

**ENGINEERING EXHIBIT
IN SUPPORT OF AN
APPLICATION FOR CONSTRUCTION PERMIT
WEEEX – EASTON, PENNSYLVANIA
1230 kHz – 1.0 kW DAY/1.0 kW NIGHT - ND-U
FACILITY ID: 8596**

Applicant: Radio License Holding CBC, LLC

February, 2020



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FCC Form 301 - Section III

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ENGINEERING STATEMENT OF CYNTHIA M. JACOBSON, P.E.
IN SUPPORT OF AN
APPLICATION FOR CONSTRUCTION PERMIT
WEEX – EASTON, PENNSYLVANIA
1230 kHz – 1.0 kW DAY/1.0 kW NIGHT – ND-U
Facility ID: 8596

Applicant: Radio License Holding CBC, LLC

I am a Consulting Engineer, an employee in the firm of Carl T. Jones Corporation, with offices located in Springfield, Virginia. My education and experience are a matter of record with the Federal Communications Commission. I am a Registered Professional Engineer in the Commonwealth of Virginia, Registration No. 0402027914.

GENERAL

This office has been authorized by Radio License Holding CBC, LLC (“Radio License”), licensee of Standard Broadcast Station WEEX, Easton, Pennsylvania to prepare this Engineering Statement, FCC Form 301 (Section III), and the attached figures in support of an Application for Construction Permit to change the daytime directional antenna system to a non-directional antenna system and move the night to the proposed day nondirectional antenna.

WEEX is a Class C station, presently licensed to operate on 1230 kHz with a

power of 0.84 kW day and 1.0 kW night. The day mode uses a directional antenna system while the night employs a non-directional antenna.

The instant application proposes to operate with a nondirectional antenna at a daytime power of 1.0 kW. The nondirectional night facility of WEEX will switch to the same nondirectional antenna as proposed for the day operation. The current #2 (north) tower of the day array will be employed for the proposed day and night non-directional facility. The #2 (north) tower is the shorter of the two existing towers. The existing #1 (south) tower will no longer be employed for the WEEX AM operation.

ANTENNA SYSTEM AND GROUND SYSTEM

The WEEX nondirectional antenna is an existing, guyed, uniform cross-section, series fed tower, 68.0 electrical degrees in height, corresponding to a radiator height of 46.0 meters.

The ground system consists of 120 evenly spaced, buried, copper wire radials about the base of the tower. The radials are 61 meters in length except where terminated by property boundaries, plus a 7.3 meter square ground screen at the base of the tower.

FAA NOTIFICATION AND TOWER REGISTRATION

The overall height of the existing antenna structure is 46.6 meters AGL. Since WEEX is proposing to utilize an existing tower structure without physical modification, it is believed that no further notification to the Federal Aviation Administration (FAA) is

necessary. The proposed transmitting antenna is an existing, unregistered tower structure.

SITE AND SURROUNDING TERRAIN

The proposed antenna/transmitter location and surrounding terrain characteristics are on file with the FCC and the FAA. The tower coordinates (NAD-27) for the proposed WEEX non-directional operation are:

North Latitude: 40 - 42 - 31
West Longitude: 75 - 13 - 00

These coordinates differ slightly as they pertain to the specific location of the #1 tower that will be employed as the nondirectional antenna for the proposed day and night operations.

BLANKETING AND STATION INTERACTION

The population within the proposed WEEX 1000 mV/m contour is greater than 300 persons. The population within the proposed day and night 1000 mV/m contour is 411 persons. The population within the present day 1000 mV/m contour is 446 and 457 persons in the present night. Thus, the proposal will reduce the population contained within the 1000 mV/m contour by a total of 35 persons daytime and 46 persons nighttime. The present and proposed 1000 mV/m contours are shown in Figure 1. Figure 2 depicts the present and proposed 25 mV/m daytime contours. In response to all legitimate complaints of blanketing interference, the applicant will undertake steps to

mitigate the interference in accordance with the requirements of Section 73.88 of the Commission's Rules and Regulations.

There are no AM stations located within 3.2 kilometers of the proposed site. There are three licensed full-service FM stations, two licensed translator/low power FM stations and three construction permit authorizations for FM translators/low power stations located within 10 kilometers of the proposed site. There are no licensed low power TV station located within the 10 kilometers. It is expected that no detrimental interaction will occur with any other station due to the fact that WEEX is remaining at its licensed site.

COVERAGE CONTOURS

The present and proposed 5.0 mV/m daytime service contours are shown on the map of Figure 3. The proposed daytime 5.0 mV/m contour encompasses 100% of the population/area of the city of license, Easton, Pennsylvania. Therefore the requirements of Section 73.24(i) are fully satisfied.

The proposed predicted 2.0 mV/m and 0.5 mV/m daytime contours are shown on Figures 4 and 5, respectively.

The present and proposed predicted nighttime service contours are shown on the map of Figure 8. The present and proposed nighttime interference-free contours (25.3 mV/m) encompasses 100% of the population and 93.6% and 89.1% of the area of the city of license, Easton, Pennsylvania, respectively.

DAYTIME ALLOCATION STUDY

The results of the daytime allocation study are shown in Figure 6. Six stations are considered in the daytime allocation. These stations are:

WPHT	1210 kHz	Philadelphia, Pennsylvania;
WGNV	1220 kHz	Newburgh, New York;
WFAS	1230 kHz	White Plains, New York;
WKBO	1230 kHz	Harrisburg, Pennsylvania;
WIOV	1240 kHz	Reading, Pennsylvania; and
WQFM	1240 kHz	Wilkes-Barre, Pennsylvania.

The distances to all groundwave contours were calculated using the equivalent distance method. Contours were calculated at 5 degree intervals using ground conductivity values shown on the FCC's M-3 soil conductivity map. Tabulations of distances to groundwave contours and conductivity profiles are not included herein, but can be provided upon request.

Figure 6 depicts the entire daytime allocation picture of those affected stations. A further breakdown of each channel relationship follows along with corresponding maps depicting the pertinent contours.

CO-CHANNEL PROTECTION

As depicted on the map of Figure 6A, there is current overlap of the licensed WEEX 0.025 mV/m interfering contour with the 0.5 mV/m protected contours of WFAS and WKBO. Also, there is overlap of the licensed WEEX 0.5 mV/m protected contour with the 0.025 mV/m interfering contour of WFAS. The proposed overlap caused to

WFAS and WKBO will be reduced as the proposed 0.025 mV/m interfering contour of WEEX is entirely within the licensed 0.025 mV/m interfering contour. The overlap caused to WKBO will be entirely eliminated with the herein proposal. The proposed overlap that WEEX receives from WFAS will also be reduced. The instant proposal will not increase the received/caused overlap from/to WFAS and WKBO when compared to the overlap that exists with the licensed WEEX facility.

FIRST-ADJACENT CHANNEL PROTECTION

The map of Figure 6B depicts the 0.25 mV/m interfering and 0.5 mV/m protected contours of WEEX along with those of WIOV and WQFM. Overlap of the WEEX 0.25 mV/m interfering contour exists with the 0.5 mV/m protected contour of WIOV. The caused overlap to WIOV will be reduced with the proposal. There is no prohibited overlap between WEEX and WQFM.

Figure 6C depicts the daytime allocation with Class A station WGNV, Newburgh, New York. The WGNV 0.25 mV/m interfering contour currently overlaps the licensed WEEX 0.5 mV/m protected contour. The WEEX proposal will reduce the amount of received overlap from WGNV when compared to the amount of existing overlap.

SECOND-ADJACENT CHANNEL PROTECTION

The map of Figure 6D depicts the 5.0 mV/m interfering and protected contours of WEEX along with those of WPHT. No overlap currently exists between the stations nor is any overlap proposed.

NIGHTTIME ALLOCATION STUDY

The results of the nighttime allocation study are shown in Figure 7. Figure 7 contains a tabulation of the present and proposed RSS calculations for co-channel foreign stations that may be impacted by WEEX. The proposed nighttime facility of WEEX will not raise the 50% RSS limit of any foreign station.

ENVIRONMENTAL IMPACT

The proposal described herein does not involve high intensity lighting as specified under Section 1.1307(a)(8), nor will it result in human exposure to radio-frequency radiation in excess of the standards specified in Section 1.1307(b). The applicant has determined that under the provisions of Section 1.1306, the proposal is excluded from environmental processing because no new construction will occur.

RADIO-FREQUENCY IMPACT

On January 1, 1986, the FCC amended its Rules to implement the National Environmental Policy Act of 1969 (NEPA). This amendment established RF radiation protection guidelines to be used to determine if potentially harmful RF exposure is possible from an FCC-regulated transmission facility. Effective October 15, 1997, the FCC adopted revised guidelines and procedures for evaluating environmental effects of RF emissions. These revised guidelines incorporate two tiers of exposure limits based on whether exposure occurs in a “controlled” (occupational) situation or an “uncontrolled” (general population) situation. The FCC has also revised OET Bulletin

No. 65 entitled, “Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields,” to aid the radiation exposure analysis. This bulletin, as well as other current literature, provides detailed information for conducting an analysis including mathematical equations that can be used to determine compliance with the Commission’s guidelines.

CALCULATION METHODS

Verification of compliance with FCC specified guidelines for human exposure to RF radiation was obtained from OET Bulletin No. 65.

