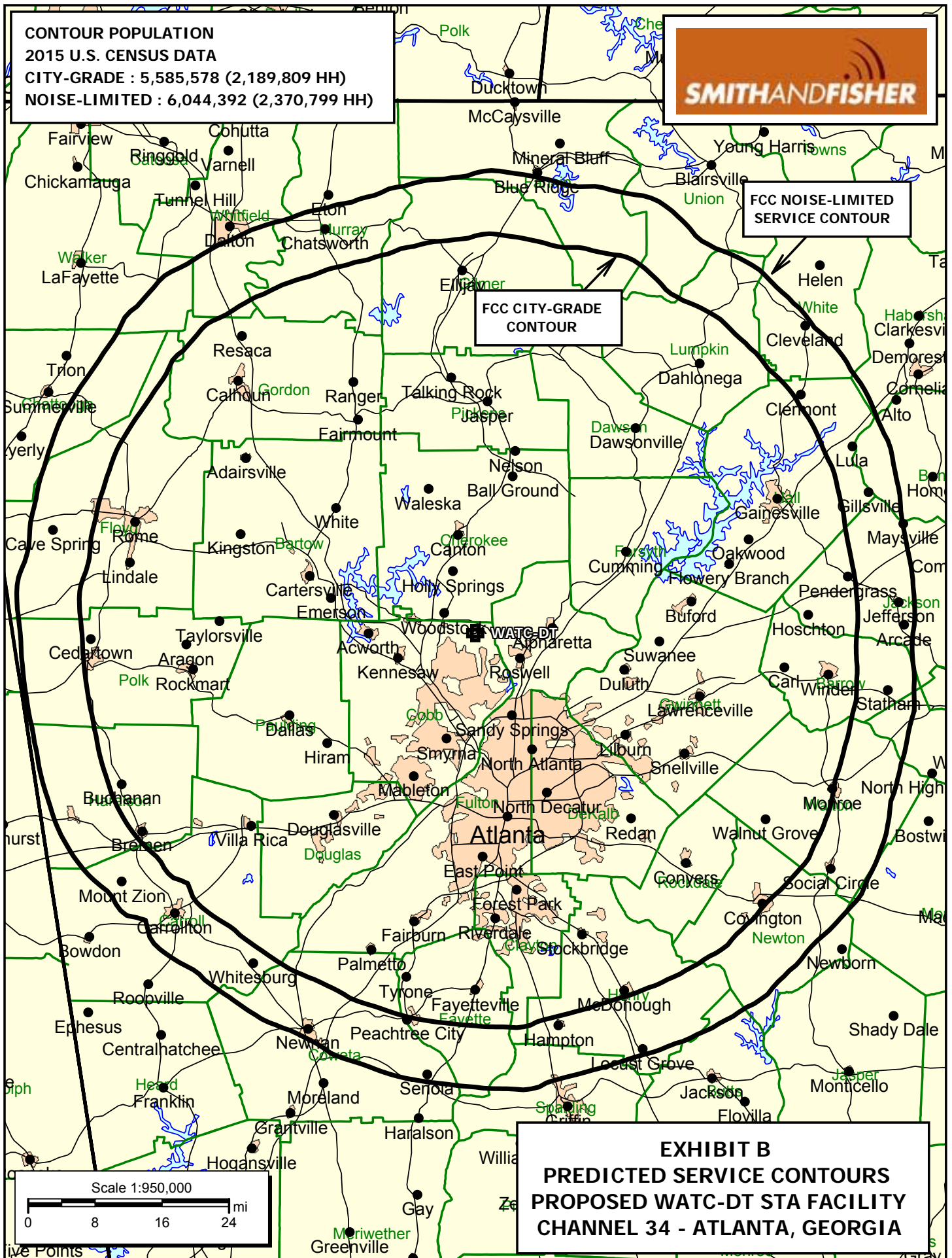


EXHIBIT B
PREDICTED SERVICE CONTOURS
PROPOSED WATC-DT STA FACILITY
CHANNEL 34 - ATLANTA, GEORGIA

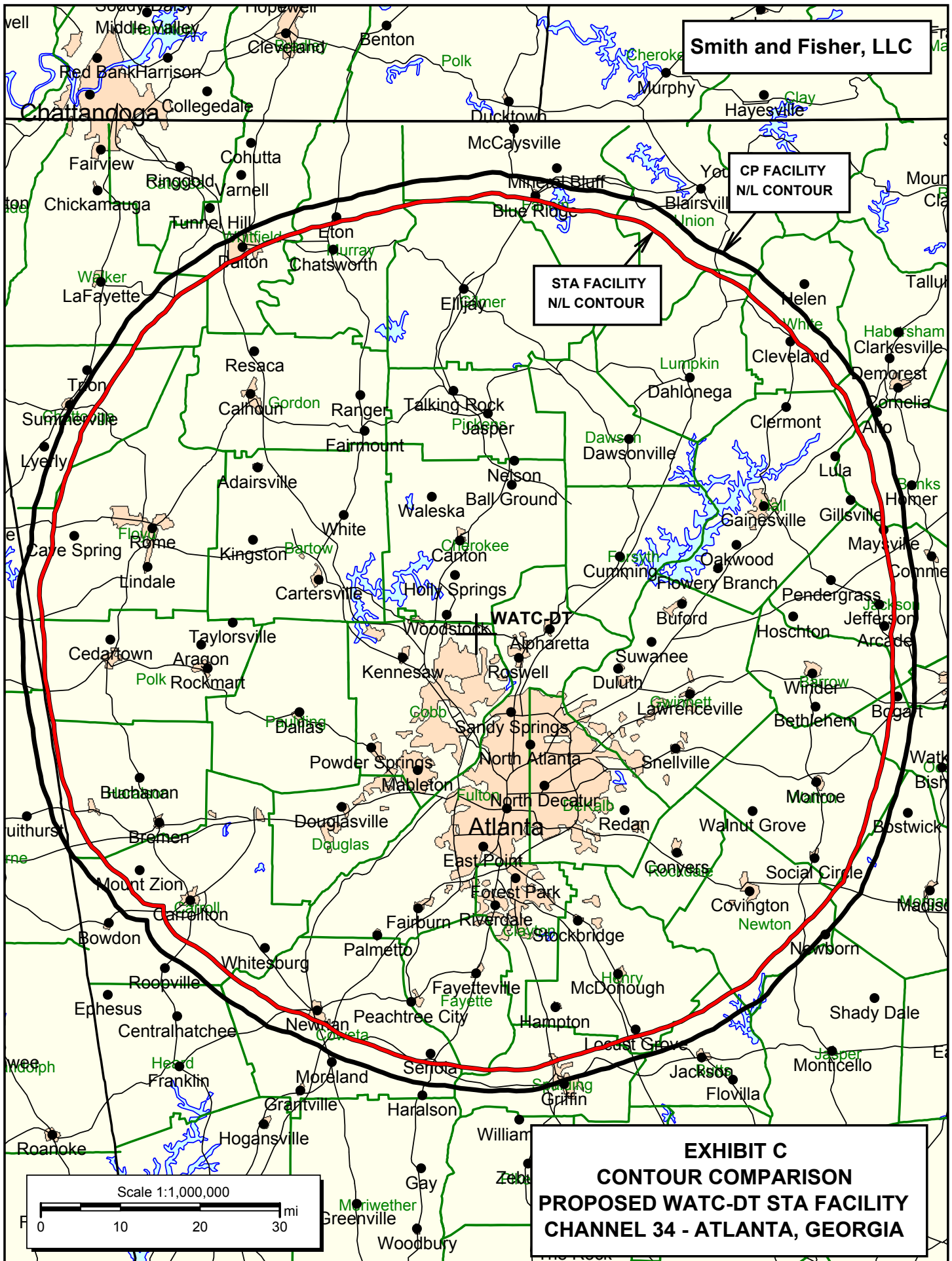


EXHIBIT D

ELEVATION PATTERN

