BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for Determination of Need for Levy Units 1 and 2 Nuclear Power Plants	)))	DOCKET NO. 080148-EI Submitted for filing: March 11, 2008

REDACTED
TESTIMONY
OF
DANIEL L. RODERICK
ON BEHALF OF
PROGRESS ENERGY FLORIDA

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IN RE: PETITION FOR DETERMINATION OF NEED FOR LEVY UNITS 1 AND 2 NUCLEAR POWER PLANTS

FPSC DOCKET NO. _____

DIRECT TESTIMONY OF DANIEL L. RODERICK

I. INTRODUCTION AND QUALIFICATIONS

Q. Please state your name and business address.

A. My name is Daniel L. Roderick. My business address is Crystal River Energy Complex, Nuclear Administration 2C, 15760 West Power Line Street, Crystal River, Florida 34428.

Q. By whom are you employed and in what capacity?

A. I am employed by Progress Energy Florida ("PEF" or the "Company") in the capacity of Vice President – Nuclear Projects & Construction. As Vice President – Nuclear Projects & Construction, I am responsible for the management and oversight of all large, capital nuclear projects for the Company. These include the Crystal River Unit 3 ("CR3") power uprate project, the CR3 steam generator replacement project scheduled for 2009, and the development, siting, engineering, and construction of two new nuclear generating facilities at the Company's Levy County site. Prior to assuming my current position, I served as the CR3 Director of Site Operations. In that capacity, I was responsible for the safe, efficient, and reliable generation of electricity from the Company's CR3 nuclear plant. All

plant functions, including the Plant General Manager, Engineering Manager, Training Manager, and Licensing, reported to me and were under my supervision.

Q. Please summarize your educational background and work experience.

A. I have a Bachelor of Science and Master of Science degree in Industrial Engineering from the University of Arkansas and have held a Senior Reactor Operator License. I have been at CR3 since 1996. Prior to serving as Director Site Operations, I held the positions of Plant General Manager, Engineering Manager, and Outage Manager. Prior to my employment with the Company, I was employed for twelve years with Entergy Corporation at its Arkansas Nuclear One plant in Russellville, Arkansas with responsibilities in Plant Operations and Engineering.

II. PURPOSE AND SUMMARY OF TESTIMONY

Q. What is the purpose of your testimony?

A. The purpose of my testimony is to support the Company's request for a determination of need for its proposed Levy Units 1 & 2 nuclear power plants. Specifically, I support the selection of the Levy site, the selection of the Westinghouse AP-1000 advanced reactor technology, and the benefits of the new, advanced nuclear plants. In addition, I sponsor the Company's current cost estimates for the project, explain the procedures in place to ensure the costs incurred for the project are reasonable and prudent, and outline the current project schedule.

Q. Are you sponsoring any sections of the Company's Need Study, Exhibit No. ___ (JBC-1)?

A. Yes. I am sponsoring Sections III, A., B., C., D., E., and F of the Need Study, which describe Levy Units 1 and 2, the Levy site, the nuclear reactor design initially selected, the estimated capital and operation and maintenance ("O&M") costs and expected cost savings, the projected plant performance, the fuel supply, and the environmental benefits from operating nuclear power plants.

Q. Do you have any exhibits to your testimony?

A. Yes, I have supervised the preparation of or prepared the following exhibits to my direct testimony.

- Exhibit No. ___ (DLR-1), a map showing the State of Florida and the Levy County site location.
- Exhibit No. ___ (DLR-2), an aerial map showing the Levy site.
- Exhibit No. ___ (DLR-3), an aerial map showing the site and the proposed location of the two nuclear units.
- Exhibit No. ___ (DLR-4), a composite of graphics of the AP-1000 advanced reactor plant.
- Exhibit No. ___ (DLR-5), a cost breakdown summary for Levy Units 1 and 2.
- Exhibit No. ___ (DLR-6), a confidential detailed project schedule.

All of these exhibits are true and accurate.

Q. Please summarize your testimony.

A. To meet its customers' growing demand for electricity in the 2016 and 2017 time frame, PEF is pursuing the development of two state-of-the-art Westinghouse Advanced Passive 1000 ("AP-1000") advanced light water reactors at the Company's 3,100 acre Levy County site. The Company plans to have Units 1 & 2 commercially operational in June 2016 and 2017 respectively. Each unit will supply approximately 1092 megawatts (summer) of emissions-free electricity. Levy Units 1 & 2 will be highly efficient, base load nuclear plants, with low fuel costs, low forced and planned outage rates, and high availability and capacity factor rates. Adding new nuclear generation to Progress Energy's existing nuclear fleet further builds upon the Company's core strength of operating nuclear plants.

The Levy project will produce significant economic benefits to Levy and surrounding Counties. The plants will employ approximately 800 full-time, high-paying positions, generate another 1,000-2,000 indirect jobs, and employ approximately 3,000 people at the height of the construction. As a result, the Company expects an overall economic benefit to the State from the Levy project.

At this time, we estimate that Units 1 & 2 will cost approximately $14 billion in 2016 dollars, including Allowance for Funds Used During Construction ("AFUDC"), and excluding approximately $3.1 billion in associated transmission facility costs. These estimates are based on the latest pricing obtained from the vendor, Westinghouse and its joint venture partner Shaw Stone & Webster (collectively referred to as the "Consortium"). The cost estimates assume that

cost savings will be realized on the second unit, as long as the second unit is constructed within approximately 12 to 18 months of Unit 1.

These estimates are based on the best information available to the Company at this time. Any number of factors, however, could affect the project cost. These include, but are not limited to, the terms and conditions of any final engineering, procurement, and construction ("EPC") contract with the Consortium; permitting and licensing delays at the local, state and federal level; litigation delays at both the state and federal level; labor and equipment availability; vendor ability to meet schedules; cost escalations; the imposition of new regulatory requirements; significant inflation or increase in the cost of capital; the ability to obtain and maintain financing at reasonable terms; and lack of public, investor, or policy maker support, to name only a few.

EPC contract negotiations are ongoing with the Consortium and we expect to execute an EPC contract by the end of 2008. In order to meet our 2016 in-service date, we will begin to order long lead-time equipment, such as large reactor vessel forgings, and will make several key regulatory filings in 2008. Most significantly, we plan to file our Site Certification Application ("SCA") with the Florida Department of Environmental Protection ("DEP") in the second quarter of 2008, and the Combined Construction and Operating License Application ("COLA") with the U.S. Nuclear Regulatory Commission ("NRC") in the third quarter of 2008. We expect the DEP approval process to take 12-15 months and the NRC license approval process to take approximately 42 months. Obtaining key regulatory approvals on a timely basis will be critical to

maintaining the construction schedule, meeting budgets, and moving forward with the project.

III. SITE AND TECHNOLOGY SELECTION

Q. Please describe PEF's actions since 2005 regarding the potential addition of new nuclear generating capacity to PEF's generation resource portfolio.