The proposed WEEX facility will operate on 1230 kHz with a daytime and nighttime power level of 1.0 kW. To determine distance to compliance with the guidelines, Tables 1 and 2 of Supplement A (Edition 97-01) to OET Bulletin 65 was used. A fence 3.0 meters from the base of the tower would be compliant with the radio-frequency energy requirements of the FCC regarding the occupational/controlled and the general population/uncontrolled MPE limits. Any existing fencing around the base of the tower will be expanded if necessary to meet the requirements.

It is submitted that the proposed WEEX station will not constitute a potential hazard to the quality of the human environment. Accordingly, the WEEX proposal, as described herein, should be categorically excluded from RF environmental processing under Section 1.1307(b) of the Rules.

OCCUPATIONAL SAFETY

Access to the area immediately surrounding the WEEX supporting tower base will be restricted to authorize maintenance personnel only. WEEX ensures protection to station personnel or tower contractors working in the vicinity of the tower. Procedures will be followed during times of service or maintenance of the transmission systems when necessary to avoid potentially harmful exposure to personnel.

CONCLUSION

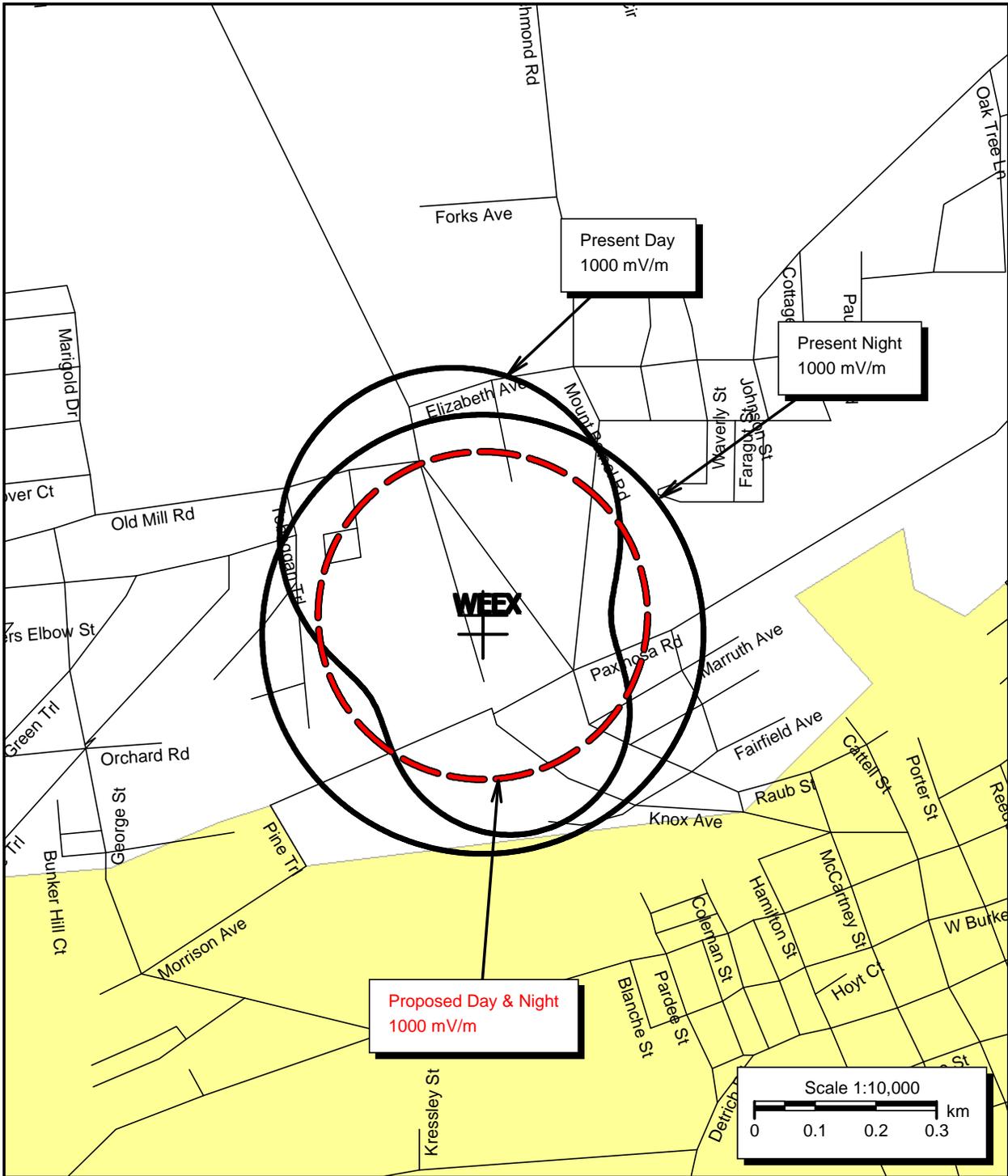
This statement and Section III of FCC Form 301 and the attached figures were prepared by me or under my direct supervision and are believed to be true and correct.

It is submitted that the proposed operation described herein complies with the technical standards of the Rules and Regulations of the Commission.

DATED: February 24, 2020



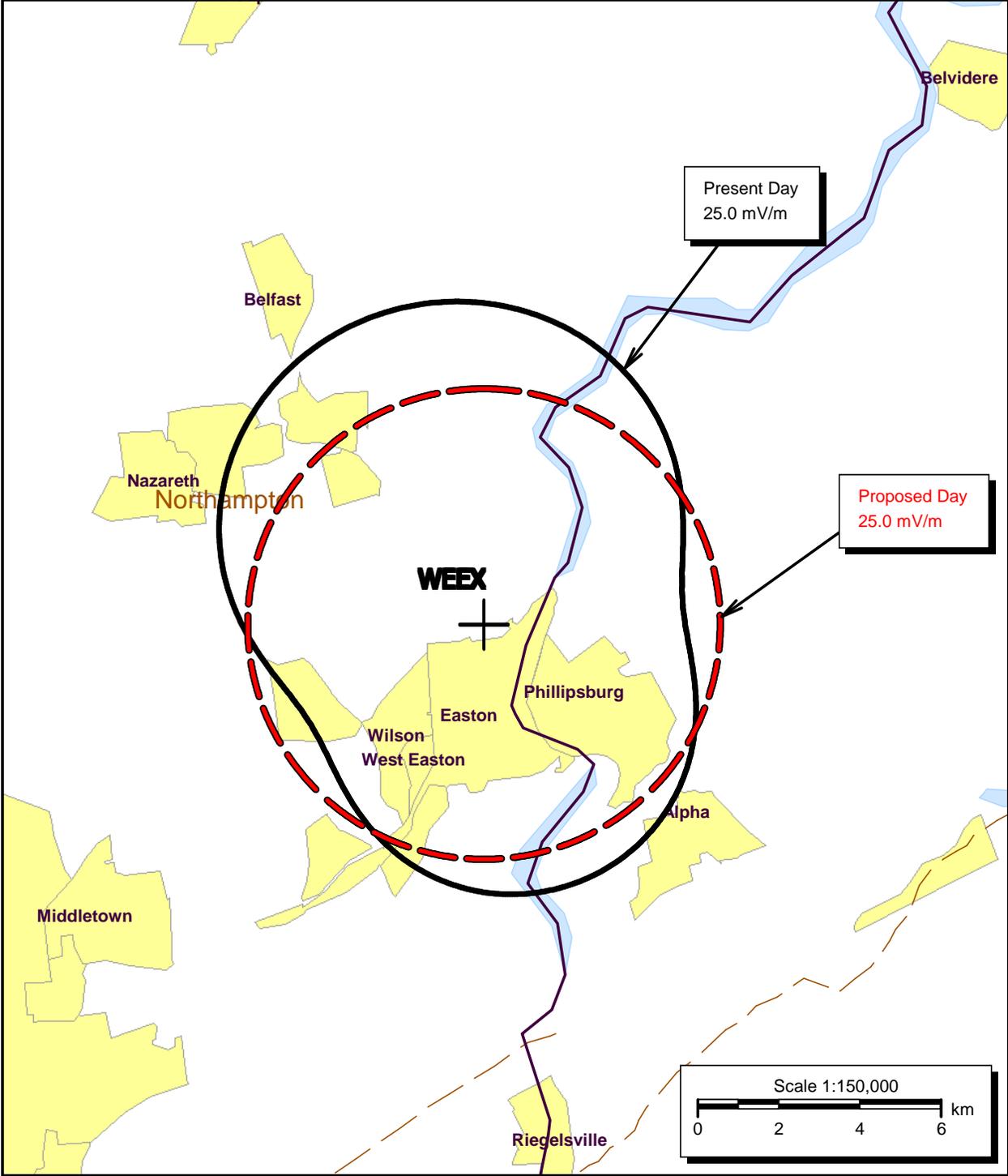
FIGURE 1



PRESENT AND PROPOSED 1000 MV/M
DAYTIME AND NIGHTTIME COVERAGE CONTOURS
WEEX - 1230 KHZ - EASTON, PENNSYLVANIA
PRESENT: 0.84 KW DAY/1.0 KW NIGHT - DA-D-U
PROPOSED: 1.0 KW DAY/1.0 KW NIGHT - ND-U
FEBRUARY, 2020



