

**BEFORE THE  
PUBLIC SERVICE COMMISSION  
OF MARYLAND**

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

**DIRECT TESTIMONY OF DIANE H. BROWN**

1 **Q. PLEASE STATE YOUR NAME, OCCUPATION, AND CURRENT ROLE IN**  
2 **THIS PROCEEDING.**

3 A. My name is Diane H. Brown. I work for the Power Plant Research Program  
4 (PPRP) of Maryland’s Department of Natural Resources. I am the State’s Project  
5 Manager for reviewing Catoctin Power, LLC’s (Catoctin) application to construct  
6 a 600 MW electrical generation facility in Frederick County, Maryland. A  
7 statement of my educational background, occupational history, and professional  
8 qualifications is appended to this testimony as Appendix A.

9 **Q. PLEASE DESCRIBE YOUR EXPERIENCE WITH PPRP.**

10 A. I have been employed by the Power Plant Research Program (PPRP) since  
11 February 1985. Since that time I have managed the licensing of numerous power  
12 plant projects, including Duke Energy North America’s proposal to construct a  
13 720 MW facility near Point of Rocks in Frederick County, Old Dominion Electric  
14 Cooperative’s (ODEC) 1040 MW combustion turbine facility, CHX’s application  
15 to construct a 4 MW poultry litter fired facility, Panda Brandywine’s 248 MW  
16 combined cycle power plant, the Bentech Group’s application to construct a  
17 landfill gas generating facility, the Potomac Electric Power Company’s  
18 (PEPCO’s) Station H facility and portions of Baltimore Gas & Electric’s (BG&E’s)  
19 proposed Perryman facility.

1 **Q. HAVE YOU TESTIFIED AS AN EXPERT WITNESS IN OTHER**  
2 **REGULATORY PROCEEDINGS?**

3 A. Yes. I have testified before the PSC in numerous power plant licensing cases and  
4 other proceedings. Most recently, I have testified in Mirant Corporation's  
5 application to construct an auxiliary boiler at its Morgantown facility (Case 8949),  
6 ODEC's application to construct 1040 MW of combustion turbines in Cecil  
7 County (Case 8821), CHx's application to construct a 4 MW poultry fired  
8 cogeneration facility in Hurlock, Maryland (Case 8854), the Bentech group's  
9 application to construct a 4 MW landfill gas electrical generation unit and in both  
10 phases of the Panda-Brandywine proceeding (Case 8488) which considered all  
11 the environmental and socioeconomic impacts associated with the proposed 240  
12 MW combined cycle facility. In all of these cases I was the overall policy witness  
13 for the State in its environmental review assessment and associated  
14 recommendations.

15 I also testified in all three phases of PEPCO's proposed application to construct  
16 Station H (Case No. 8063), a proposal to construct 500 MW of combustion  
17 turbines. My testimony in those proceedings addressed both the environmental  
18 and socioeconomic impacts of the proposed plant and the need for additional  
19 capacity. I also testified in Case No. 8245, the complaint of AEC/REFFUEL (a  
20 non-utility generation developer) against the Potomac Edison Company. In  
21 addition to avoided cost, my testimony in that proceeding focused on  
22 environmental and economic benefits of the proposed project. In addition, I  
23 testified in Case No. 8201, the PSC's investigation of Delmarva Power and Light  
24 Company's "Challenge 2000" Integrated Resource Plan and competitive  
25 solicitation, and in the need for power phase of Case No. 8241, BG&E application  
26 to license its Perryman facility. I also testified in Case No. 8413, PEPCO's  
27 application for approval of two independent power contracts.

28 **Q. WHAT ARE YOUR RESPONSIBILITIES WITH RESPECT TO THE STATE'S**  
29 **REVIEW OF CATOCTIN POWER'S PROPOSAL TO CONSTRUCT A**  
30 **GENERATING FACILITY ON THE SITE OF ALCOA'S EASTALCO**  
31 **ALUMINUM SITE?**

32 A. I am the State's Project Manager for the Certificate of Public Convenience and  
33 Necessity (CPCN) review of the Catoctin facility. In this role I am responsible for

1 the implementation and direction of the technical, policy, and regulatory  
2 evaluations performed by PPRP, and for coordinating the positions of all State  
3 agencies with a regulatory or policy interest in the project. To complete these  
4 evaluations, I have directed the work of PPRP's technical consultants.