Exhibit No.

Date **12 Mar 2017**

Call Letters **WATC**

Channel **34**

Antenna Type **TLP-24B (C)/VP**

Location

Customer

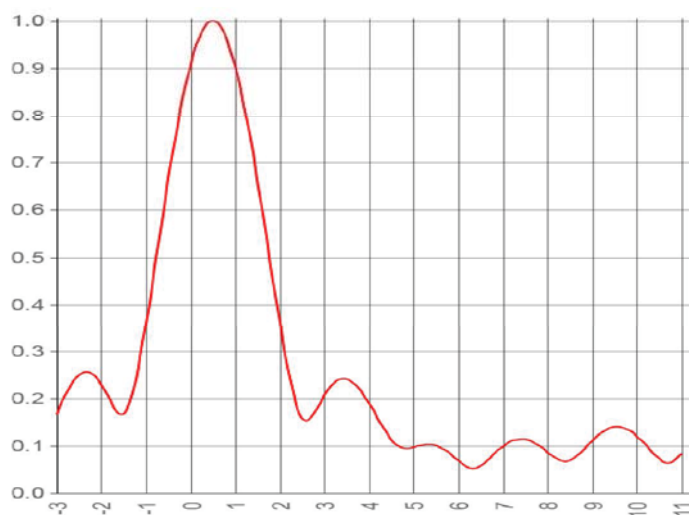
RMS Gain at Main Lobe **23.0 (13.62 dB)**