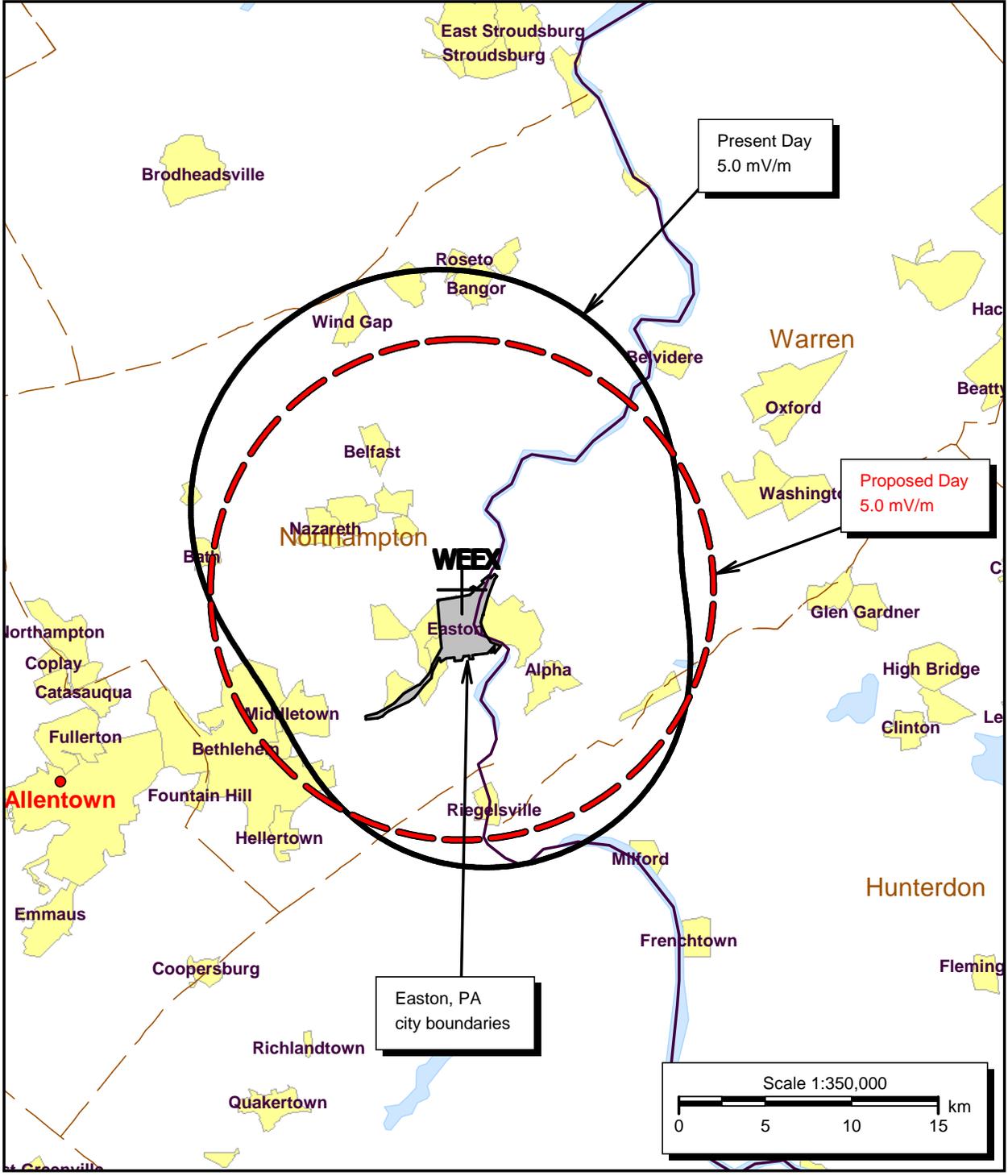
FIGURE 2



PRESENT AND PROPOSED 25 MV/M
DAYTIME COVERAGE CONTOURS
WEEX - 1230 KHZ - EASTON, PENNSYLVANIA
PRESENT: 0.84 KW DAY/1.0 KW NIGHT - DA-D-U
PROPOSED: 1.0 KW DAY/1.0 KW NIGHT - ND-U
FEBRUARY, 2020



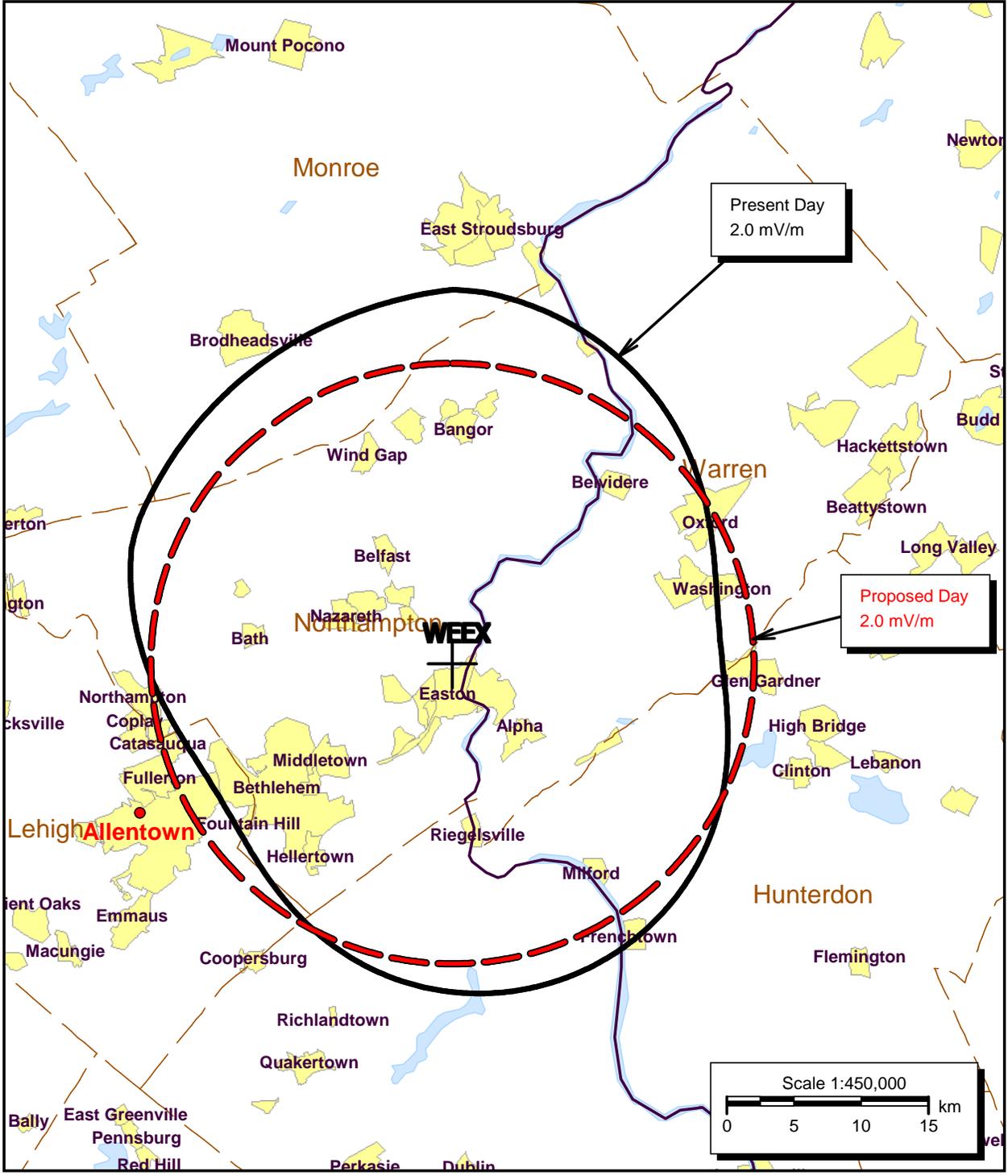
FIGURE 3



PRESENT AND PROPOSED 5.0 MV/M
DAYTIME COVERAGE CONTOURS
WEEX - 1230 KHZ - EASTON, PENNSYLVANIA
PRESENT: 0.84 KW DAY/1.0 KW NIGHT - DA-D-U
PROPOSED: 1.0 KW DAY/1.0 KW NIGHT - ND-U
FEBRUARY, 2020