5 **Q. PLEASE BRIEFLY DESCRIBE THE PROPOSED FACILITY.**

6 A. This project proposed by Catoctin Power, LLC, a wholly owned subsidiary of  
7 Sempra Energy Resources, will consist of a natural gas-fired nominal 600 MW  
8 electric generating station consisting of two combustion turbines with electric  
9 generators, two heat recovery steam generators, and a steam turbine with electric  
10 generator. The facility will also include an on-site electrical switchyard, a  
11 generator lead connecting the facility to the electrical grid, and associated  
12 permanent on-site facilities.

13 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

14 A. My testimony summarizes the technical work done to date by the State in its  
15 review of Catoctin's proposed facility. Once the State's review is completed, I  
16 will provide the State's recommendations and proposed conditions with respect  
17 to this Project as well as a completed environmental review.

18 **Q. WHAT IS THE SCOPE OF YOUR TESTIMONY TODAY?**

19 A. First, my testimony describes the process by which PPRP develops its  
20 environmental review document and PPRP's power plant application review  
21 process. Second, my testimony introduces and sponsors environmental and  
22 socioeconomic impacts evaluated to date of the proposed facility as discussed in  
23 PPRP's draft environmental review document entitled, *Interim Draft*  
24 *Environmental Review of the Proposed Catoctin Power Project* and presented with my  
25 testimony as DNR Exhibit\_\_(DHB-2). Third, I describe the additional analysis  
26 and review process that PPRP and the other State agencies will perform to  
27 complete our evaluation of Catoctin so we can make appropriate  
28 recommendations to the Commission.

1 **Q. PLEASE DESCRIBE THE ROLE OF PPRP AND OTHER STATE AGENCIES**  
2 **IN THE REVIEW OF APPLICATIONS FOR CERTIFICATES OF PUBLIC**  
3 **CONVENIENCE AND NECESSITY FOR POWER STATION PROJECTS IN**  
4 **MARYLAND.**

5 A. Under Maryland's Power Plant Siting Act of 1971, Chapter 31 of the Laws of  
6 Maryland of 1971, as codified in Sections 3-301 through 3-306 of the Natural  
7 Resources Article, and Sections 2-207 and 2-208 of the Public Utility Company  
8 Article of the Annotated Code of Maryland, and Maryland's Environmental  
9 Policy Act, Chapter 702 of the Laws of 1973, as codified in Section 1-303 of the  
10 Natural Resources Article, the Public Service Commission is required to consider  
11 a broad range of impacts including socioeconomic, environmental, health, safety  
12 and system reliability of any proposed electric generating facility as part of the  
13 application review and approval process for a CPCN. PPRP is responsible for  
14 coordinating the review of projects requiring a CPCN from the PSC, with other  
15 units within DNR, as well as with the Departments of the Environment,  
16 Agriculture, Transportation, Business and Economic Development, and  
17 Planning, and the Maryland Energy Administration. Additionally, depending on  
18 the scope of the project, PPRP coordinates with other agencies that would have  
19 input into assessing the proposed impacts of a proposed facility such as the  
20 Maryland Historical Trust or the Maryland Department of Health and Mental  
21 Hygiene.

22 **Q. HOW DOES PPRP REVIEW APPLICATIONS FOR NEW POWER**  
23 **STATIONS?**

24 A. The PPRP review process usually begins well before a major application like  
25 Catocin's is submitted to the PSC. Very early in the process PPRP meets with  
26 the developer to identify any major issues and generally outlines what analysis  
27 or field work needs to be accomplished as part of the formal application. It is to  
28 the benefit of all parties to come to an early agreement regarding various studies  
29 that need to be performed.

30 Throughout the process, PPRP maintains an information flow through  
31 established representatives with the departments mentioned earlier. The goal is  
32 to ensure that as many concerns as possible are identified early in the process so  
33 that they can be addressed, either through studies performed by the applicant or

1 by PPRP. The intent is to safeguard against serious issues coming to light after a  
2 project has received its CPCN.

