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<b>FROM:</b> U.S. Enviro Protection Agency Washington, D. C. 20460 Casey Caccavari		<b>DATE OF DOC</b> 2-20-74	<b>DATE REC'D</b> 2-25-74	<b>LTR</b> X	<b>MEMO</b>	<b>RPT</b>	<b>OTHER</b>
<b>TO:</b> D. R. Muller		<b>ORIG</b> 1 signed	<b>CC</b>	<b>OTHER</b>	<b>SENT AEC PDR</b> X <b>SENT LOCAL PDR</b> X		
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**DESCRIPTION:**  
Ltr furnishing comments on the Draft Enviro Statement for Bellefonte Units 1 & 2.....

**ENCLOSURES:**

**DO NOT REMOVE**  
**ACKNOWLEDGED**

**PLANT NAME:** Bellefonte Units 1 & 2

FOR ACTION/INFORMATION 2-26-74 GC

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**EXTERNAL DISTRIBUTION**

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1 - ASLB (YORE/SAYRE/ WOODARD/"H" ST.	1-CONSULTANT'S NEWMARK/BLUME/AGBABIAN	1-AGMED (Ruth Gussman) RM-B-127, GT.
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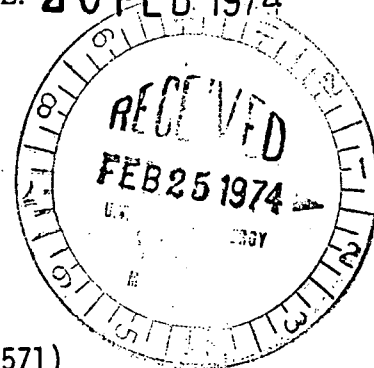
SUBJECT: Draft Environmental Statement for the Proposed  
Bellefonte Nuclear Plant

DATE: 20 FEB 1974

FROM: *Casey Caccavari*  
Casey Caccavari, Chief  
Technical & Regional Programs Branch (HM-571)

TO: Daniel R. Muller  
Assistant Director for Environmental Projects  
Directorate of Licensing (AEC)

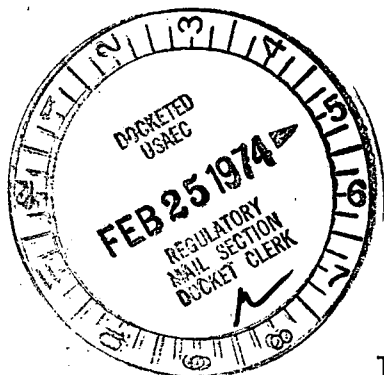
THRU: *Rudolph M. Marrazzo*  
Rudolph M. Marrazzo, Director  
Technical Assistance and Operations Division (HM-571)



Our comments on the Draft Environmental Statement for the Proposed Bellefonte Nuclear Plant are noted below.

The Draft Report does not provide information concerning noise level criteria. The final statement should contain a computation of anticipated noise levels for noise sensitive areas on the basis of the most adverse conditions expected to occur on the sites. This computation is represented as the design noise level during the worst hour of the day during the design year. The analysis should consist of the following:

- 1) An adequate model for relating parameters to estimated noise levels;
- 2) Appropriate parameters representing the worst hour of the day during the design year, ( $L_{eq}$ ,  $L_{10}$ ,  $L_{50}$ ,  $L_{90}$ ,  $L_{dn}$ , etc.); and
- 3) Existing noise levels representing the no-project situation.



To cite just one source of information, the Highway Research Board has published "Highway Noise, A Design Guide for Highway Engineers", NCHRP 117, Washington, HRB, 1971 which proposes a method for predicting highway noise.

As a minimum, the noise analysis should include noise projections after application of chosen noise abatement schemes. Aside from traffic control measures (speed reduction, truck-traffic restrictions, etc.), the most effective noise abatement methods involve utilization of buffer zones or the installation or construction of noise abatement barriers or devices.

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The noise analysis should also be concerned with noise levels generated by mechanical equipment utilized in the operation of the nuclear power plants.

Noise impact during the construction phase is both temporary and difficult to analyze; however, it should be addressed. Estimates of the maximum construction generated noise at the nearest noise sensitive area should be stated. In addition, the time length of construction, facilities impacted, noise abatement and control measures, noise levels of equipment and operational limits (e.g., time of day, numbers used at one time) should be covered.

Possible considerations for noise abatement during construction activities include the following:

- 1) Construction contract specifications:
  - a) for use of the quietest equipment available (decibel values should be specified for each type of equipment),
  - b) containing guaranteed levels of maximum noise emission into various zones (residential, commercial, and industrial),
  - c) for curfews on hours of construction
- 2) Methods of enforcement for the above clauses.

To determine the applicable noise criteria, a determination should be made of the existing and anticipated noise sensitive land uses near the proposed route, particularly those facilities in which speech or sleep occurs (such as residences, motels, hotels, hospitals, and schools, as well as recreational areas such as parks, campgrounds, and nature preserves). For undeveloped areas, a review of the current zoning and any land use plans, including population projections, should be made to anticipate future noise problem areas.

For noise sensitive areas, the criteria covered in EPA's NTID 300.7, "Effects of Noise on People" should be applied to the noise levels presented.

The primary purpose in considering alternatives is to attempt to mitigate (or eliminate) the unavoidable adverse impacts identified with the proposed project. In most cases socioeconomic considerations will be a major factor. All viable alternatives should be considered and their environmental effects set forth adequately.