A. Beginning in 2004, PEF began to look seriously at the possibility of adding new nuclear generation in Florida, as well as other types of generation resources, including solid fuel plants, such as pulverized and super-critical coal facilities. This was based, in part, on the 2004 hurricane season, the general increases in oil and natural gas commodity prices, consistently increasing load growth and the increased demand for power within PEF's service territory, the increased focus on climate change and greenhouse gas emissions, and the potential benefits of adding new base load generating capacity to PEF's generation portfolio.

During that time period, Congress also passed the Energy Policy Act of 2005 ("EPAct 2005"). EPAct 2005 included various provisions intended to foster the construction of new nuclear generation, to increase the country's fuel diversity and security, lessen the nation's dependence on fossil and foreign fuels, and reduce greenhouse gas emissions. Among other things, Congress established production tax credits ("PTCs") that would be available to new nuclear capacity using advanced nuclear technologies if certain eligibility requirements and deadlines were met. Companies that met these eligibility requirements and milestones would be eligible to receive PTCs equal to $0.018/kWh for the first eight years of the facility's operation. EPAct 2005 further directed the

Department of Energy ("DOE") to provide certain loan guarantees and standby support agreements for new nuclear plants in an effort to lower the financing costs of such plants.

Subsequent to the enactment of EPAct 2005, the Florida Legislature passed an omnibus energy bill, the Florida Renewable Energy Technologies and Energy Efficiency Act of 2006, in May 2006, which then Governor Bush signed into law in June of that year. That legislation, which passed unanimously in the Senate and 119-1 in the House, expressed the Legislature's clear intent to promote new nuclear power development in Florida. The Act revised the Power Plant Siting Act to foster the siting of new nuclear plants, and provided certain financial incentives aimed at not only fostering the development of new nuclear facilities but at lowering the overall cost of the plants to Florida customers.

Following the enactment of EPAct 2005, Progress Energy's Nuclear Generation Group ("NGG") established a project organization, Nuclear Plant Development ("NPD"), dedicated to evaluating the development of new nuclear plants by Progress Energy. Most significantly, the NPD group conducted detailed site and technology selection evaluations, and developed cost estimates for potential plants in Florida.

In addition, Progress Energy along with other nuclear utilities, including Southern Company, FPL, Exelon, and Entergy, formed NuStart Energy Development, LLC ("NuStart") to pool resources to advance the development of new nuclear plants. This included, among other things, the development of a standard COLA that would shorten the NRC review process for new nuclear

license applications. NuStart submitted the reference COLA for the AP1000 reactor technology to the NRC last year based on TVA's Bellefonte site.

A. SITE SELECTION

Q. What process did the Nuclear Plant Development Group use to analyze and select a preferred site for new nuclear generation in Florida?

A. In 2005, NPD began reviewing sites potentially suitable for new nuclear plants in Florida. NPD followed the Electric Power Research Institute ("EPRI") siting guide, a widely accepted guidance document for evaluating new nuclear power plant sites, and applicable NRC regulatory guidance, in reviewing and evaluating potential sites. NPD also retained nationally recognized environmental consulting firms to assist in the site evaluation process.

The EPRI Siting Guide, as adopted for the PEF siting study, provided four steps in the site selection process. First, NPD identified "regions of interest," which were initially subjected to exclusionary considerations, resulting in the identification of "potential sites." Second, NPD further analyzed the "potential sites" against avoidance considerations reducing that list to a smaller number of "candidate sites." Third, NPD performed a suitability evaluation of specific criteria on the "candidate sites" and then determined the highest ranked "alternative sites" best suited for a nuclear plant. Finally, NPD evaluated the "alternative sites" against various strategic considerations to determine the "preferred site."

NPD analyzed potential sites within PEF's 35 county service territory, plus counties bordering PEF's service territory. Within that area, NPD identified 20 potential sites. NPD reviewed each site through successive layers of analysis including, among other screening measures, health and safety criteria, population density restrictions, geotechnical and seismological suitability, water supply and rail/barge access, wetlands impact, important species and habitats, and high-level transmission system impacts. The screening resulted in a short list of eight candidate sites.

Continued screening evaluation of the candidate sites included an increased level of detail associated with water management, population profiles, reconnaissance level information, which resulted in the identification of five alternative sites in Levy, Dixie, Putnam, Highlands, and Citrus Counties. NPD then completed on-site analyses (environmental and geotechnical drilling) at the Levy, Dixie, Putnam and Highlands sites. Based on the on-site analyses, the prior screening analyses, and on weighing strategic and transmission considerations, NPD ultimately concluded that the Levy County site presented the best overall site, and therefore the preferred site for potential new nuclear generating facilities.

Q. Please describe the preferred Levy County site.

A. The site consists of approximately 3,105 acres of forested land just east of U.S. Highway 19 and several miles north of S.R. 40 in Levy County. The site is approximately 10 miles from PEF's existing Crystal River Energy Complex in Citrus County. Maps of the site are included in my testimony as Exhibits Nos. __,

___, and ___ (DLR-1 through DLR-3). The property has been used for silviculture for many years and is approximately 8 miles from the Gulf of Mexico. The plants will draw their cooling water makeup from and discharge blowdown to the Gulf. In December 2007, PEF acquired a second 2,100-acre tract contiguous with the southern boundary of the Levy property, which provides access to water supply and heavy load path and transmission exit corridors from the plant site.

Q. Why is the Levy site PEF's best site for a new nuclear plant?

A. Levy rated the highest site for several principal reasons. First, it had access to adequate water supply. Second, the site is at a relatively high elevation, which provides additional protection from wind damage and flooding. Third, unlike a number of other sites considered, the Levy site has more favorable geotechnical qualities, which are critical to siting a nuclear power plant. Fourth, although the Crystal River Energy Complex site has many favorable qualities, adding new nuclear generating capacity to the Crystal River Energy Complex at this time would result in a significant concentration of PEF's generating assets in one geographical location. This increases the likelihood of a significant generation loss from a single event and a potential large scale impact on the PEF system. Finally, the Levy site ranked the highest from a transmission deliverability perspective. In this regard, NPD retained Navigant Consulting, a well-respected international engineering firm, to analyze the potential transmission upgrades necessary for each alternative site and the estimated costs associated with each alternative site. Both the Levy and Crystal River sites scored the best due to lower estimated direct connect and upgrade costs. Levy, however, offered a

significant advantage by not co-locating transmission lines in the same corridor with the Crystal River Energy Complex, thereby avoiding loss from a single event and a resulting large scale impact on the PEF system. Considering the collective results of all these reviews and analyses, PEF selected the Levy site as the preferred location for new reactor technology deployment in Florida.

Q. Following selection of the Levy County site as the preferred site, what further steps did NPD take to analyze the potential viability of the site?