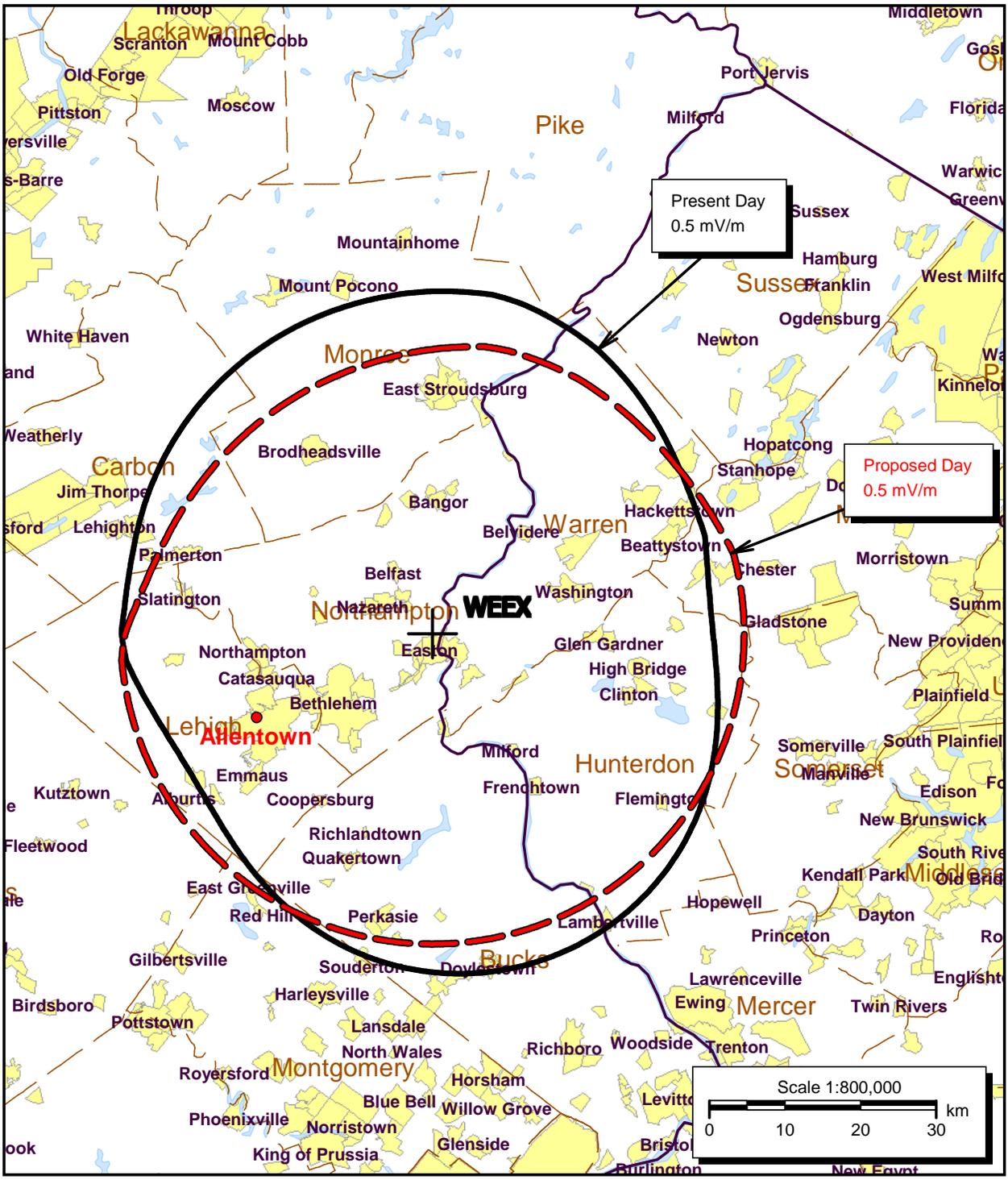
FIGURE 4



PRESENT AND PROPOSED 2.0 MV/M
DAYTIME COVERAGE CONTOURS
WEEX - 1230 KHZ - EASTON, PENNSYLVANIA
PRESENT: 0.84 KW DAY/1.0 KW NIGHT - DA-D-U
PROPOSED: 1.0 KW DAY/1.0 KW NIGHT - ND-U
FEBRUARY, 2020



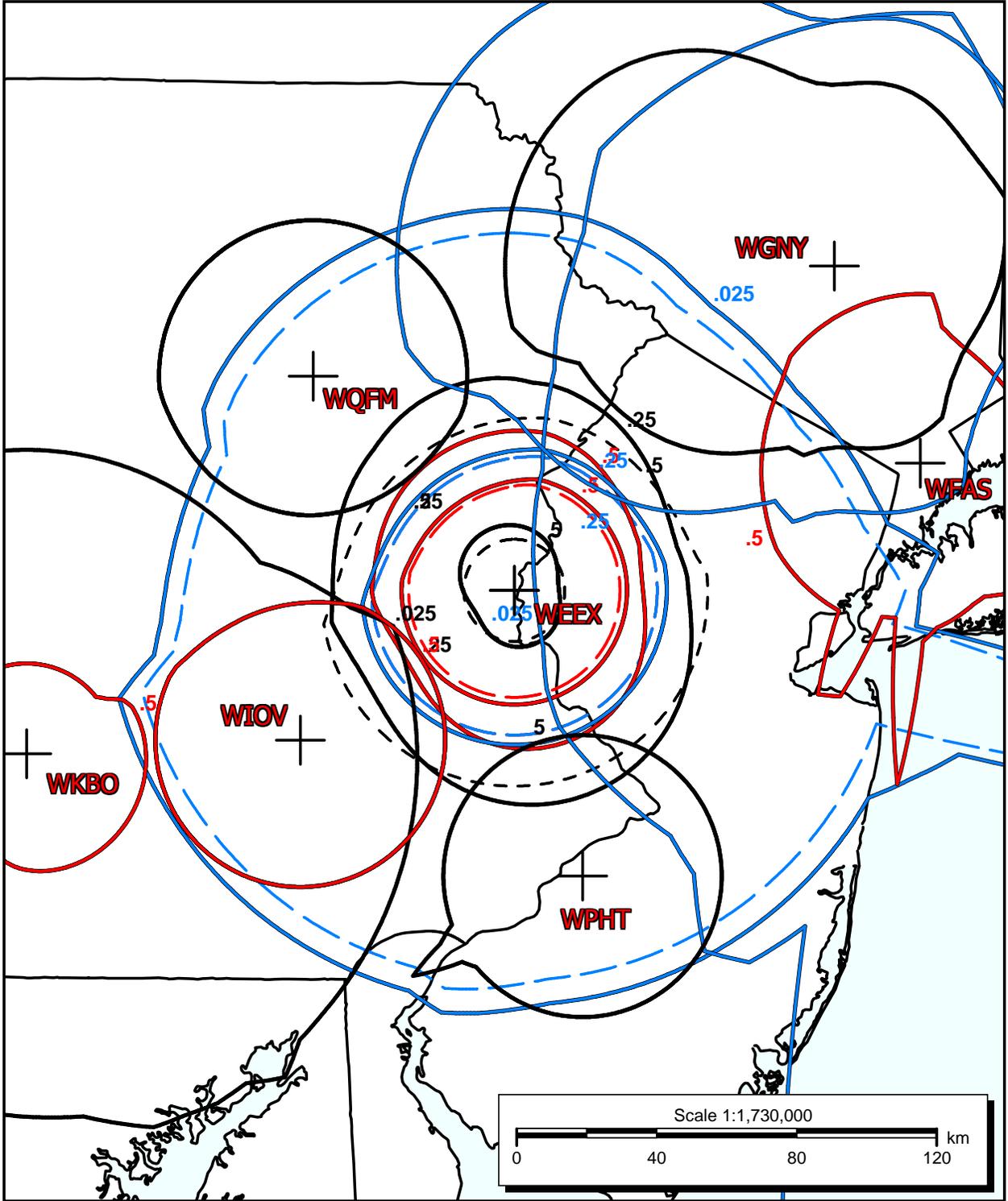
FIGURE 5



PRESENT AND PROPOSED 0.5 MV/M
DAYTIME COVERAGE CONTOURS
WEEX - 1230 KHZ - EASTON, PENNSYLVANIA
PRESENT: 0.84 KW DAY/1.0 KW NIGHT - DA-D-U
PROPOSED: 1.0 KW DAY/1.0 KW NIGHT - ND-U
FEBRUARY, 2020



