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ENGINEERING EXHIBIT EE-1:

SORENSEN PACIFIC BROADCASTING, INC.
AGANA, GUAM

Ch. 22n NEW LPTV APPLICATION

July 19, 2001

ENGINEERING STATEMENT IN SUPPORT OF
AN APPLICATION FOR A
NEW LPTV STATION

File No. BNPTTL-20000801ADB - Facility ID: 125527

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Declaration

I, John J. Mullaney, declare and state that I am a graduate electrical engineer with a B.E.E. and my qualifications are known to the Federal Communications Commission, and that I am an principal engineer in the firm of Mullaney Engineering, Inc., and that I have provided engineering services in the area of telecommunications since 1977. My qualifications as an expert in radio engineering are a matter of record with the Federal Communications Commission.

The firm of Mullaney Engineering, Inc., has been requested by Sorensen Pacific Broadcasting, Inc., to prepare the instant engineering exhibit in support of an Application for Construction Permit for new LPTV station at Agana, Guam (FCC Facility ID Number: 125527).

All facts contained herein are true of my own knowledge except where stated to be on information or belief, and as to those facts, I believe them to be true. I declare under penalty of perjury that the foregoing is true and correct.

/s/ John J. Mullaney

John J. Mullaney, Consulting Engineer

Executed on the 19th day of July 2001.

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NARRATIVE STATEMENT:

I. General:

This engineering statement has been prepared on behalf of Sorensen Pacific Broadcasting, Inc. The purpose of this statement is to request a Construction Permit to build a new LPTV facility on Channel 22n at Agana, Guam. The proposed site is beyond the 121 kilometer geographical restriction to any of the cities contained in the notice announcing the LPTV filing window. This is one of two applications being filed by this applicant.

The application is not a major environmental action, as defined by Section 1.1307 of the Commission's Rules. The proposed facility is in full compliance with both the "controlled" & "un-controlled" FCC Radiation Guidelines. Since the proposed LPTV facility contributes less than 5% of the "controlled" standard at ground level it is **categorically excluded** from further consideration.

Compliance with the FCC's interference criteria was determined through the use of a modified version of the FCC's LPONE computer program.. The modified program incorporates the revised NTSC taboo's and the appropriate D/U ratio's for protection of DTV facilities. In addition, the program also includes the discrimination provided

by the directional receive antenna described in OET Bulletin 69 (July 1997). The applicant requests a waiver of the rules to permit it to use these additional techniques to demonstrate a lack of interference.

Answers to questions contained in F.C.C. Form 301, Section II, are incorporated in the following paragraphs and figures.

II. Engineering Discussion:

A. Proposed Location:

Sorensen proposes to mount on the existing tower of KZGZ FM which has 1008507 as its Antenna Structure Registration Number.

Figure 1 is a map showing the general area proposed to be served.

B. Antenna System and Tower:

The antenna will be an "off the shelf" Jampro JA/LS-DO-8 UHF antenna with a "skull" pattern and its main lobe N-225-E. Based upon prior information concerning this antenna pattern in the FCC's data base the rotation should be 225 degrees.

Figure 3 is a sketch of the proposed tower.

C. Transmitter:

Sorensen will use a transmitter rated at 100 watt. The transmitter complies with the frequency tolerance as specified part 74.761 of the Commission's Rules.

The transmitters operating frequency will be checked with a calibrated frequency counter which will use WWV as a reference.

D. Proposed Coverage:

The site has a direct line of sight view of the city of license and the surrounding built up area.

E. Proposed Operation:

Sorensen will fully comply with section 74.734 of the rules concerning "Attended and unattended operation". The existing equipment is so designed that it can be controlled to shut down in the absence of base band video and/or audio signals at the transmitter input. The equipment will be secured in a locked enclosure or structure to prevent access to unauthorized persons.

Based on past performance of the existing equipment the probability of spurious radiations is highly unlikely. The system, however, will be checked on a regular basis to determine full compliance with the Commission Rules.

F. Other Services in Area:

Based on the type of transmitter proposed, no intermodulation problems with existing transmitting facilities would be expected. In the unlikely event some problems would occur, Sorensen will correct such cases in accordance with the Commission's rules.

There are no known AM Broadcast Stations within 3.2 kilometers of the proposed site.

G. Environmental Assessment Statement:

Sorensen believes its proposal will not significantly affect the environment since it does not meet any of the criteria specified in Section 1.1307 of the rules. Since an existing tower will be used with no change in overall height the only remaining environmental issue is R.F. Exposure. As will be shown, the proposed LPTV contributes less than 5% of the "controlled" standard at ground level and, therefore, it is **categorically excluded** from further consideration. Specifically the proposed facility:

1) Will NOT involve the exposure of workers or the general public to levels of Radio Frequency radiation in excess of the guidelines recommended by the FCC - OET Bulletin 65 (August 25, 1997).