A. First, PEF negotiated and executed an agreement with the landowner for an option to purchase the property upon PEF's completion of its more detailed site characterization of the property and suitability for a nuclear plant. Upon execution of the Purchase and Sales Agreement in November 2006, NPD conducted additional, detailed comprehensive on-site testing and evaluations of the property consistent with industry and NRC regulatory guidance and regulations. The detailed analyses included months of on-site geotechnical analysis that included more than 80 borings, geophysical logging, and detailed examination of soil/rock core samples. The analyses showed that the site was suitable for new nuclear plants.

PEF closed on the property on September 13, 2007. PEF paid approximately $[redacted] for the 3,105 acre site, or approximately $[redacted] per acre. Upon receipt by PEF of its NRC COL, PEF will pay to the seller an additional $[redacted] or $[redacted] per acre.

As I noted above, in December 2007, PEF acquired another 2,100-acre tract that is contiguous with the southern border of the Levy site from an adjacent

landowner. This parcel will provide PEF with access to the Cross Florida Barge Canal, which in turn provides access to the Gulf of Mexico -- the cooling water source for the plants. This additional parcel also provides PEF access to heavy load paths necessary for the construction of the plant, and transmission exit corridors. In addition, the tract included a parcel adjacent to the northwest corner of the Levy site off U.S. 19, which will provide construction and employee access to the site. PEF paid approximately $[redacted] for this tract.

As indicated in Exhibit No. ___ (DLR-3), the actual developed area for the nuclear power blocks will be approximately 500 acres, with a large Exclusionary Area Boundary ("EAB") as required by the NRC for a nuclear power plant. NPD assessed the entire property to ensure that no issues existed with respect to the presence of hazardous materials or previous incompatible uses. NPD also conducted other detailed assessments of the site, including assessments of threatened and endangered species, and archeological/cultural resources, none of which identified any significant issues.

Q. Has PEF taken any other steps to assure that the site will be suitable for new nuclear generating facilities?

A. Yes. PEF has worked with Levy County in obtaining amendments to the Levy County Comprehensive Plan to change the land use designation of the property from agricultural/rural residential to public use, and to clarify that power generating facilities are a permitted use within the public use land use designation. The County approved the Comprehensive Plan amendments in

March 2007. The Florida Department of Community Affairs has provided comments on the proposed amendments and we expect final adoption by the County in March of this year. In addition, in September 2007, the County adopted revisions to its zoning code to allow for the siting of the nuclear facility on the property.

B. TECHNOLOGY SELECTION

Q. How did PEF select the Westinghouse AP-1000 technology?

A. Similar to its Site Selection process, NPD performed a methodical, detailed quantitative and qualitative evaluation of commercially available advanced reactor technologies. NPD issued RFPs to the three vendors that had advanced reactor designs: General Electric ("GE"); Westinghouse; and Areva, for the GE Economic Simplified Boiling Water Reactor ("ESBWR"), the Westinghouse AP-1000 advanced passive pressurized water reactor, and the Areva European Pressurized Reactor ("EPR"), respectively. NPD completed a thorough and extensive evaluation of the vendor proposal responses associated with technical and operational requirements for licensing, design, construction, and capability input by the vendors. Following nearly a year of detailed evaluation, NPD initially selected the Westinghouse AP-1000 design as the best advanced technology for PEF.

Q. Following the initial selection of the AP-1000 technology, did PEF continue to evaluate this and other advanced reactor technologies?

A. Yes. Since the preliminary selection of the Westinghouse AP-1000 design in January 2006, NPD continued to monitor industry changes, advanced reactor technology developments, and other information that might affect PEF's technology selection, or the assumptions NPD used in its initial analysis. In January 2007, NPD updated its January 17, 2006 technology evaluation. Among other things, NPD included a review of the GE Advanced Boiling Water Reactor ("ABWR"), a 1,350 MW plant similar to existing boiling water reactor technology. NPD chose to analyze the GE ABWR because two U.S. utilities announced their intent to construct the ABWR following NPD's initial technology evaluation. In addition, NPD requested all vendors to provided updated pricing information to the extent available.

Q. What did your updated analysis show?

A. Following the same evaluation criteria as our initial analysis, NPD's updated evaluation confirmed the initial recommendation to utilize the Westinghouse AP-1000 design.

IV. THE AP-1000 DESIGN

Q. Please describe the Westinghouse AP-1000 design.

A. The Westinghouse AP-1000 design (See Exhibit No. __ (DLR-4)) is a standardized, advanced passive pressurized water nuclear reactor. It is an advanced generation nuclear technology that employs "passive" rather than traditional "active" safety systems. In other words, the design uses gravity and

natural recirculation of air and water in emergency situations that do not require engines or pumps to power key safety systems. The result is an extremely safe and much simpler design that requires significantly less cable, pumps, valves, and other equipment than existing nuclear power reactors. The two proposed units at the Levy site each will generate approximately 1092 MW electric (summer) and 1120 MW electric (winter) and will occupy about 300 acres of the approximately 3100 acre site.

PEF initially will store used nuclear fuel on-site in a storage pool. The used fuel pool will be located in a hardened building, which will meet all applicable NRC safety requirements. At this time, we expect the Federal Government to take title to the used fuel and dispose of it in a permanent geologic repository. Even in the event the Federal Government fails to accept used fuel from the plants in a timely manner, the on-site storage pool will have capacity to safely store all of the plant's used fuel for approximately 19 years. The site also will be designed to accommodate an Independent Spent Fuel Storage Installation or "ISFSI," if one is needed, which will be capable of safely storing all used fuel generated at the site for at least 60 years. Like Progress Energy's existing nuclear fleet, any low-level radioactive waste ("LLW") generated by plant operations will be minimized, compacted, and sent off-site for disposal in a NRC-licensed LLW disposal facility.

Q. Has the NRC approved of the Westinghouse AP-1000 Design?

A. Yes. The NRC approved a final rule amending 10 CFR Part 52 on December 30, 2005 certifying the Westinghouse AP-1000 advanced reactor standard plant design.

Q. Why is NRC pre-approval of the design important?

A. Having a standard design that the NRC already has approved should help facilitate the NRC's review of PEF's Levy COLA, limit the number of issues that may be litigated in a COL hearing, and hopefully shorten the NRC licensing schedule.

V. NON-BINDING COST ESTIMATE

Q. What is PEF's estimate of the installed cost of Levy Units 1 & 2?

A. We estimate the installed cost for Levy Units 1 and 2 will be approximately $14 billion in 2016 dollars. This includes approximately $3.2 billion in AFUDC. It does not include the costs of transmission, which is addressed in Mr. Oliver's testimony. This estimate includes costs for: land; COLA preparation and NRC review; the AP-1000 plant; initial core load; site specific structures, such as cooling towers, intake and discharge structures, land clearing and engineering; owner's costs, such as training and staffing, certain owner construction oversight, permits, fees, insurance, and taxes; AFUDC; escalations and contingencies. Based on our negotiations with the Consortium to date, we expect to achieve efficiencies and cost reductions on the second unit if that unit is constructed within 12 to 18 months of the first unit. A more detailed breakdown of the costs,

including the Unit 1 and Unit 2 comparative costs, is included in confidential Exhibit No. __ (DLR-5).