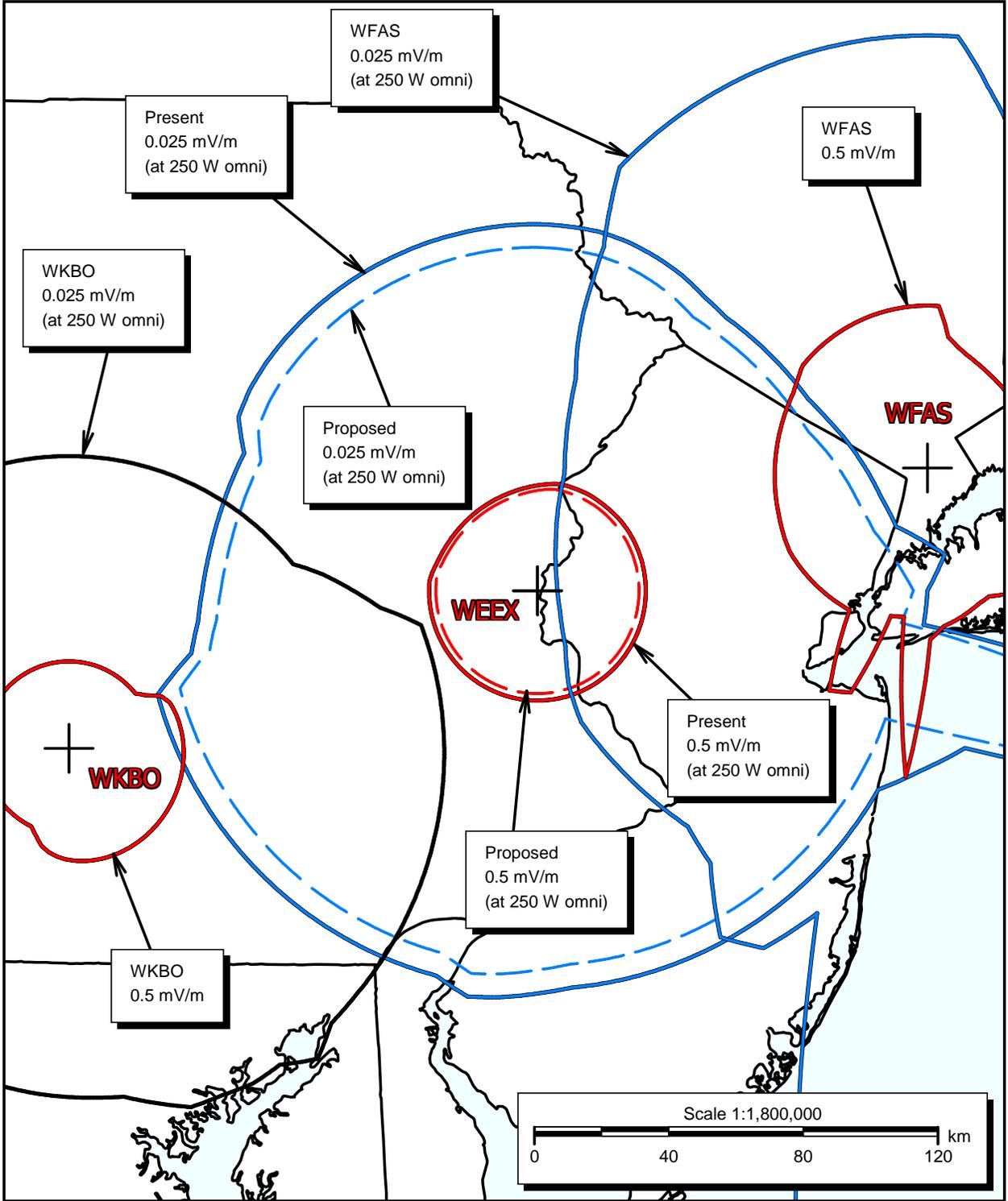
FIGURE 6



DAYTIME ALLOCATION STUDY
WEEX - 1230 KHZ - EASTON, PENNSYLVANIA
PRESENT: 0.84 KW DAY/1.0 KW NIGHT - DA-D-U
PROPOSED: 1.0 KW DAY/1.0 KW NIGHT - ND-U
FEBRUARY, 2020



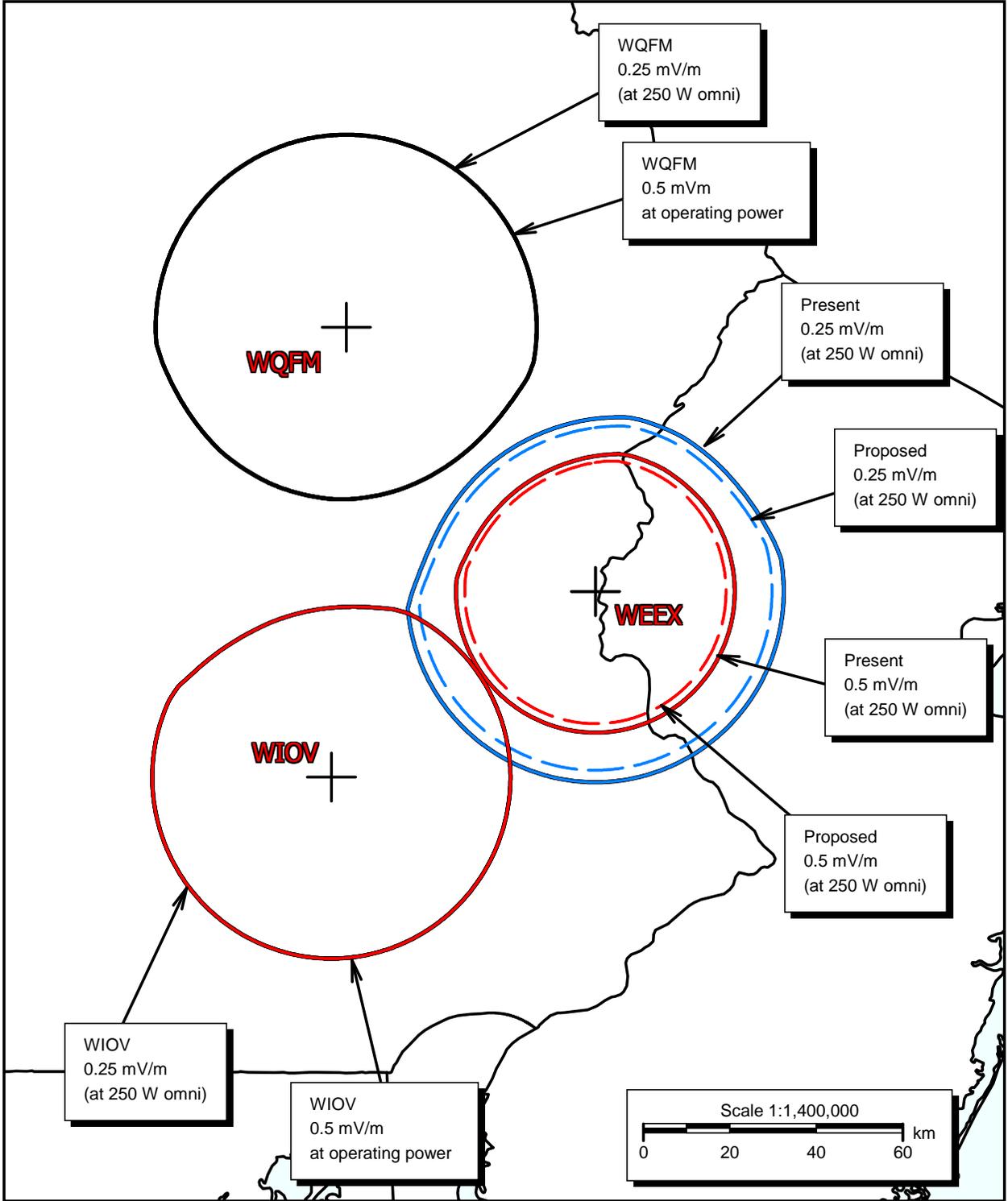
FIGURE 6A



DAYTIME ALLOCATION STUDY
CO-CHANNEL STATIONS
WEEX - 1230 KHZ - EASTON, PENNSYLVANIA
PRESENT: 0.84 KW DAY/1.0 KW NIGHT - DA-D-U
PROPOSED: 1.0 KW DAY/1.0 KW NIGHT - ND-U
FEBRUARY, 2020



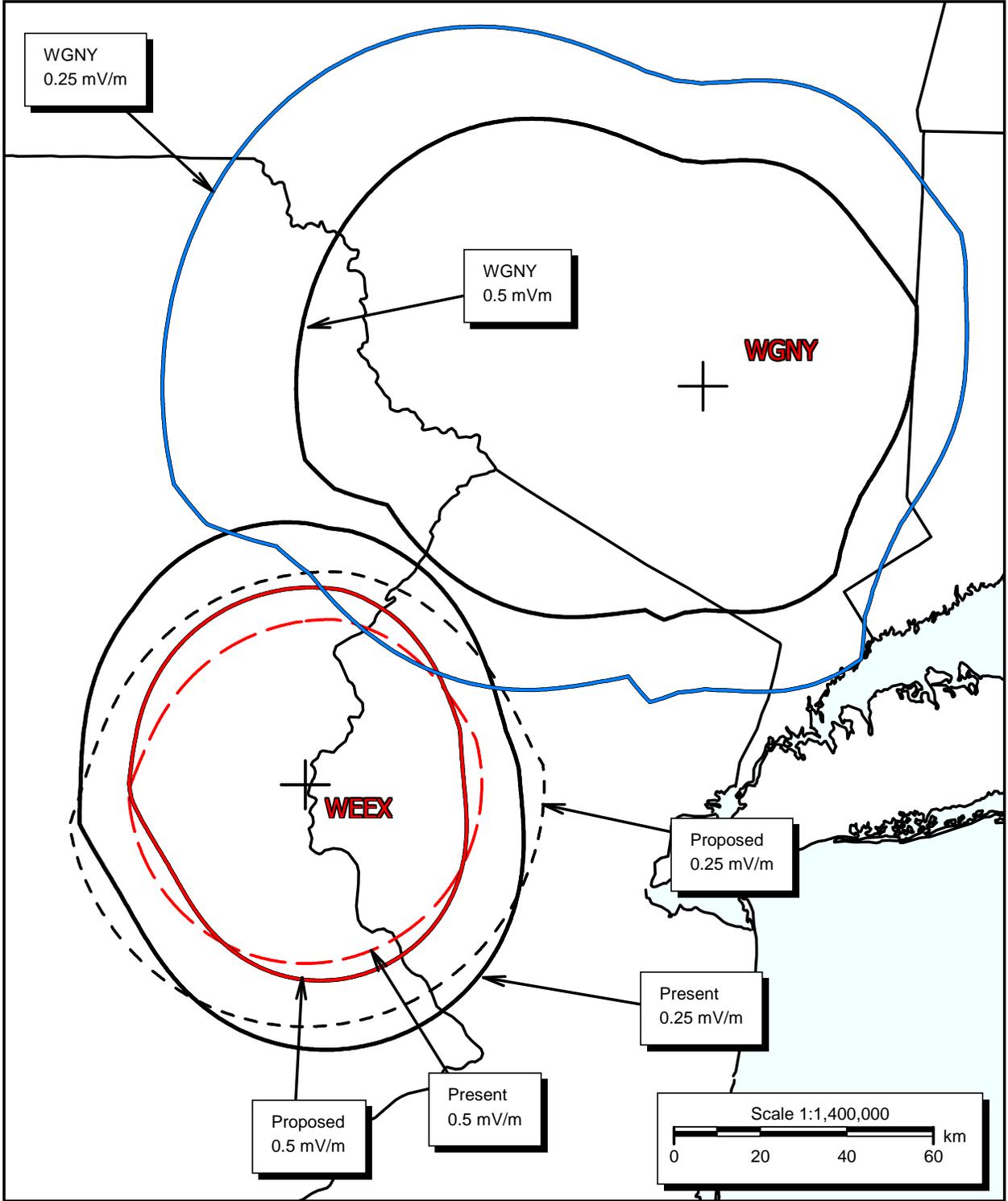
FIGURE 6B



DAYTIME ALLOCATION STUDY
FIRST ADJACENT-CHANNEL STATIONS
WEEX - 1230 KHZ - EASTON, PENNSYLVANIA
PRESENT: 0.84 KW DAY/1.0 KW NIGHT - DA-D-U
PROPOSED: 1.0 KW DAY/1.0 KW NIGHT - ND-U
FEBRUARY, 2020