3 This coordination takes the form of field visits to the proposed site and any  
4 alternatives, informational and status summaries sent periodically to all the  
5 agency representatives, and numerous meetings, both with the applicant and the  
6 agency representatives.

7 **Q. HOW DOES THE COORDINATION CHANGE ONCE AN APPLICATION IS**  
8 **RECEIVED?**

9 A. The communication with the applicant and the agency representatives described  
10 above is continued once a formal application is received. The results of all  
11 studies and the applicant's testimony are reviewed, and the potential impact of  
12 the proposed facility is evaluated. If necessary, ongoing meetings with both the  
13 applicant and agency representatives take place to attempt to resolve any  
14 remaining issues. At the culmination of this process, Secretaries of Natural  
15 Resources, Environment, Transportation, Agriculture, Planning, Business and  
16 Economic Development and the Director of the Maryland Energy Administration  
17 provide the Commission with a letter that will include initial recommendations  
18 pertaining to the facility that has been evaluated.

19 **Q. WHAT IS THE STATUS OF PPRP'S REVIEW OF THE CATOCTIN**  
20 **FACILITY?**

21 A. The State has not yet completed its review of Catocin's facility. In late August  
22 the Company filed additional information on the various water supply options  
23 for the power plant and associated linear facilities needed to transport water and  
24 natural gas to the site. To accommodate the filing of this supplemental  
25 information by the Company, the Hearing Examiner bifurcated the proceeding  
26 with the intent that Interveners would file testimony on all issues but water on  
27 October 1. The schedule allows for a supplemental filing on November 24 that  
28 will consider water issues. PPRP is in the process of evaluating the information  
29 provided in the August filing and will be coordinating the review of its findings  
30 with other agencies and officials between now and the November filing.

1 **Q. WHAT DOES THIS FILING REPRESENT?**

2 A. This filing represents our technical analysis to date which includes an analysis of  
3 information filed by the company in its CPCN application, its responses to DNR  
4 Data Requests Nos. 1 through 6 and portions of information provided in the  
5 company's August 20, 2004 supplemental filing. The information in DHB-2 has  
6 been reviewed by the other state agency contacts, however, the Secretaries of the  
7 various departments have not yet developed their recommendations and will not  
8 do so until our review is complete.

9 **Q. HAS PPRP FILED AN INITIAL LETTER OF RECOMMENDATION WITH**  
10 **THE PUBLIC SERVICE COMMISSION AND THE PARTIES OF RECORD**  
11 **FOR THIS PROCEEDING?**

12 A. No. Given the potential for the interaction of water supply and linear facility  
13 information with other aspects of the proposed facility, the State has decided to  
14 not file its initial letter of recommendation until the November 24 testimony is  
15 filed. In that way we will have the opportunity to conduct a full comprehensive  
16 review of all issues and make recommendations based on that review.

17 **Q. WHAT WILL BE FILED ON NOVEMBER 24?**

18 A. On November 24 we will file a revised Environmental Review Document and  
19 initial recommendations. The Environmental Review Document will be re-filed  
20 with additional sections addressing water supply and linear facilities. It may also  
21 contain some changes to other parts of the document to reflect the recommended  
22 conditions.

23 **Q. PLEASE EXPLAIN HOW PPRP HAS CONDUCTED ITS REVIEW TO DATE**  
24 **OF THE ENVIRONMENTAL AND SOCIOECONOMIC ISSUES**  
25 **ASSOCIATED WITH THE CONSTRUCTION AND OPERATION OF THE**  
26 **PROPOSED FACILITY.**

27 A. PPRP directed its technical consultants to review information that has been  
28 submitted by the Applicant to date. This includes the information filed by  
29 Catocin in its CPCN application to the PSC, testimony filed by the Applicant  
30 and data responses provided in response to PPRP, other intervenor questions as  
31 well as technical data bases from other reliable sources.