RMS Gain at Horizontal **19.0 (12.79 dB)**

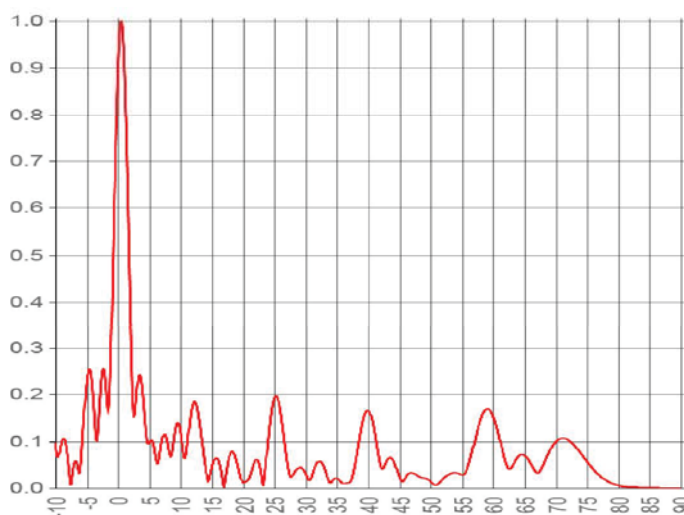
Calculated

Beam Tilt **0.5 Degrees**

Drawing # **24L230050**



Degrees below horizontal



Degrees below horizontal

Angle	Field	Angle	Field	Angle	Field	Angle	Field	Angle	Field
-10	0.098	10	0.120	30	0.031	50	0.013	70	0.100
-9	0.100	11	0.084	31	0.025	51	0.007	71	0.107
-8	0.057	12	0.182	32	0.056	52	0.020	72	0.103
-7	0.053	13	0.142	33	0.041	53	0.030	73	0.091
-6	0.043	14	0.044	34	0.011	54	0.033	74	0.074
-5	0.227	15	0.043	35	0.021	55	0.028	75	0.056
-4	0.196	16	0.061	36	0.010	56	0.048	76	0.040
-3	0.165	17	0.007	37	0.012	57	0.099	77	0.027
-2	0.230	18	0.075	38	0.058	58	0.148	78	0.017
-1	0.359	19	0.056	39	0.133	59	0.169	79	0.010
0	0.909	20	0.011	40	0.165	60	0.153	80	0.005
1	0.906	21	0.022	41	0.120	61	0.107	81	0.003
2	0.363	22	0.060	42	0.047	62	0.054	82	0.002
3	0.206	23	0.023	43	0.059	63	0.046	83	0.002
4	0.189	24	0.101	44	0.060	64	0.068	84	0.001
5	0.097	25	0.193	45	0.023	65	0.070	85	0.001
6	0.069	26	0.162	46	0.023	66	0.052	86	0.001
7	0.099	27	0.061	47	0.032	67	0.032	87	0.000
8	0.086	28	0.029	48	0.025	68	0.049	88	0.000
9	0.111	29	0.044	49	0.021	69	0.079	89	0.000

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POWER DENSITY CALCULATION
PROPOSED WATC-DT STA FACILITY
CHANNEL 34 – ATLANTA, GEORGIA

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Atlanta facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 288 kW (H) and 86.4 kW (V), an antenna radiation center 43.6 meters above ground, and the specific elevation pattern of the proposed Dielectric antenna, maximum power density two meters above ground of 0.152 mW/cm^2 is calculated to occur 25 meters from the base of the tower. Since this is only 38.0 percent of the 0.40 mW/cm^2 reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 34 (590-596 MHz), a grant of this proposal may be considered a minor environmental action with respect to public exposure to non-ionizing electromagnetic radiation.

In addition, once the new WATC-DT antenna is installed, a power density survey of the tower site will be conducted in order to ensure compliance with the Commission's RF human exposure standards.

Further, the station owner will take whatever precautionary steps are necessary, such as reducing power or leaving the air temporarily, to ensure that workers operating in the vicinity of the antenna are not exposed to excessive non-ionizing radiation.