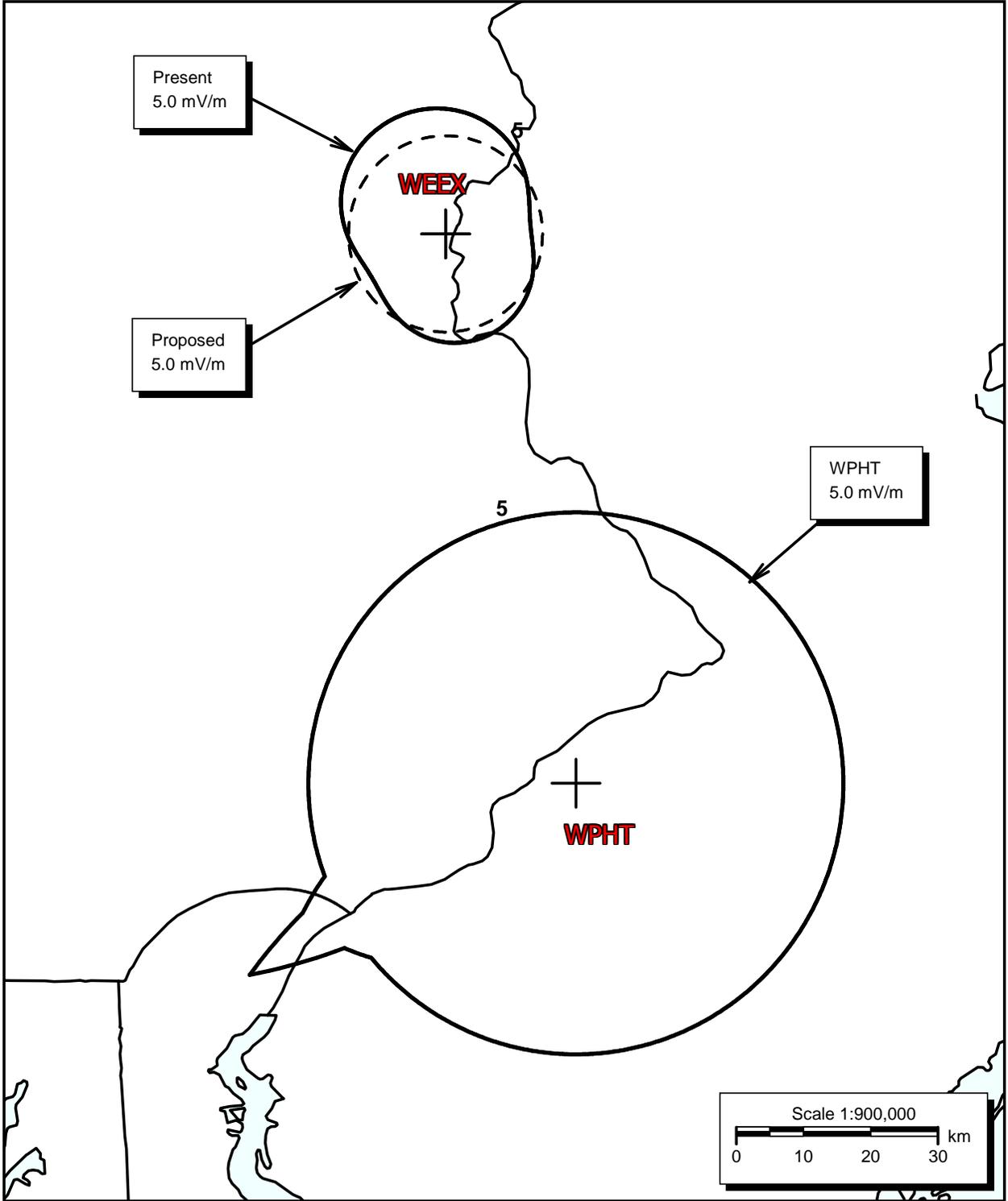
FIGURE 6C



DAYTIME ALLOCATION STUDY
FIRST ADJACENT-CHANNEL STATION - WGNY
WEEX - 1230 KHZ - EASTON, PENNSYLVANIA
PRESENT: 0.84 KW DAY/1.0 KW NIGHT - DA-D-U
PROPOSED: 1.0 KW DAY/1.0 KW NIGHT - ND-U
FEBRUARY, 2020



FIGURE 6D



DAYTIME ALLOCATION STUDY
SECOND-ADJACENT CHANNEL STATIONS
WEEX - 1230 KHZ - EASTON, PENNSYLVANIA
PRESENT: 0.84 KW DAY/1.0 KW NIGHT - DA-D-U
PROPOSED: 1.0 KW DAY/1.0 KW NIGHT - ND-U
FEBRUARY, 2020



NIGHTTIME ALLOCATION STUDY TO FOREIGN STATIONS

Protected Station: CKMP/A, 1230 kHz - MIDLAND, ON, CA
 Coordinates: 44-43-35 N, 079-53-38 W
 Standard: Canadian (Figure 4) [10%]

Current:

Proposed:

Call	Freq (kHz)	Limit (mV/m)	(%)
CJTT/A	1230	8.215	100.0
WTIV	1230	7.997	97.3
WSOO	1230	7.671	66.9
WECK	1230	7.509	54.4
----- 50% -----			
WENY	1230	7.509	47.8
WTKG	1230	7.490	43.0
WYTS	1230	7.358	38.8
*WEEX	1230	7.330	36.0
WFAS	1230	7.288	33.7
WBET	1230	7.161	31.3
NEW STE. AG1	1230	7.082	29.6
WBPZ	1230	7.079	28.3
WCRO	1230	7.016	27.0
WMPC	1230	6.985	26.0
----- 25% -----			
WMML	1230	6.743	24.3
WMQU	1230	6.574	23.0
WJOY	1230	6.418	21.9
WHUC	1230	6.354	21.1
WCMD	1230	6.287	20.5
WNAW	1230	6.215	19.8
WVNT	1230	6.094	19.1
WTSV	1230	6.037	18.5
WNEZ	1230	5.954	18.0
WJOB	1230	5.923	17.6
WIXT	1230	5.822	17.0
CJLP/A	1230	5.812	16.8
WFER	1230	5.779	16.4
WCWA	1230	5.731	16.1
WSAL	1230	5.684	15.7
WCLO	1230	5.557	15.2
CHVD/A	1230	5.530	14.9
WJBC	1230	5.491	14.7
WNEB	1230	5.479	14.5
WFVA	1230	5.369	14.0

Call	Freq (kHz)	Limit (mV/m)	(%)
CJTT/A	1230	8.215	100.0
WTIV	1230	7.997	97.3
WSOO	1230	7.671	66.9
WECK	1230	7.509	54.4
----- 50% -----			
WENY	1230	7.509	47.8
WTKG	1230	7.490	43.0
WYTS	1230	7.358	38.8
WFAS	1230	7.288	35.8
WBET	1230	7.161	33.1
NEW STE. AG1	1230	7.082	31.1
WBPZ	1230	7.079	29.7
WCRO	1230	7.016	28.2
WMPC	1230	6.985	27.0
WMML	1230	6.743	25.2
----- 25% -----			
WMQU	1230	6.574	23.8
WJOY	1230	6.418	22.6
WHUC	1230	6.354	21.8
WCMD	1230	6.287	21.1
*WEEX-PRO	1230	6.236	20.4
WNAW	1230	6.215	20.0
WVNT	1230	6.094	19.2
WTSV	1230	6.037	18.7
WNEZ	1230	5.954	18.1
WJOB	1230	5.923	17.7
WIXT	1230	5.822	17.1
CJLP/A	1230	5.812	16.9
WFER	1230	5.779	16.5
WCWA	1230	5.731	16.2
WSAL	1230	5.684	15.8
WCLO	1230	5.557	15.3
CHVD/A	1230	5.530	15.0
WJBC	1230	5.491	14.8
WNEB	1230	5.479	14.6
WFVA	1230	5.369	14.1

Protected Station: CJSA/A, 1230 kHz - STE. AGATHE DES MONT, QC, CA
 Coordinates: 46-04-34 N, 074-19-20 W
 Standard: Canadian (Figure 4) [10%]

Current:

Proposed:

