

**BEFORE THE
PUBLIC SERVICE COMMISSION
OF MARYLAND**

In the matter of the Application of)
Catocin Power, LLC for a Certificate of)
Public Convenience and Necessity to) Case No. 8997
Construct a Nominal 600 MW Generating)
Facility in Frederick County, Maryland)

DIRECT TESTIMONY OF RICHARD M. LETTY

1 **Q. PLEASE STATE YOUR NAME, OCCUPATION, AND CURRENT POSITION.**

2 A. My name is Richard M. Letty, Senior Consultant at KM Chng
3 Environmental Inc. A statement of my educational background,
4 occupational history, and professional qualifications is appended to
5 this testimony as Appendix A.

6 **Q. PLEASE DESCRIBE YOUR SPECIFIC EXPERIENCE IN POWER**
7 **PLANT EVALUATION AND NOISE IMPACT ASSESSMENTS.**

8 A. My previous work experience has included employment at Stone &
9 Webster Engineering in their Environmental Division, responsible for
10 noise control engineering of their power plant designs to meet all
11 Federal, State and local noise regulations. I have been involved in the
12 review of noise analysis submittals from two power plant developers
13 in Massachusetts, to determine compliance of proposed and operating
14 projects with State and local noise regulations. In support of the
15 concerns of the local cities and towns, we have reviewed these
16 submittals and have recommended additional noise analysis and
17 mitigation measures that could be implemented at the proposed power
18 plant to satisfy local concerns. More recently, I have evaluated
19 potential noise impacts from proposed power plants in Maryland on
20 behalf of the Maryland Department of Natural Resources.

1 Q. HAVE YOU APPEARED BEFORE THE MARYLAND PUBLIC
2 SERVICE COMMISSION IN ANY PREVIOUS LICENSING
3 CASES?

4 A. Yes, I provided expert testimony with respect to noise impacts from
5 the proposed Rock Springs facility (Case No. 8821), the proposed
6 Kelson Ridge facility (Case No. 8848), and Mirant's proposed
7 expansions at Chalk Point (Case No. 8912) and at Dickerson (Case No.
8 8888).

9 Q. WHAT ARE YOUR RESPONSIBILITIES WITH RESPECT TO THE
10 STATE'S ENVIRONMENTAL REVIEW FOR THE PROPOSED
11 CATOCTIN POWER FACILITY?

12 A. I am responsible for reviewing the applicant's study of existing
13 ambient sound pressure levels experienced in the site vicinity,
14 examining the applicant's assessment of noise impacts from the
15 proposed facility, and directing a project team in conducting an
16 independent verification of the calculations. These analyses are
17 contained in DNR's document entitled *Environmental Review of the*
18 *Proposed Catoctin Power Facility*, (DNR Exhibit __ (DHB-2)), Sections 3.6
19 and 5.6, which I am sponsoring.

20 Q. WHAT WERE THE OBJECTIVES OF YOUR EVALUATION?

21 A. The objectives of my evaluation were to examine the noise levels that
22 could be caused by the facility, and to evaluate those impacts in
23 comparison to Maryland and Frederick County noise regulations and
24 within the context of existing noise levels in the site vicinity.

25 Q. HOW WERE THESE OBJECTIVES ACCOMPLISHED?

26 A. I utilized data that was supplied by the applicant describing the noise
27 characteristics of the principal noise-generating components of the
28 proposed facility. Based on the facility layout, I then projected the
29 equipment noise to selected receptor locations. I compared the

1 projected noise levels to Maryland and County noise standards and to
2 the ambient noise conditions around the site.

3 **Q. ON WHAT MAJOR DATA SOURCES DID YOUR EVALUATIONS**
4 **RELY?**

5 A. Catoctin Power provided data in its application regarding the
6 configuration of facility equipment, as well as the results of noise
7 measurements taken around the site. Estimates of noise emissions
8 from the proposed equipment were also provided by the applicant in
9 the CPCN application and in response to DNR Data Request 2-15.

10 **Q. PLEASE DESCRIBE THE KEY ASSUMPTIONS USED DURING**
11 **YOUR EVALUATION.**

12 A. My analysis assumes that equipment will be located as shown on the
13 site layout; however, this could change during subsequent phases of
14 design. If the layout of the equipment changes, Catoctin Power should
15 prepare an updated noise impact analysis after site layout is finalized.

16 Plant equipment noise was projected to several of the closest receptor
17 locations along the property boundary, assuming that the noise levels
18 will decrease solely due to distance spreading in the atmosphere. No
19 attenuation was assumed due to atmospheric absorption, vegetation,
20 or barriers.

21 **Q. PLEASE DESCRIBE AMBIENT NOISE CONDITIONS IN THE**
22 **SITE VICINITY.**

23 A: The acoustic character of the site is currently dominated during
24 daytime hours by operations of the existing Eastalco plant, and by
25 truck and automobile traffic on nearby roads. Catoctin Power
26 measured maximum daytime (7 AM to 10 PM) sound levels of 83 to 84
27 dBA due to heavy truck traffic at intersections on the eastern boundary
28 of the Eastalco site.

1 On the northwestern boundary of the site, closest to where the
2 proposed generating facility would be constructed, there were two
3 locations where Catoctin Power took noise measurements. The
4 maximum daytime sound levels were 80 dBA at the more northerly of
5 these two monitoring locations, where truck traffic is more prevalent,
6 and only 59 dBA at the monitoring point to the southwest of the
7 proposed facility. At this southwest location, there is no heavy truck
8 traffic; this is also the location of the existing residence closest to the
9 proposed facility. Average sound levels (L_{eq}) at these two locations
10 were 62 and 48 dBA, respectively, in the daytime. At night (defined in
11 State regulations as 10 PM to 7 AM), the noise levels measured at these
12 locations along the northwest site boundary were usually in the mid-
13 40s, with short-term maximum traffic noise measured at 59 dBA.
14 Noise from the operating Eastalco facility was audible at those
15 locations during both daytime and nighttime monitoring, according to
16 Catoctin Power's application.