Q. How did you arrive at this cost estimate?

A. We based this estimate on (1) site specific pricing received from the Consortium in February 2008, and (2) our best assumptions regarding the escalation of certain parts of the project, such as labor, commodities (like steel and concrete), and equipment.

Q. Will any of the project costs be fixed?

A. We are in negotiations with the Consortium on the terms and conditions of an acceptable EPC contract, including the pricing structure. We expect that some, but not all, of the costs will be firm. In other words, the cost for those elements will be established at the time of EPC execution, but would still be subject to escalation tied to particular indices. We also expect that there will be substantial costs that will not be firm and for which we will have target price estimates at the time of EPC execution. We expect to finalize and execute the EPC contract by the end of 2008.

Q. How might the costs increase or decrease on this project?

A. Costs could increase or decrease based on a number of factors. Some of these factors include: labor availability and price; equipment escalation rates; commodity prices; forgings and other key equipment availability; the ultimate

terms and conditions of the EPC contract; permitting and licensing delays at both the state and federal level; litigation delays at both the state and federal level; vendor ability to meet schedules; the imposition of new regulatory requirements; significant inflation or an increase in the cost of capital; and the ability to obtain and maintain financing at reasonable terms.

Q. What are the steps PEF is taking to mitigate the potential impact of these factors on the ultimate cost of and schedule for the project?

A. PEF is taking steps to mitigate potential cost increases. For example, we have created a new organization, Nuclear Projects & Construction, which I lead and which is focused solely on and dedicated to managing our large nuclear projects, including the new Levy nuclear project. This organization will allow our Operations organization to focus on the continued safe, reliable, and efficient operation of our existing nuclear fleet, while the Nuclear Projects & Construction group will be singularly focused on the CR3 uprate, CR3 steam generator replacement, and new Levy construction project.

My organization has also implemented an internationally recognized project management guide that is used in managing some of the largest public and private construction projects in the world. This project management guide is a tool we can use to assure the aggressive and efficient oversight of the project and our key contractors.

Finally, China recently announced that it will construct at least three Westinghouse AP-1000 units for commercial operation as early as 2013 to 2015.

Not only should this help Westinghouse gain experience in the construction of its design, which should benefit our customers, but Progress Energy anticipates sending employees to China for extended periods of time to review on-site the construction of the first AP-1000 units. We will use the lessons learned on these projects at our Levy project.

Q. Are you also attempting to mitigate risks through your EPC contract?

A. Yes. We are negotiating terms and conditions in the EPC contract with the Consortium where commercially feasible to reasonably allocate the risk among the parties and to protect our customers' interests. At this time we have not completed the negotiation of the EPC.

VI. DISCUSSIONS WITH POTENTIAL JOINT OWNERS

Q. Has PEF had any discussions with other entities regarding potential joint ownership of a portion of Levy Units 1 & 2?

A. Yes. We have had discussions with nearly every, if not every, electric utility within the state, including municipal electric utilities, power agencies, electric cooperatives, and investor-owned utilities. We have also had a series of meetings with those municipal electric utilities and electric cooperatives who have expressed serious interest in owning a portion of the project. The discussions to date have been encouraging and are ongoing.

Although, as Mr. Crisp establishes, PEF needs the full output of the units, joint ownership may have some potential benefits to PEF customers. These

potential benefits include "smoothing out" the "lumpiness" of the large units when they come on line, spreading a portion of the significant capital risk, and assisting in the siting of the significant transmission facilities required for the project. PEF will continue its negotiations with potential joint owners; however any ultimate decision will depend upon whether the parties can reach mutually agreeable terms and conditions, whether joint ownership benefits PEF's customers and the Company, and whether it is reasonable and prudent to have joint owners in Levy Units 1 and 2.

VII. PROJECT SCHEDULE

Q. Please provide a summary of the project schedule and key milestones.

A. As shown in more detail in Exhibit No. ___ (DLR-6), our next near term schedule milestones include the execution of the EPC contract in the second or third quarter of 2008, the filing of the DEP SCA in June 2008, and the filing of the NRC COLA in third quarter of 2008. Timely receipt of the SCA and COL will be critical in meeting all of the other construction milestones. In 2008, we likely will also place orders for certain long-lead time equipment, including the reactor vessel, the steam generators, and the turbine generators.

In order to ensure the proposed commercial operation date for Unit 1 is met, pre-construction activities must begin in 2008. This includes certain site infrastructure such as site access roads, an office building and a training facility. Assuming we receive all regulatory approvals on schedule, we will commence on-site preparation and pre-construction activities in 2010. We plan to begin the pour

of safety-related concrete; i.e., starting with the reactor foundation in 2012, and we expect completion of the balance of plant by the end of 2015.

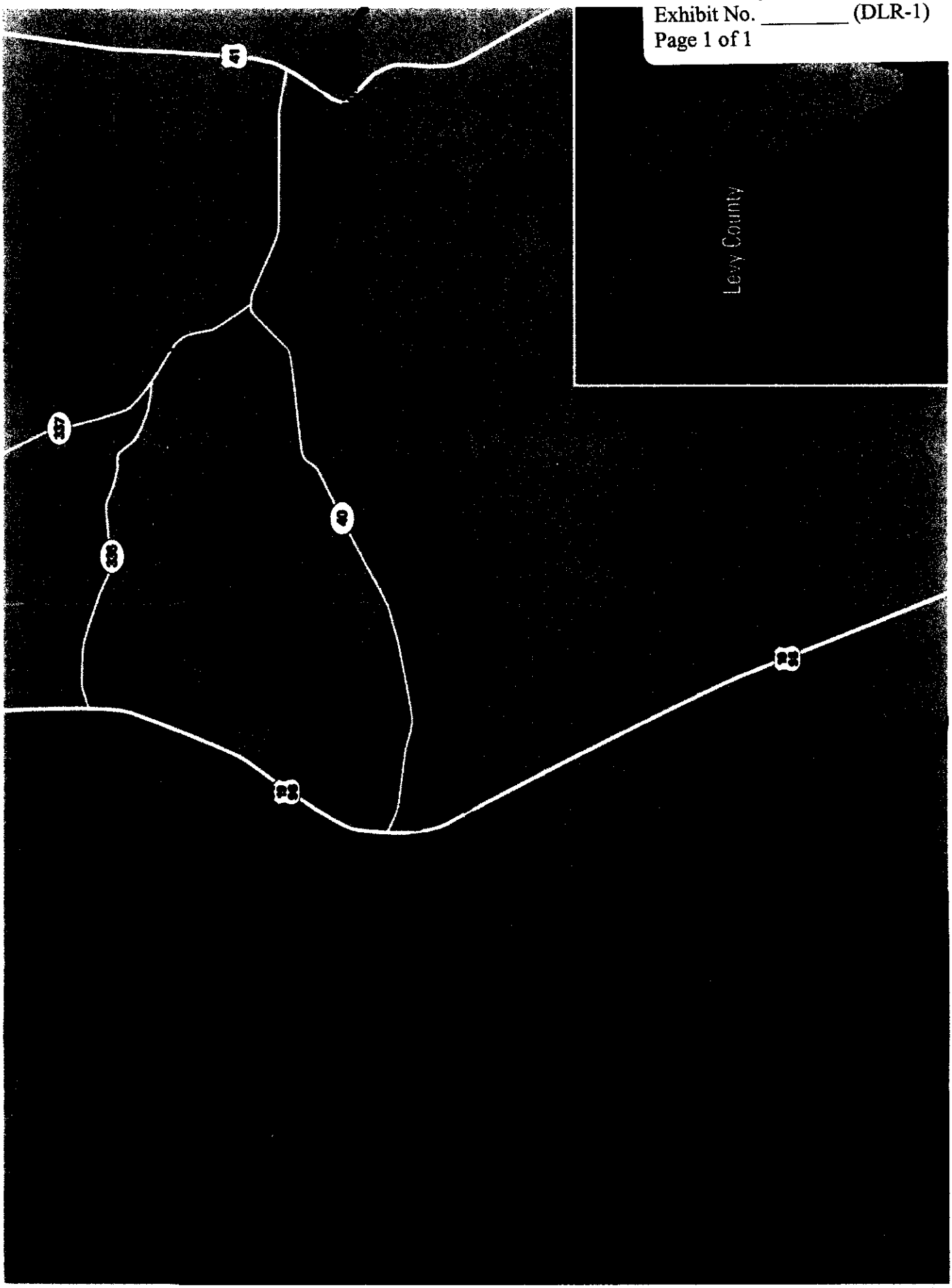
Concurrent with construction, we will commence training of the new reactor staff. We plan to commence start up testing in late 2015, and go commercial with Unit 1 in June 2016, and with Unit 2 in June 2017.