1 **Q. PLEASE DESCRIBE THE TYPES OF ANALYSES THAT PPRP CONDUCTED**  
2 **AS PART OF ITS REVIEW.**

3 A. In general, PPRP gathered information necessary to verify the evaluations that  
4 Catoctin presented in its application for a CPCN. PPRP also conducted  
5 independent modeling analyses to provide a more thorough evaluation of the  
6 environmental impacts than was provided in its CPCN application. For example,  
7 in evaluating air quality impacts, PPRP conducted independent analyses to  
8 evaluate the impact on the National Ambient Air Quality Standards (NAAQS)  
9 and Prevention of Significant Deterioration (PSD) increment modeling for  
10 particulate matter and other emissions. In order to assess the impact of the  
11 facility on the Chesapeake Bay, PPRP conducted additional analyses on  
12 predicted nitrogen deposition from the operation of the proposed facility.  
13 Finally, PPRP conducted an independent analysis to determine if there would be  
14 air quality impacts associated with Catoctin using treated effluent for cooling  
15 purposes.

16 **Q. PLEASE DESCRIBE THE SCOPE OF THE DIRECT TESTIMONY THAT**  
17 **WILL BE PRESENTED BY OTHER WITNESSES IN THIS PROCEEDING.**

18 A. Julia Ross of Environmental Resources Management, Inc. will present testimony  
19 on PPRP's technical review of existing weather and ambient air quality  
20 conditions, investigations of potential air emissions from the proposed project  
21 and assessment of the proposed pollution control systems.

22 Mark E. Garrison of Environmental Resources Management Inc., will provide  
23 testimony on PPRP's review of the air quality impact evaluations submitted by  
24 Catoctin Power for its proposed Catoctin project.

25 Dr. Peter D. Hall of MicroAnalytics will present testimony on the socioeconomic,  
26 cultural, visual and transportation impacts of the proposed facility.

27 Richard M. Letty of KM Chang Environmental Inc., will present testimony on the  
28 potential noise impacts from the facility.

1 **Q. AS PART OF THE NOVEMBER FILING, DO YOU ANTICIPATE THAT THE**  
2 **STATE WILL SPONSOR ADDITIONAL TESTIMONY?**

3 A. Yes. Certainly my testimony will be updated and I expect PPRP to sponsor  
4 additional witnesses who will testify on water impacts and related issues as well  
5 as air policy issues. Additionally, PPRP intends to further address the issue of  
6 potential soil contamination on the Catoctin site, however, we are still awaiting  
7 the submittal of the Company's Phase I Environmental Site Assessment. The  
8 company indicated in its response to DNR Data Request 6-7 that this assessment  
9 is underway and will be filed upon its completion. There may be other testimony  
10 but, until PPRP has finalized the ERD, it is too early to identify specific areas.

11 **Q. DOES THAT CONCLUDE YOUR TESTIMONY AT THIS TIME?**

12 A. Yes, it does.

## APPENDIX A

### STATEMENT OF QUALIFICATIONS for Diane H. Brown

#### *Experience and Employment*

Ms. Diane H. Brown has served as an Administrator with the Maryland Power Plant Research Program (PPRP) since February 1985. Ms. Brown currently manages the economics and air quality program at PPRP. She is responsible for, among other things, the direction of work related to air modeling work done in support of power plant licensing cases. She has served as project manager on a number of power plant licensing and planning cases including Case 8821 Old Dominion Electric Cooperative's application to construct 1040 MW of combustion turbines, Panda project, Case No. 8413, Potomac Electric Power Company's application for approval of two non-utility generation projects (of which Panda was one), Phase II and Phase III of PEPCO's Station H facility and Phase II of BG&E's Perryman application.

Prior to her employment with PPRP, Ms. Brown was employed as an economist with the Research Triangle Institute in Research Triangle Park, North Carolina. Here she served as principal or co-investigator in the preparation of numerous environmental and energy research projects. Her particular areas of expertise included the preparation of environmental impact statements, energy planning studies, studies which determined the market penetration of demand-side management programs, studies evaluation the potential of alternative energy systems, and regulatory impact assessment.

Ms. Brown received her B.A. in economics from Franklin and Marshall College in 1976, and a Master's of Environmental Management from Duke University in 1980.