17 **Q: HOW WILL THE PROPOSED CATOCTIN POWER FACILITY**
18 **ALTER THE SOUND LEVELS CURRENTLY EXPERIENCED NEAR**
19 **THE SITE?**

20 A: The proposed new generating units are expected to have a modest
21 noise impact on nearby receptors, contributing a maximum of 57 dBA
22 to sound pressure levels at the nearest property boundary and 51 dBA
23 at the closest existing residence. The facility will generate a fairly
24 constant sound pressure level during its hours of operation,
25 representing a constant increase in the noise floor. With the addition
26 of the proposed generating units, minimum ambient noise levels along
27 Ballenger Creek Pike, at the nearest property boundary to the Catoctin
28 facility, may increase as much as 12 dBA. However, there are no actual
29 receptors in such close proximity to the proposed facility; rather, the
30 land is currently in agricultural and light industrial use, and is
31 designated for future industrial use in the county's comprehensive
32 master plan. The nearest residential receptor is very likely to remain
33 the nearest residential receptor for the foreseeable future, and at that

1 location, noise levels are expected to increase a maximum of 6 dBA as
2 a result of the Catoctin Power development.

3 **Q: WHAT IS YOUR OPINION REGARDING THE LIKELIHOOD**
4 **THAT THE CATOCTIN POWER FACILITY WILL COMPLY WITH**
5 **STATE AND COUNTY NOISE REGULATIONS AND**
6 **ORDINANCES?**

7 A: Noise emissions from the proposed power plant are expected to
8 comply with all applicable rules regarding allowable noise. Through
9 its zoning ordinance, Frederick County has established a limit of 55
10 dBA at receiving residential properties, and the State of Maryland also
11 limits nighttime noise to 55 dBA at residential receptors. (Traffic on
12 public roads is exempt from state and local noise limits.) As
13 mentioned previously, at the nearest property boundary, the proposed
14 facility may contribute as much as 57 dBA; however, that land is in
15 agricultural use and is slated for future industrial use. Therefore, it is
16 highly unlikely that it would ever be residentially developed. At the
17 closest residential areas, the proposed facility would contribute sound
18 pressure levels at least 4 dBA below the noise limit.

19 **Q: PLEASE DESCRIBE THE ASSUMPTIONS INCLUDED IN YOUR**
20 **CALCULATIONS OF POTENTIAL NOISE IMPACTS.**

21 A: My calculation methodology is somewhat conservative in that it
22 assumes that sound pressure will decrease due to distance spreading
23 alone. No attenuation was assumed due to vegetation, barriers, or
24 excess attenuation due to molecular absorption in the atmosphere.

25 **Q. WHAT ARE YOUR TECHNICAL CONCLUSIONS AND**
26 **PROFESSIONAL OPINIONS REGARDING NOISE IMPACTS**
27 **FROM THE PROPOSED COMBINED CYCLE GENERATING**
28 **FACILITY?**

29 A. The proposed facility is expected to have a modest noise impact. It
30 will add to the existing Eastalco facility noise, making it more audible
31 to surrounding receptors, but the increase will be less than 10 dBA,

1 which is generally considered the definition of a "significant" increase
2 in community noise levels.

3 My calculations indicate that the proposed new units will operate in
4 compliance with applicable state and county noise regulations.

5 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

6 **A. Yes, it does.**

APPENDIX A
STATEMENT OF QUALIFICATIONS
for Richard M. Letty

Experience and Employment

Mr. Letty is a Senior Consultant with over 25 years of experience in environmental noise and vibration assessments for power generation, industrial and transportation sources. His recent project experience includes power plant noise impact evaluations on behalf of the State of Maryland; power plant siting/design reviews for the Towns of Bellingham and Andover, MA; noise studies for the MWRA Cummingsville sewer construction/rehabilitation project; and the noise control plan for the MWRA Boston Harbor Project. Mr. Letty's prior work experience includes design, construction and operational noise control engineering and impact analyses for a number of fossil fuel and nuclear power plants. Representative projects include the noise monitoring/impact assessment for the Ocean State Power Cogeneration Plan, RI; noise compliance testing for the Dartmouth Power Station, MA; and EIR for Boston Edison's Mystic Power Station's coal conversion units; design of a siren warning system for Boston Edison's Pilgrim Nuclear Power Station; and an ambient noise survey for Public Service of New Hampshire's high-voltage DC transmission line.

Education

M.B.A., Northeastern University, 1985 - Marketing
M.S., Massachusetts Institute of Technology, 1971 - Aeronautics
B.S., Merrimack College, 1969 - Engineering Physics

Professional Experience

KM Chng Environmental Inc., 1992-Present
Bolt Beranek and Newman/ Acentech, Inc., 1987-1992
Acoustic Technology Inc., 1985-1987
Stone & Webster Engineering, 1979-1984
Massachusetts Port Authority, Logan Airport, 1977-1979
Federal Aviation Administration, 1976-1977
Pratt & Whitney Aircraft, 1972-1976

Publications and Presentations

With over twenty years of experience, Mr. Letty has published and presented over 40 reports and papers on transportation noise and vibration. He has served as an expert witness before the Maryland Public Service Commission (PSC Case No. 8912, Case No. 8821, and Case No. 8843) as well as in court appearances for the City of Austin, Texas, and is experienced in presenting study results in both private and public forums.