Call	Freq (kHz)	Limit (mV/m)	(%)
CJLP/A	1230	8.777	100.0
WMML	1230	8.271	94.2
CHVD/A	1230	8.083	67.0
WTSV	1230	7.910	54.4
----- 50% -----			
WNAW	1230	7.503	45.3
WFAS	1230	7.423	40.8
WMOU	1230	7.400	37.7
*WEEX	1230	7.295	34.7
WHUC	1230	7.221	32.5
CJTT/A	1230	7.177	30.7
WENY	1230	7.106	29.0
CKMP/A	1230	7.023	27.6
WNEZ	1230	6.987	26.4
----- 25% -----			
WNEB	1230	6.806	24.9
WBLQ	1230	6.526	23.1
WIXT	1230	6.466	22.3
WJOY	1230	6.241	21.0
WBPZ	1230	6.140	20.3
WTIV	1230	6.082	19.7
WECK	1230	5.596	17.7
WGUY	1230	5.594	17.5
WCRO	1230	5.536	17.0
WSOO	1230	5.298	16.1
WYTS	1230	4.973	14.9
WESX	1230	4.948	14.6
WTKG	1230	4.945	14.5
WCMD	1230	4.907	14.2
WBVP	1230	4.690	13.4
WCMC	1230	4.679	13.3
WMPC	1230	4.453	12.5
WFVA	1230	4.368	12.2
WBET	1230	4.325	12.0
CHYK/A	1230	4.275	11.8
WKBO	1230	4.152	11.3

Call	Freq (kHz)	Limit (mV/m)	(%)
CJLP/A	1230	8.777	100.0
WMML	1230	8.271	94.2
CHVD/A	1230	8.083	67.0
WTSV	1230	7.910	54.4
----- 50% -----			
WNAW	1230	7.503	45.3
WFAS	1230	7.423	40.8
WMOU	1230	7.400	37.7
WHUC	1230	7.221	34.4
CJTT/A	1230	7.177	32.3
WENY	1230	7.106	30.4
CKMP/A	1230	7.023	28.8
WNEZ	1230	6.987	27.5
WNEB	1230	6.806	25.8
----- 25% -----			
WBLQ	1230	6.526	24.0
WIXT	1230	6.466	23.1
WJOY	1230	6.241	21.7
*WEEX-PRO	1230	6.163	20.9
WBPZ	1230	6.140	20.4
WTIV	1230	6.082	19.8
WECK	1230	5.596	17.9
WGUY	1230	5.594	17.6
WCRO	1230	5.536	17.1
WSOO	1230	5.298	16.2
WYTS	1230	4.973	15.0
WESX	1230	4.948	14.7
WTKG	1230	4.945	14.6
WCMD	1230	4.907	14.3
WBVP	1230	4.690	13.5
WCMC	1230	4.679	13.4
WMPC	1230	4.453	12.6
WFVA	1230	4.368	12.3
WBET	1230	4.325	12.1
CHYK/A	1230	4.275	11.8
WKBO	1230	4.152	11.4

Protected Station: CJLP/A, 1230 kHz - DISRAELI, QC, CA
 Coordinates: 45-54-28 N, 071-20-33 W
 Standard: Canadian (Figure 4) [10%]

Current:

Proposed:

Call	Freq (kHz)	Limit (mV/m)	Limit (%)
NEW STE. AG1230	1230	9.012	100.0
WMOU	1230	8.824	97.9
WTSV	1230	8.339	66.1
CHVD/A	1230	8.177	54.0
----- 50% -----			
WMML	1230	8.020	46.6
WNAW	1230	7.535	39.7
WFAS	1230	7.413	36.3
WNEB	1230	7.210	33.2
WNEZ	1230	7.165	31.3
*WEEX	1230	7.084	29.5
WHUC	1230	7.050	28.1
WGUY	1230	6.879	26.4
WBLQ	1230	6.842	25.4
----- 25% -----			
WENY	1230	6.566	23.6
WJOY	1230	6.422	22.5
WIXT	1230	5.953	20.3
CJTT/A	1230	5.836	19.5
CKMP/A	1230	5.726	18.8
WBPZ	1230	5.404	17.4
WESX	1230	5.044	16.0
WTIV	1230	4.990	15.7
WECK	1230	4.738	14.7
WCRO	1230	4.681	14.3
WCMC	1230	4.506	13.7
WCMD	1230	4.167	12.5
ZBM 1-A	1230	4.084	12.2
WBVP	1230	4.077	12.1
WFVA	1230	3.862	11.3
WSOO	1230	3.834	11.2
WYTS	1230	3.801	11.0
WRBS	1230	3.773	10.9
WKBO	1230	3.729	10.7
WTKG	1230	3.530	10.0

Call	Freq (kHz)	Limit (mV/m)	Limit (%)
NEW STE. AG1230	1230	9.012	100.0
WMOU	1230	8.824	97.9
WTSV	1230	8.339	66.1
CHVD/A	1230	8.177	54.0
----- 50% -----			
WMML	1230	8.020	46.6
WNAW	1230	7.535	39.7
WFAS	1230	7.413	36.3
WNEB	1230	7.210	33.2
WNEZ	1230	7.165	31.3
WHUC	1230	7.050	29.4
WGUY	1230	6.879	27.5
WBLQ	1230	6.842	26.3
----- 25% -----			
WENY	1230	6.566	24.4
WJOY	1230	6.422	23.2
WIXT	1230	5.953	21.0
*WEEX-PRO	1230	5.837	20.1
CJTT/A	1230	5.836	19.7
CKMP/A	1230	5.726	19.0
WBPZ	1230	5.404	17.6
WESX	1230	5.044	16.2
WTIV	1230	4.990	15.8
WECK	1230	4.738	14.8
WCRO	1230	4.681	14.5
WCMC	1230	4.506	13.8
WCMD	1230	4.167	12.6
ZBM 1-A	1230	4.084	12.3
WBVP	1230	4.077	12.1
WFVA	1230	3.862	11.4
WSOO	1230	3.834	11.3
WYTS	1230	3.801	11.1
WRBS	1230	3.773	10.9
WKBO	1230	3.729	10.7
WTKG	1230	3.530	10.1

Protected Station: CJTT/A, 1230 kHz - NEW LISKEARD, ON, CA
 Coordinates: 47-29-36 N, 079-36-44 W
 Standard: Canadian (Figure 4) [10%]

Current:

Proposed:

Call	Freq (kHz)	Limit (mV/m)	Limit (%)
CKMP/A	1230	8.243	100.0
WSOO	1230	7.797	94.5
CJSA/A	1230	7.284	64.1
WTKG	1230	6.820	50.5
----- 50% -----			
CHVD/A	1230	6.616	43.7
CHYK/A	1230	6.457	39.1
WENY	1230	6.392	36.0
WJOY	1230	6.162	32.7
WFAS	1230	6.107	30.8
WTIV	1230	6.099	29.4
*WEEX	1230	6.036	27.9
WMML	1230	5.982	26.6
CJLP/A	1230	5.975	25.7
----- 25% -----			
WBET	1230	5.839	24.3
WMQU	1230	5.827	23.6
WFER	1230	5.735	22.6
WYTS	1230	5.697	21.9
WMPC	1230	5.613	21.0
WECK	1230	5.523	20.3
WBPZ	1230	5.386	19.4
WTSV	1230	5.368	18.9
WNAW	1230	5.300	18.4
WHUC	1230	5.278	18.0
CJLB/A	1230	5.269	17.7
WCRO	1230	5.138	17.0
WXCO	1230	5.018	16.3
WIXT	1230	5.000	16.1
WNEZ	1230	4.859	15.4
WMOU	1230	4.804	15.1
WJOB	1230	4.734	14.7
WBVP	1230	4.710	14.4
WNEB	1230	4.613	14.0
WCLO	1230	4.604	13.8
KWNO	1230	4.586	13.6
WCWA	1230	4.468	13.2
WCMD	1230	4.459	13.0
WBLQ	1230	4.283	12.4

Call	Freq (kHz)	Limit (mV/m)	Limit (%)
CKMP/A	1230	8.243	100.0
WSOO	1230	7.797	94.5
CJSA/A	1230	7.284	64.1
WTKG	1230	6.820	50.5
----- 50% -----			
CHVD/A	1230	6.616	43.7
CHYK/A	1230	6.457	39.1
WENY	1230	6.392	36.0
WJOY	1230	6.162	32.7
WFAS	1230	6.107	30.8
WTIV	1230	6.099	29.4
WMML	1230	5.982	27.6
CJLP/A	1230	5.975	26.6
WBET	1230	5.839	25.1
----- 25% -----			
WMQU	1230	5.827	24.3
WFER	1230	5.735	23.2
WYTS	1230	5.697	22.5
WMPC	1230	5.613	21.6
WECK	1230	5.523	20.8
WBPZ	1230	5.386	19.8
WTSV	1230	5.368	19.4
WNAW	1230	5.300	18.8
WHUC	1230	5.278	18.4
CJLB/A	1230	5.269	18.0
WCRO	1230	5.138	17.3
WXCO	1230	5.018	16.7
WIXT	1230	5.000	16.4
WNEZ	1230	4.859	15.7
WMOU	1230	4.804	15.3
WJOB	1230	4.734	14.9
*WEEX-PRO	1230	4.726	14.7
WBVP	1230	4.710	14.5
WNEB	1230	4.613	14.1
WCLO	1230	4.604	13.9
KWNO	1230	4.586	13.7
WCWA	1230	4.468	13.2
WCMD	1230	4.459	13.1
WBLQ	1230	4.283	12.5

Protected Station: CHVD/A, 1230 kHz - DOLBEAU, QC, CA
 Coordinates: 48-51-48 N, 072-15-06 W
 Standard: Canadian (Figure 4) [10%]