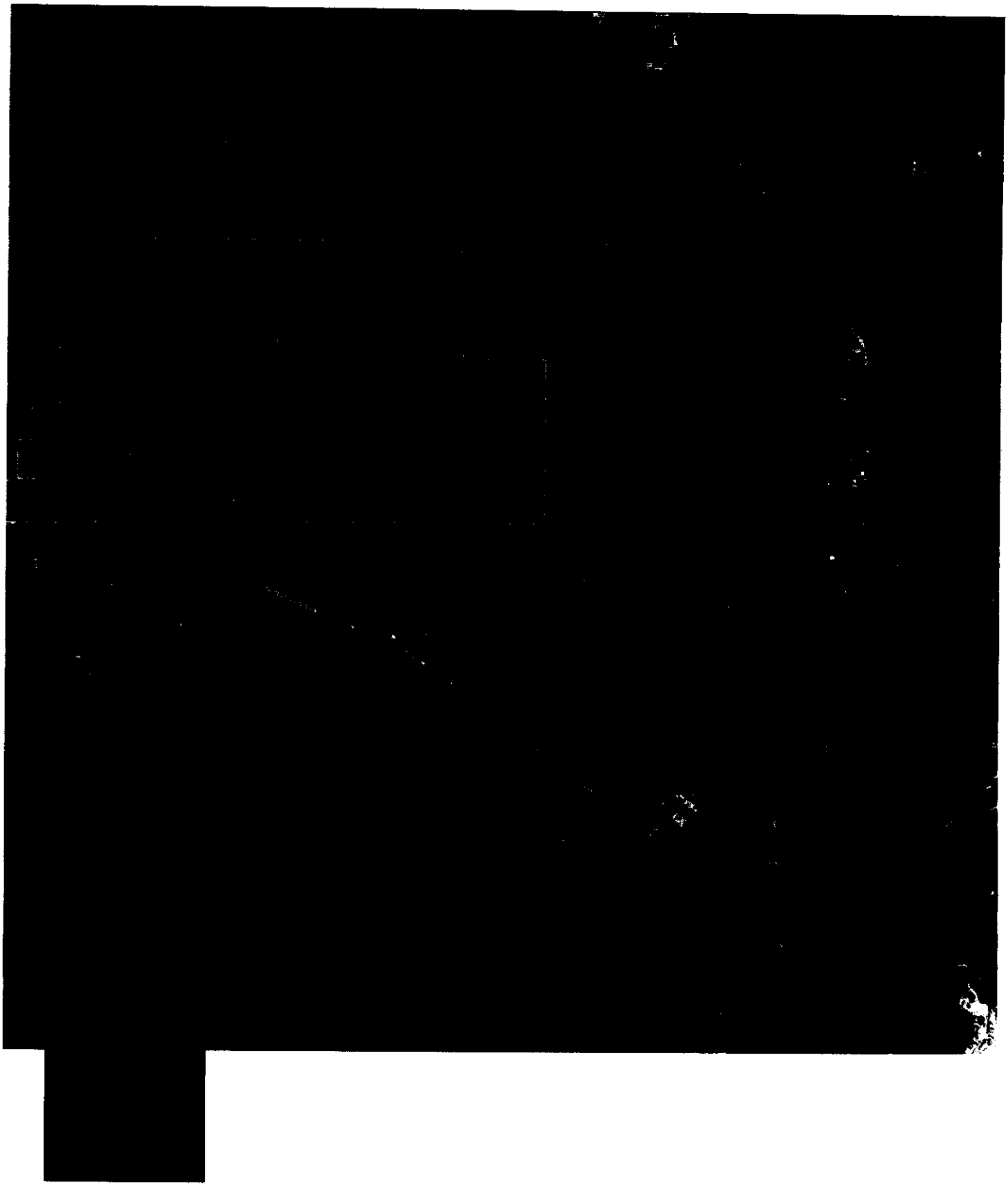
As discussed in greater detail by Mr. Oliver, on a concurrent path with the construction of the generating units, we will acquire necessary rights-of-way for the associated transmission facilities, and commence construction of the associated facilities beginning in 2010 or sooner, if possible. We anticipate completing transmission construction by 2015 to meet our start up testing schedule.

