DECLARATION OF DIANE D'ARRIGO
IN SUPPORT of Joint Petitioners
In the matter of PPL's
Bell Bend Nuclear Power Plant

I, Ms. Diane D'Arrigo, hereby declare as follows:

1. I am the Radioactive Waste Project Director at Nuclear Information and Resource Service (NIRS) at 6930 Carroll Avenue, Suite 340, Takoma Park, Maryland 20912, and have been at NIRS for 23 years.

2. I am an expert on the policy aspects and general technical characteristics of so-called "low-level" radioactive waste. I hold a Bachelor of Science degree in chemistry with a course concentration in environmental studies and a postgraduate environmental law course. My work experience has been with industry research and development, academic research, laboratory analysis, public interest research, and environmental advocacy. I have closely followed the so-called "low-level" radioactive waste issue since the passage of the Low Level Radioactive Waste Policy Act and its Amendments, including efforts to site new waste repositories and to deregulate/declare "below regulatory concern"/release/clear the waste from radioactive regulatory control. I regularly make presentations and occasionally provide testimony to legislators and regulators on related topics. For over twenty five years I have been tracking and participating in policy-making and implementation of policies regarding the generation, disposal, management and deregulation of nuclear waste and materials, primarily from the operation of nuclear power plants and their fuel chain. My work has included research and public education on safety and environmental risks posed by wastes from the operation of nuclear power plants and the fuel chain and the regulations for disposal. I have spoken publicly and published articles on these topics.

3. I am familiar with the current situation in the United States with regard to "low-level" radioactive waste and with the legislative and regulatory history from the early 1980s up to the present. I am generally familiar with NRC policies and regulations with respect to "low-level" radioactive waste.

4. There is clear public concern about so-called "low-level" radioactive waste especially the highly concentrated, long-lasting, biologically active waste in Classes B, C and Greater-Than-C. The majority of the radioactivity in this waste comes from nuclear power reactors, such as the proposed Bell Bend nuclear power plant.

5. As of July 1, 2008, the Barnwell, South Carolina disposal site has limited its access to waste generated within the Atlantic Compact (SC, NJ, CT). The US Ecology-run commercial radioactive waste disposal site at Hanford/Richland Washington already limits access to generators in the Northwest and Rocky Mountain Compact States only. For the rest of the country, then, including Pennsylvania, generators of Class B and C radioactive waste will have no licensed disposal site to which to send their waste. In addition, there is no disposal site for Greater-than-C (GTCC) radioactive wastes.

6. The nuclear utilities and the NRC are developing guidelines for extended long-term on-site storage of so-called "low level" radioactive waste at nuclear power reactors. This is not a responsible permanent solution for isolation of these long-lasting, highly concentrated radioactive wastes nor does this substitute for regulations. As with high level radioactive waste, the outcome could likely be de-facto permanent onsite storage at the reactor site. A likely and completely realistic scenario is that the B, C and GTCC radioactive waste generated by Bell Bend will not leave the site.

7. If perpetual or extended on-site storage of Class B, C and GTCC radioactive wastes is the "fall back" it could significantly decrease the safety and security of the site.

8. Absent any known licensed disposal for Classes B, C and Greater-Than-C radioactive waste, the applicant must analyze the environmental, safety and security impacts of alternatives for the long-term, indefinite storage of the "low-level" radioactive waste generated by the Bell Bend reactor for its operating years and beyond.

9. Some so-called "low-level" radioactive waste can give high doses of radiation if one is exposed unshielded. According to the Government Accounting Office (GAO/RCED-98-40R Questions on Ward Valley, 5-22-98 pp. 49-52) some so-called 'low-level' radioactive waste can give a lethal dose at one meter, unshielded, in approximately 20 minutes. In addition, so-called 'low-level' radioactive wastes

> "contain every radionuclide found in 'high-level' radioactive waste…low-level radioactive wastes constitute a very broad category containing many different types and concentrations of radionuclides, including the same radionuclides that may be found in high-level radioactive wastes."

These include plutonium-239 (hazardous life 250 to 500 thousand years), iodine-129 (hazardous life 170 to 340 million years), strontium 90 (hazardous life 280-560 years) and cesium-137 (hazardous life 300 to 600 years).

10. It is imperative that the environmental, safety and security issues of extended on-site storage/de-facto disposal of radioactive waste be addressed in PPL's COL application.

11. Even if waste is sent offsite to vendors, it could be returned for storage in the absence of permanent disposal.

12. The special location of the Bell Bend site and its dependence on the Susquehanna River for large water resources deserves deeper evaluation from the perspective of exorbitant water use, to potential contamination by routine releases and unintended possible radioactive and heat releases from reactor and waste processing, treatment and/or storage operations. The fact that numerous other reactors are in the same watershed should be factored in.

13. If compaction or incineration are to be carried out on site, that should be included in the COLA so the public can comment on the potential for such radioactive waste treatment and storage activities at the site.

14. There is no justification provided for producing long-lasting, intensely radioactive wastes for which no disposal exists. Considering the long history of failed so-called "low-level" radioactive waste disposal sites in the country, assumptions that new ones will be available are not justified thus advance planning is essential if the reactor is allowed to operate, thus generating long-lasting and biologically active Class B, C and Greater than C radioactive wastes.

I declare under penalty of perjury that the foregoing statements of fact are true and correct to the best of my knowledge and that the opinions expressed herein are based on my best professional judgment.

Diane D'Arrigo
Radioactive Waste Project Director
Nuclear Information and Resource Service

Dated: May 18, 2009