

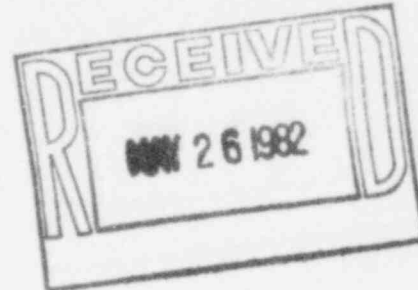


## Nebraska Public Power District

GENERAL OFFICE  
P.O. BOX 499, COLUMBUS, NEBRASKA 68601-0499  
TELEPHONE (402) 564-8561

May 24, 1982

Mr. John T. Collins  
Regional Administrator  
U.S. Nuclear Regulatory Commission  
Region IV  
Suite 1000  
611 Ryan Plaza Drive  
Arlington, Texas 76011



- Reference: 1) Letter to J. M. Pilant from J. T. Collins dated March 12, 1982.
- 2) Letter to J. M. Pilant from J. T. Collins dated April 29, 1982.
- 3) Letter to J. M. Pilant from J. T. Collins dated May 13, 1982.

Dear Mr. Collins:

The purpose of this letter is to update you on what actions NPPD is taking concerning the Early Warning System (EWS) per the above-referenced letters.

Concerning Items 2 and 3 of Reference Letter (1), the District conducted a mobile route reanalysis, wherein there were identified components and methods not considered optimum for performing the required notifications. This occurred primarily in the 0-5 mile EPZ. As a result of this reanalysis, the District has completed redesign of the EWS in the 0-10 mile EPZ that would better meet the needs of the District and the general public. This redesign was done using the design criteria of NUREG 0654 (i.e., to notify a large portion of the population within the 0-10 mile EPZ within 15 minutes).

Consistent with the above, the District's Board of Directors recently approved funding for procuring additional equipment deemed necessary as a result of the redesign of the EWS.

NPPD has concluded as a result of the EWS redesign that it will make tone alert (EBS) radios available for all residences within the 0-10 mile EPZ that are not covered by fixed sirens. Additionally, NPPD will install one more fixed siren near Rockport at the exit off of Interstate 29.

8206220166 820526  
PDR ADDCK 05000298  
F PDR

Mr. John T. Collins  
Page 2  
May 24, 1982

The EBS tone alert radios will be used as the primary means of notification in the 0-10 mile EPZ in areas that are not covered by fixed sirens, and the mobile siren system will only be used as a backup means of notification. The District feels that the mobile system can still be an effective backup system even though the notification times exceed the design criteria. The EBS tone alert radios with the mobile siren system as a backup provide an ideal system because these systems 1) are not affected by a loss of off-site power, 2) are not solely an outdoor warning system as are fixed sirens, and 3) can effectively function in most adverse weather situations depending upon the precise notification requirements. The mobile sirens are not a part of the CNS EWS system and will be turned over entirely to the local agencies for maintenance; however, fire departments historically have demonstrated excellent care for emergency equipment. The exact breakdown of what part of the population is covered by what system (EBS radios or fixed siren) is shown on Enclosure I.

As a result of the placement of EBS tone alert radios, the District will be providing essentially 100% area coverage in the 0-10 mile EPZ (see Enclosure I).

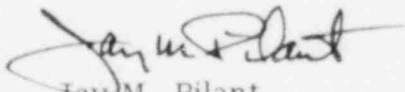
The District's intended schedule concerning procurement and distribution of the EBS radios is as follows:

1. Order for radios placed - Week of May 24, 1982.
2. System fully operational - by the end of the present refueling outage or July 1, 1982.

The District has been informed that the FCC requires tests of the EBS alert on a weekly basis. A card will be on the radio that notifies the user that if during a system test their radio does not function, they should contact the Columbus General Office.

If you have any questions or require additional information, please contact me.

Sincerely,



Jay M. Pilant  
Division Manager of Licensing  
and Quality Assurance

JMP/gmc:kz24/3R3  
Enclosures

Enclosure I

POPULATION COVERAGE FOR FIXED SIRENS AND EBS RADIOS

(Estimated in January, 1981)

Population Data

Nebraska 5 mile zone population	=	610
Nebraska 5-10 mile zone population	=	2315
Nebraska 10 mile zone total population	=	2925
Missouri 5 mile zone population	=	475
Missouri 5-10 mile zone population	=	3025
Missouri 10 mile zone total population	=	3500
Total Population of 10 mile EPZ	=	6425

Population Centers Within the 5 Mile Zone with Fixed Sirens

Brownville, Nebraska area	=	201	
Nemaha, Nebraska area	=	212	Percent Coverage = $\frac{545}{1085} = 50.2\%$
Phelps City, Missouri area	=	90	
Langdon, Missouri area	=	42	

Note: 16.9% of the 10 mile EPZ population resides within the 5 mile zone

Population Centers within the 5-10 Mile Zone with Fixed Sirens

Peru, Nebraska area	=	1425	
Shubert, Nebraska area	=	244	Percent Coverage = $\frac{3511}{5340} = 65.7\%$
Rockport, Missouri area	=	1625	
Watson, Missouri area	=	192	
Nishnabotna, Missouri area	=	25	

Total 10 Mile EPZ Coverage by Siren =  $\frac{4056}{6425} = 63.1\%$

Residents within the 5 Mile Zone with EBS Radios

Total Population	=	1085
Residents not Covered by a Fixed Siren	=	1085 - 545 = 540
Percent Coverage by Radio	=	49.8%

Residents within the 5-10 Mile Zone with EBS Radios

Total Population	=	5340
Residents not Covered by a Fixed Siren	=	5340 - 3511 = 1829
Percent Coverage by Radio	=	34.25%

Total 10 Mile EPZ Coverage by Radio =  $\frac{2369}{6425} = 36.9\%$