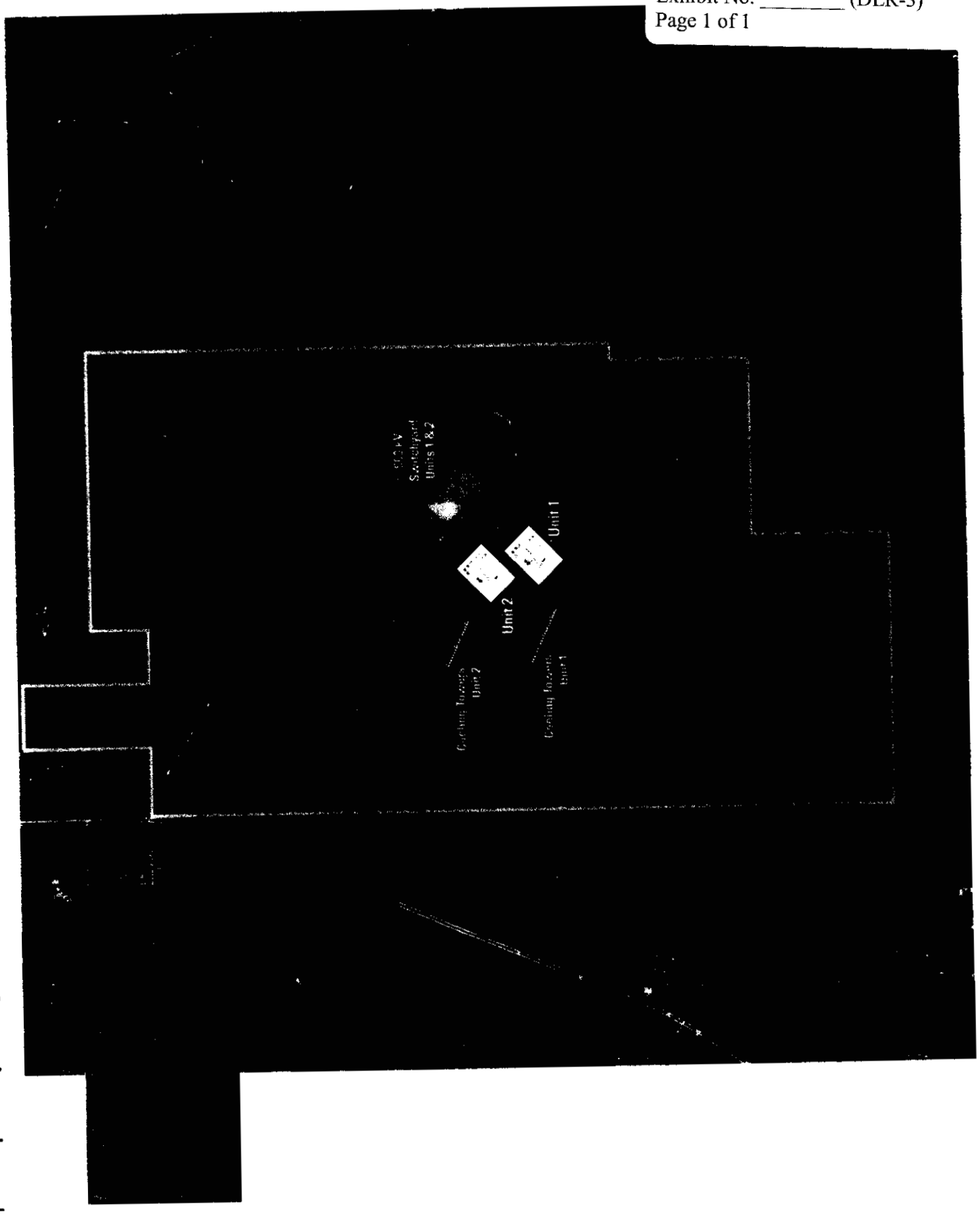
Q. Does this conclude your testimony?