Current:

Proposed:

Call	Freq (kHz)	Limit (mV/m)	(%)
CJLP/A	1230	7.955	100.0
NEW STE. AG1230	1230	7.943	99.8
WJOY	1230	6.533	58.1
----- 50% -----			
CJTT/A	1230	6.331	48.6
WMML	1230	6.168	42.6
WTSV	1230	6.108	38.8
WMOU	1230	6.084	36.0
WFAS	1230	5.901	32.9
WNAW	1230	5.636	29.8
CKMP/A	1230	5.318	26.9
WGUY	1230	5.303	25.9
WNEB	1230	5.282	25.0
----- 25% -----			
*WEEX	1230	5.280	24.2
WHUC	1230	5.265	23.5
WENY	1230	5.200	22.6
WNEZ	1230	5.199	22.0
WBLQ	1230	4.831	20.0
WIXT	1230	4.717	19.1
WESX	1230	4.277	17.0
WSOO	1230	4.188	16.4
CHYK/A	1230	4.102	15.9
WBPZ	1230	3.968	15.2
WECK	1230	3.920	14.8
WTIV	1230	3.898	14.6
CFLN/A	1230	3.888	14.4
WCRO	1230	3.392	12.4
WTKG	1230	3.292	11.9
WBVP	1230	3.243	11.7
WMPC	1230	2.964	10.6
WYTS	1230	2.958	10.5
WMQU	1230	2.927	10.3
WCMD	1230	2.915	10.3
WCMC	1230	2.890	10.1

Call	Freq (kHz)	Limit (mV/m)	(%)
CJLP/A	1230	7.955	100.0
NEW STE. AG1230	1230	7.943	99.8
WJOY	1230	6.533	58.1
----- 50% -----			
CJTT/A	1230	6.331	48.6
WMML	1230	6.168	42.6
WTSV	1230	6.108	38.8
WMOU	1230	6.084	36.0
WFAS	1230	5.901	32.9
WNAW	1230	5.636	29.8
CKMP/A	1230	5.318	26.9
WGUY	1230	5.303	25.9
WNEB	1230	5.282	25.0
----- 25% -----			
WHUC	1230	5.265	24.2
WENY	1230	5.200	23.2
WNEZ	1230	5.199	22.6
WBLQ	1230	4.831	20.5
WIXT	1230	4.717	19.6
WESX	1230	4.277	17.4
WSOO	1230	4.188	16.8
CHYK/A	1230	4.102	16.2
*WEEX-PRO	1230	4.063	15.9
WBPZ	1230	3.968	15.3
WECK	1230	3.920	14.9
WTIV	1230	3.898	14.7
CFLN/A	1230	3.888	14.5
WCRO	1230	3.392	12.5
WTKG	1230	3.292	12.0
WBVP	1230	3.243	11.8
WMPC	1230	2.964	10.7
WYTS	1230	2.958	10.6
WMQU	1230	2.927	10.4
WCMD	1230	2.915	10.3
WCMC	1230	2.890	10.2

Protected Station: CFGN/ , 1230 kHz - PORT AUX BASQUES, NF, CA
 Coordinates: 47-35-08 N, 059-07-22 W
 Standard: Canadian (Figure 4) [10%]

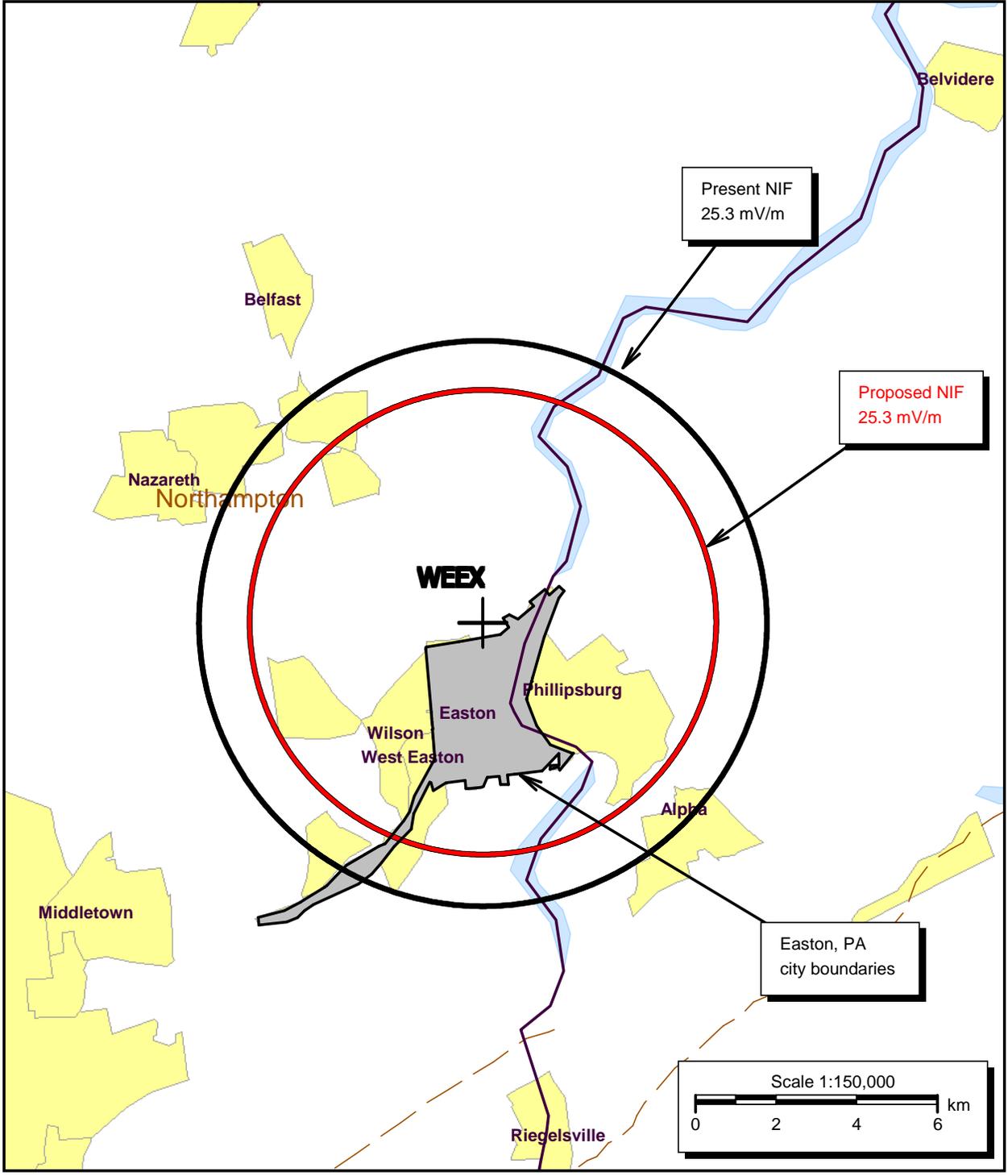
Current:

Proposed:

Call	Freq (kHz)	Limit (mV/m)	(%)
CFLN/A	1230	5.966	100.0
CJLP/A	1230	4.085	68.4
WGUY	1230	3.993	55.2
----- 50% -----			
CHVD/A	1230	3.972	48.0
WMOU	1230	3.354	36.5
WJOY	1230	3.115	31.9
ZBM 1-A	1230	3.029	29.5
WTSV	1230	2.999	28.0
NEW STE. AG1230	1230	2.856	25.7
----- 25% -----			
WNEB	1230	2.824	24.6
WFAS	1230	2.736	23.1
WBLQ	1230	2.635	21.7
WESX	1230	2.626	21.1
WMML	1230	2.614	20.6
WNEZ	1230	2.599	20.0
WNAW	1230	2.558	19.3
WHUC	1230	2.257	16.7
*WEEX	1230	2.110	15.4
WIXT	1230	1.758	12.7
WENY	1230	1.671	12.0
CJTT/A	1230	1.429	10.2

Call	Freq (kHz)	Limit (mV/m)	(%)
CFLN/A	1230	5.966	100.0
CJLP/A	1230	4.085	68.4
WGUY	1230	3.993	55.2
----- 50% -----			
CHVD/A	1230	3.972	48.0
WMOU	1230	3.354	36.5
WJOY	1230	3.115	31.9
ZBM 1-A	1230	3.029	29.5
WTSV	1230	2.999	28.0
NEW STE. AG1230	1230	2.856	25.7
----- 25% -----			
WNEB	1230	2.824	24.6
WFAS	1230	2.736	23.1
WBLQ	1230	2.635	21.7
WESX	1230	2.626	21.1
WMML	1230	2.614	20.6
WNEZ	1230	2.599	20.0
WNAW	1230	2.558	19.3
WHUC	1230	2.257	16.7
WIXT	1230	1.758	12.8
WENY	1230	1.671	12.1
*WEEX-PRO	1230	1.562	11.2
CJTT/A	1230	1.429	10.2

FIGURE 8



PRESENT AND PROPOSED NIGHTTIME INTERFERENCE-FREE COVERAGE CONTOURS
WEEX - 1230 KHZ - EASTON, PENNSYLVANIA
PRESENT: 0.84 KW DAY/1.0 KW NIGHT - DA-D-U
PROPOSED: 1.0 KW DAY/1.0 KW NIGHT - ND-U
FEBRUARY, 2020