The following is a more detailed discussion of this protection standard:

A. National Environmental Policy Act of 1969:

In 1969, Congress enacted the National Environmental Policy Act (NEPA), which requires the FCC to evaluate the potential environmental significance of the facilities it regulates and authorizes. Human exposure to Radio Frequency (RF) radiation had been identified as an issue that the FCC must consider.

Beginning with the filing of applications after January 1, 1986, broadcast stations were required to "certify compliance" with FCC prescribed guidelines on human exposure to RF radiation. The FCC standard was based upon the American National Standards Institute's (ANSI) RF radiation protection guides (ANSI C95.1-1982). These exposure limits are expressed in terms of milli-watts per square centimeter.

In October 1997, the FCC implemented a two tier evaluation criteria utilizing recommendations of the National Council on Radiation Protection and Measurement (NCRP). The "controlled" tier involves areas which have restricted access while the "un-controlled" tier involves areas which have unrestricted access. The Maximum Permissible Exposure (MPE) limits for "controlled" areas are the same as adopted in 1985, while the "un-controlled" limits for FM and TV frequencies are one-fifth or 20% of the limits for "controlled" areas.

These exposure limits are time-averaged over any six minute period and vary depending upon the frequency involved. The following are the Maximum Permissible Exposure (MPE) limits for "controlled" areas:

Frequency Range (MHz)	**Power Density (mW/sq.cm)**
0.3 to 3	100 AM
3 to 30	$900/(Freq^2)$
30 to 300	1.0 VHF TV & FM
300 to 1,500	Freq/300 UHF TV
1500 to 100,000	5.0

Sorensen recognizes that compliance with the above criteria at sites involving multiple AM, FM and/or TV facilities is based upon the contributions of all such facilities. Although other transmission facilities operate from this same site the proposed LPTV facility is not required to conduct a complete analysis since it contributes less than 5% of the "controlled" standard at ground level and therefore, it is **categorically excluded** from further consideration.

Exposure from TV signals is determined by the following formula:

$$D = \frac{SQRT(F2 * [0.4 * VERP + AERP])}{1.667 * SQRT(PD) * 3.2808}$$

Where:

D = the closest distance in feet that a human should come to an operating antenna (to obtain feet multiply by 3.2808)
F = typical relative field factor in downward direction (F = 1 is worst case main lobe)
VERP = peak Visual ERP in watts (above a dipole)
AERP = Aural ERP in watts (above a dipole)
PD = highest Power Density in milli-watts/cm2
SQRT = Square Root
Freq = Frequency in mega-cycles

The vertical radiation pattern of the TV antenna specified in this application is very narrow and, therefore, the power density as seen by an observer on the ground near the base of the tower will be less than 20 percent of the total field.

The application of the above equation (assuming the maximum field strength), in our case, for a frequency of 518 to 524 MHz results in a minimum distance of 7.5 meters (25 feet) from the antenna based upon an "un-controlled" power density of 0.35 mW/cm.sq. Inasmuch as the lowest element on the proposed antenna will be approximately 19.8 meters (65 feet) above ground level, it is self-evident that no hazard from radiation will exist. At 2 meters (6.6 feet) above ground level the proposed facility will contribute 2.0% of the ANSI "controlled" standard and, therefore, it is **categorically excluded** from further consideration since it contributes less than 5% of the "controlled" standard at ground level. The

applicant will re-evaluate the conditions prior to starting operation to insure safety.

Based upon the above, the applicant believes its operation will not have a significant effect on the environment.

The tower will be surrounded by a locked fence to limit access.

Workers employed to climb the tower or work in a potential overexposure location will not be permitted to enter the work area until cleared by the station manager or other responsible person. Appropriate warning signs will be posted to ensure safety. In addition, the applicant will establish and enforce work rules and safety procedures applicable in a potential over-exposure area. The rules will establish how close a worker can get to the antenna when it is operating at normal power and specify the power reduction required in order to make other locations safe. It is recognized that maintenance or installation work on or near the antenna may require the station to completely shutdown or switch temporarily to an auxiliary antenna or an auxiliary transmitter site. All employees, contract and other persons having access to areas of potential exposure will be required to sign a site management guide indicating they are aware of and will comply with all safety rules. In the instance of a multiple use site, a single site access policy incorporating the above philosophy will be established. All procedures will be reviewed & updated as necessary.

III. SUMMARY:

Sorensen Pacific Broadcasting, Inc. proposes to construct a new LPTV facility on Channel 22n at Agana, Guam. This engineering proposal is in full compliance with the Commission's Rules.

/s/ John J. Mullaney
John J. Mullaney, Consulting Engineer

July 19, 2001.