A. Yes, it does.

Progress Energy Florida
Docket No. _____
Exhibit No. _____ (DLR-1)
Page 1 of 1

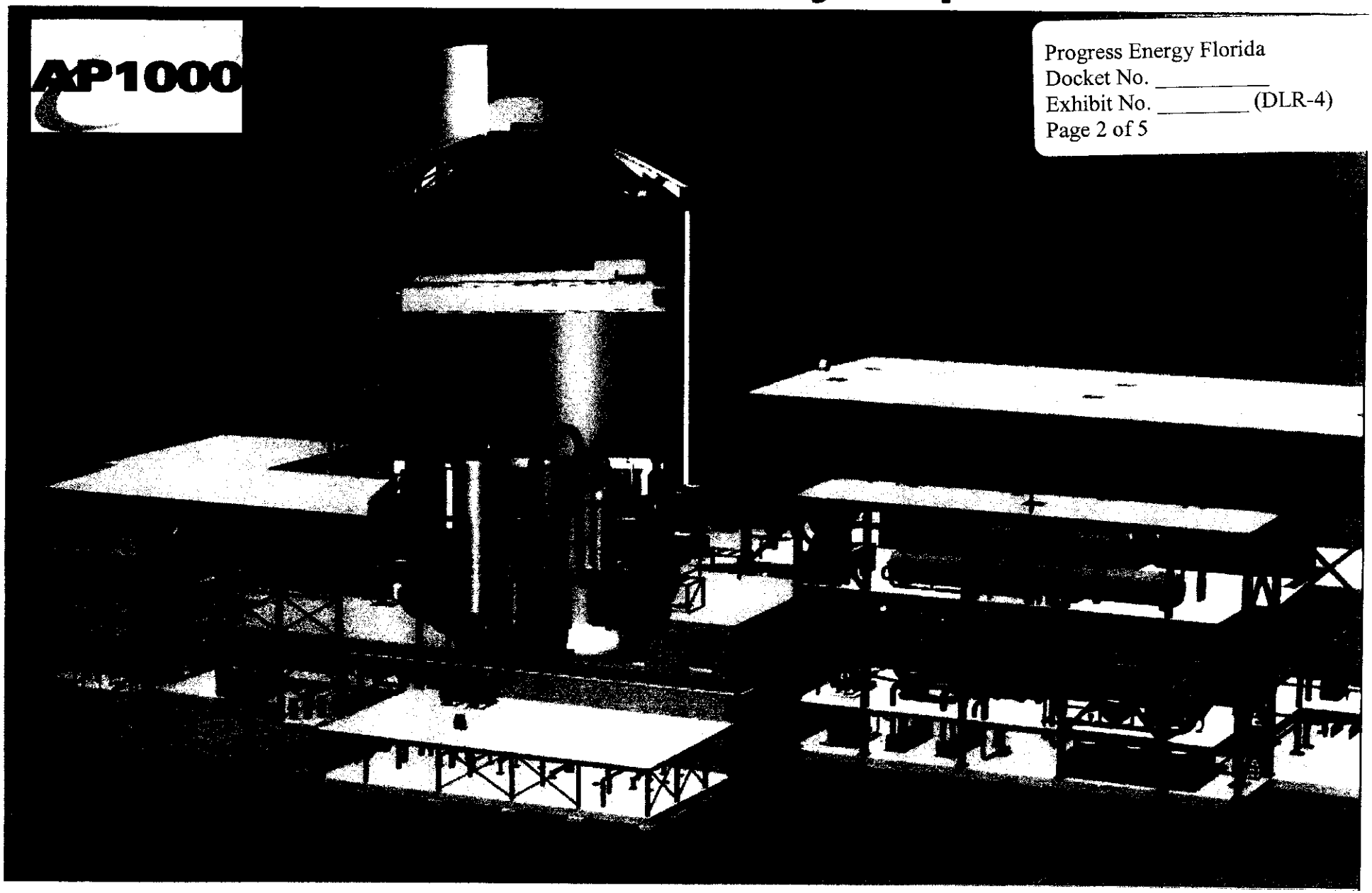





Unit 1
Unit 2


AP1000

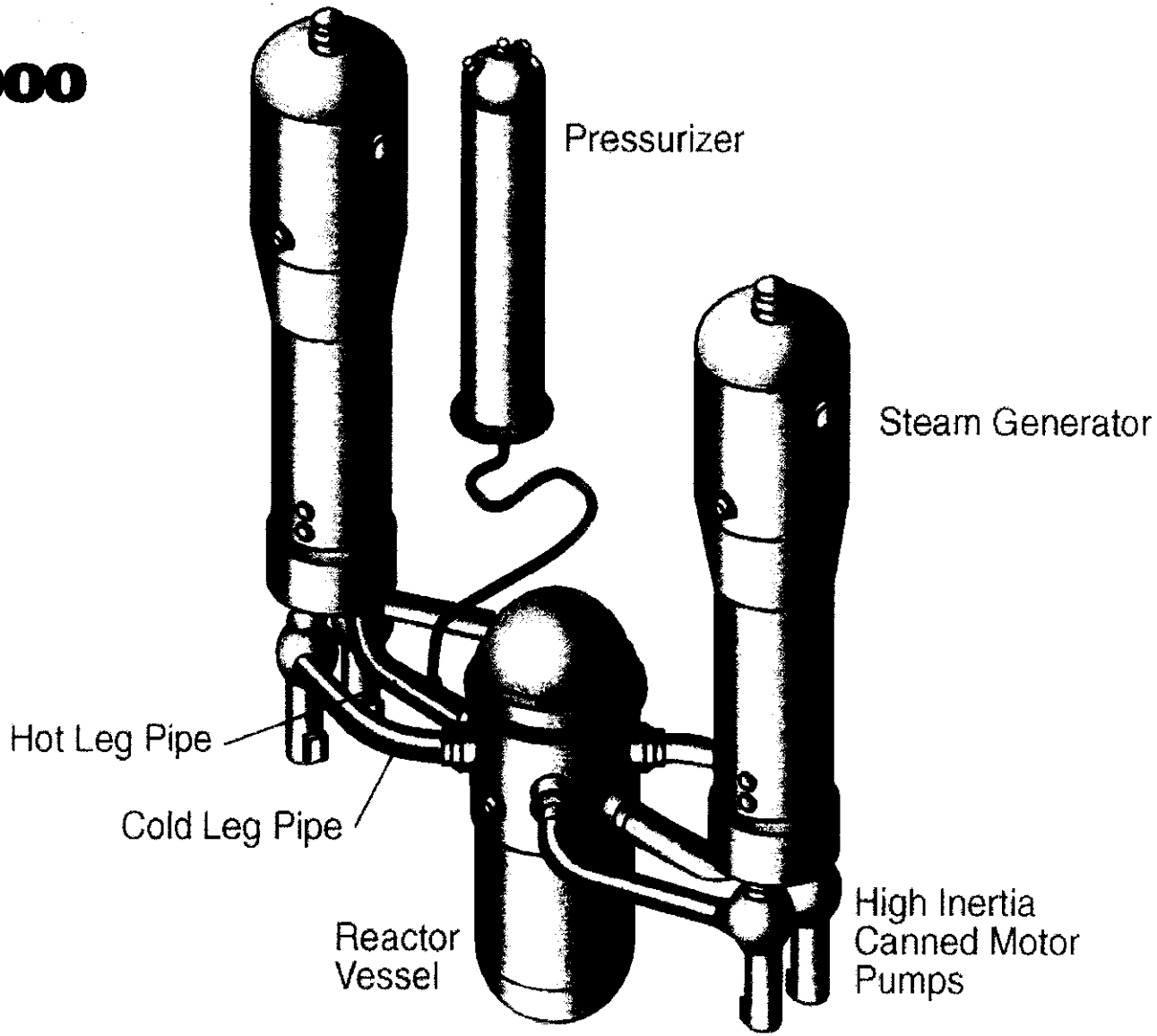
AP1000 Reactor Cut-Away Depiction



Progress Energy Florida
Docket No. _____
Exhibit No. _____ (DLR-4)
Page 2 of 5

AP1000 Reactor Coolant System

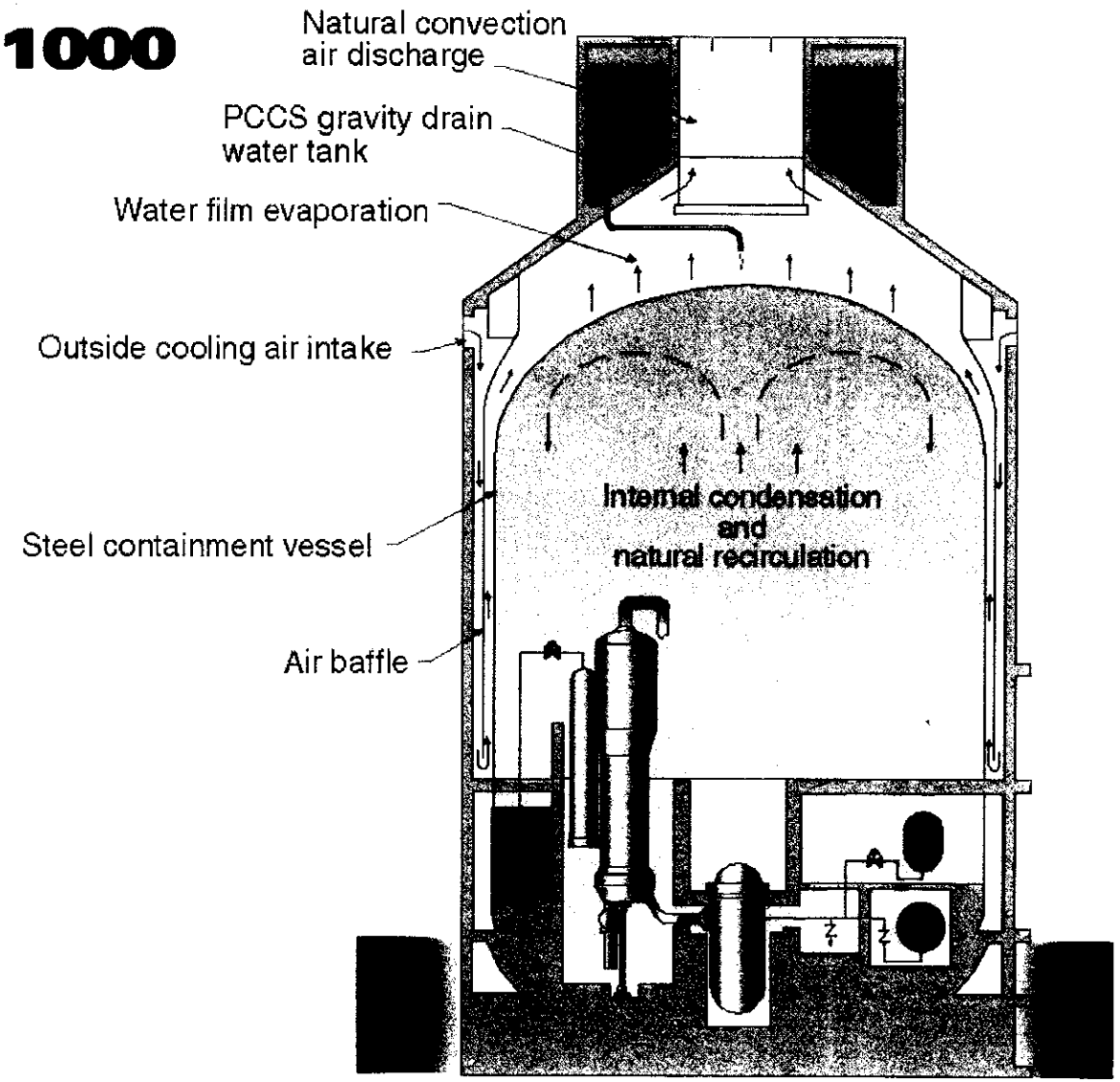
AP1000



Progress Energy

AP1000 Passive Containment Cooling

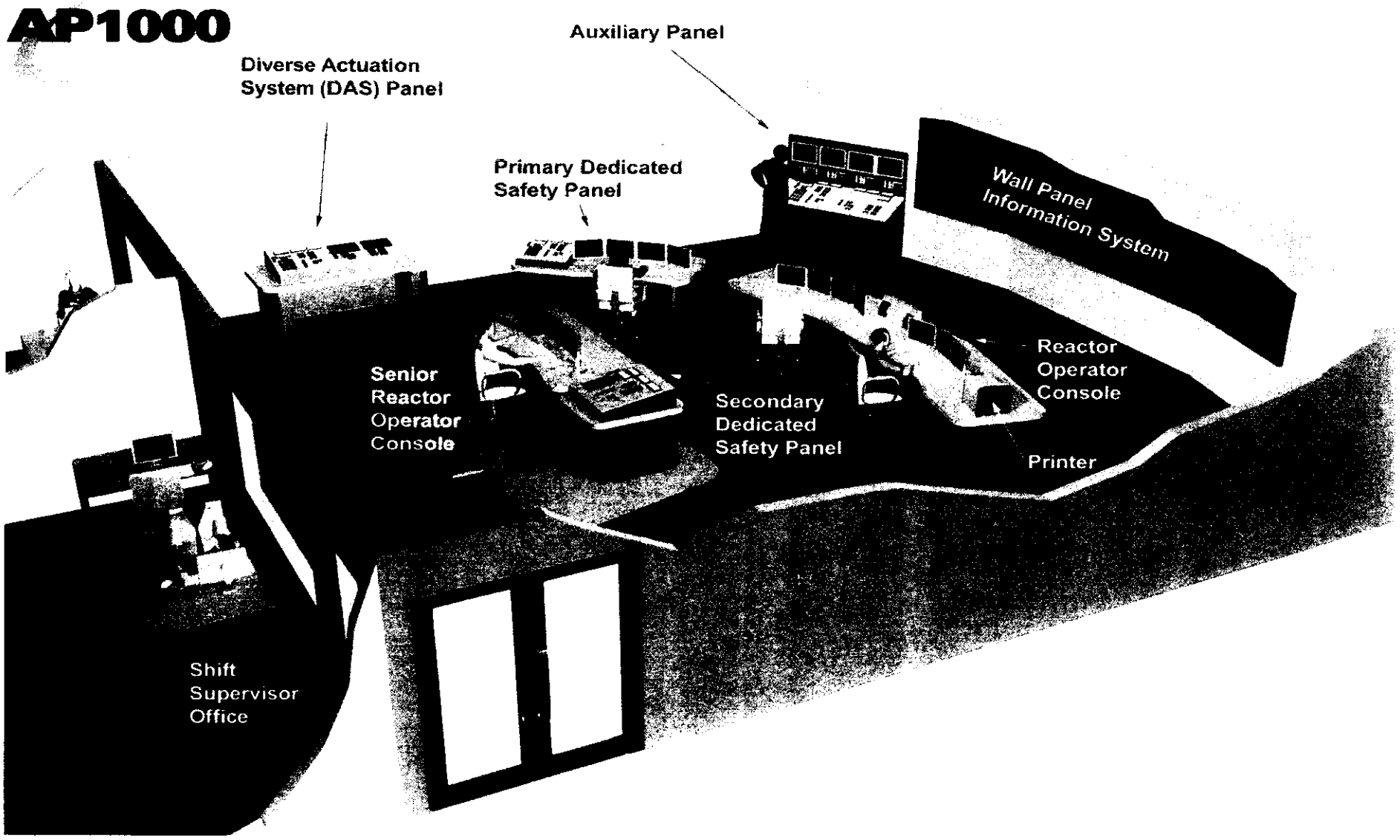
AP1000



Progress Energy Florida
Docket No. _____
Exhibit No. _____ (DLR-4)
Page 4 of 5

Progress Energy

AP1000 Compact Control Room



Cost Breakdown Summary

Total Project Estimate
Progress Energy Levy Nuclear Plant Units 1&2
Dollars in Thousands

Updated 2/21/2008

Expenditure Description	Actual To Date	2008 Projected	2009 Projected	2010 Projected	2011 Projected	2012 Projected	2013 Projected	2014 Projected	2015 Projected	2016 Projected	2017 Projected	Total Projected
Levy Unit 1 Overnight Total Cost	76,474	113,054	377,625	724,611	921,941	930,168	937,612	891,171	438,858	182,661	23,122	5,617,297
Levy Unit 2 Overnight Total Cost	-	9,367	188,422	331,780	409,976	605,380	755,597	555,813	484,098	264,053	81,796	3,686,282
Levy Unit 1 & 2 Overnight Total Cost	76,474	122,420	566,048	1,056,391	1,331,917	1,535,548	1,693,209	1,446,983	922,956	446,714	104,918	9,303,579
AFUDC	3,572	12,661	37,618	96,214	191,233	322,157	485,735	646,364	763,100	541,503	146,604	3,246,762
Escalation	-	3,523	34,472	97,956	166,583	244,573	328,571	314,004	202,600	111,003	36,083	1,539,367
Levy Unit 1 & 2 Total Estimated Cost	80,046	138,604	638,138	1,250,561	1,689,733	2,102,279	2,507,515	2,407,351	1,888,656	1,099,220	287,605	14,089,708

Progress Energy Florida
Petition for Need – Levy 1 & 2
Docket No. _____
Exhibit No. _____ (DLR-6)

REDACTED