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IDAHO PUBLIC  
UTILITIES COMMISSION

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF IDAHO POWER )  
COMPANY'S APPLICATION FOR A ) CASE NO. IPC-E-09-03  
CERTIFICATE OF PUBLIC CONVENIENCE )  
AND NECESSITY FOR THE LANGLEY )  
GULCH POWER PLANT. )  

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IDAHO POWER COMPANY

DIRECT TESTIMONY

OF

KARL BOKENKAMP

1 Q. Please state your name and business address.

2 A. My name is Karl Bokenkamp and my business  
3 address is 1221 West Idaho Street, Boise, Idaho.

4 Q. By whom are you employed and in what  
5 capacity.

6 A. I am employed by Idaho Power Company as the  
7 General Manager of Power Supply Operations and Planning.

8 Q. Please describe your educational background.

9 A. I received a Bachelor of Science Degree in  
10 Mechanical Engineering from the University of Illinois at  
11 Urbana-Champaign in 1980. In 1995, I earned a Master of  
12 Engineering Degree in Mechanical Engineering from the  
13 University of Idaho. I am a registered Professional  
14 Engineer in the state of Arizona, and I have attended the  
15 Stone & Webster Utility Management Development Program and  
16 the University of Idaho's Utility Executive Course.

17 Q. Please describe your work experience with  
18 Idaho Power Company.

19 A. I became employed by Idaho Power in 1995 as  
20 the Director, and then Manager, of Thermal Production. In  
21 this position I was responsible for managing Idaho Power's  
22 Thermal Production Department. Primary responsibilities of  
23 the department included oversight and control of Idaho  
24 Power's ownership shares in its three jointly-owned coal-

1 fired generation resources, Bridger, Boardman, and Valmy,  
2 and their associated fuel supplies.

3 In 2001, I accepted a new assignment as the Manager  
4 of Power Supply Planning and was later promoted to General  
5 Manager of Power Supply Planning. In this position, I was  
6 responsible for building and managing Power Supply's  
7 Planning Department. This department's responsibilities  
8 included operational planning, load forecasting, stream  
9 flow forecasting, integrated resource planning,  
10 cogeneration and small power producer contract management,  
11 water management/river operations, and gas and coal  
12 contract management.

13 In 2006, I was promoted to my current position of  
14 General Manager, Power Supply Operations and Planning.  
15 This position adds operational responsibilities, which  
16 include asset optimization, wholesale electricity, and  
17 natural gas transactions from real-time through multi-year  
18 deals as well as real-time operations and scheduling.

19 Q. Please outline the major topics you will  
20 address in your testimony in this proceeding.

21 A. There are three major topics that comprise  
22 my testimony. First, I will briefly review how the  
23 addition of a baseload resource like the Langley Gulch  
24 power plant ("Langley Gulch" or "Project") is consistent

1 with the Company's 2006 Integrated Resource Plan and 2008  
2 Update. Second, I will provide an overview of the Request  
3 for Proposal ("RFP") process used to evaluate the various  
4 resources that competed to provide the baseload resource.  
5 Finally, I will explain why the Project was selected as the  
6 least-cost resource through the competitive RFP process.

7 Q. What drives the need for Idaho Power to  
8 acquire additional resources?

9 A. Load growth within Idaho Power's service  
10 territory is primarily what drives the need for new  
11 generating resources. In 1990, Idaho Power had  
12 approximately 290,000 retail customers, and a firm peak-  
13 hour load of less than 2,100 MW. Today, Idaho Power serves  
14 over 480,000 retail customers in Idaho and Oregon, and firm  
15 peak-hour load has grown to over 3,200 MW. Average firm  
16 load has increased from approximately 1,200 aMW in 1990 to  
17 over 1,800 aMW in 2008.

18 Q. What role does the Company's integrated  
19 resource planning process play in determining the need for  
20 the acquisition of a baseload resource?

21 A. The Company's integrated resource planning  
22 process is the basis for establishing the Company's need  
23 for the acquisition of additional resources. The IRP  
24 considers supply-side resources (generators and market

1 purchases), demand-side resources (energy efficiency or  
2 demand response programs), and the transmission lines  
3 necessary to integrate these resources. Because of the  
4 Company's reliance on its hydroelectric generation, its  
5 operations can be significantly affected by water  
6 conditions. With this in mind, the Company's IRP utilizes  
7 two planning criteria, one for average load or energy and  
8 another for peak-hour load, and both are based on receiving  
9 less than normal streamflows. For energy, Idaho Power  
10 plans to be able to serve its average loads under 70<sup>th</sup>  
11 percentile water and 70<sup>th</sup> percentile load conditions. For  
12 peak-hour load, Idaho Power plans to serve its peak-hour  
13 loads under 90<sup>th</sup> percentile water and 95<sup>th</sup> percentile load  
14 conditions.

15           The preferred portfolio in the 2004 IRP included a  
16 500 MW baseload coal-fired resource, with seasonal  
17 ownership, in 2011. The preferred portfolio in the 2006  
18 IRP refined this resource need to a 225 MW power purchase  
19 facilitated from what we called a McNary to Boise  
20 transmission upgrade in 2012, a 250 MW pulverized coal  
21 baseload resource in 2013 and a 250 MW Regional IGCC (or  
22 "clean coal") project in 2017. Since the 2006 IRP was  
23 published, escalating concerns regarding climate change, CO<sub>2</sub>  
24 emissions and the public's perception of coal-fired

1 resources has made coal-fired resource development an  
2 unrealistic alternative. These concerns coupled with the  
3 possibility of new large loads locating in our service  
4 territory and the anticipated shift of flow augmentation  
5 releases of water from the federal dams on the Snake River  
6 above Brownlee Dam from July and August to May and June,  
7 have prompted the Company to (1) revise the 250 MW coal-  
8 fired resource to a natural gas-fired baseload resource,  
9 (2) increase the size of the baseload resource to  
10 approximately 300 MW, and (3) accelerate the on-line date  
11 of the baseload resource to 2012.

12 Q. Why did the Company decide to utilize a  
13 competitive request for proposals or RFP process to acquire  
14 the baseload resource previously described in your  
15 testimony?

16 A. The competitive RFP process allows the  
17 Company to access the broader power supply market to obtain  
18 the best resource for our customers. It gives us access to  
19 a spectrum of potential resources and resource developers.  
20 Use of a formal RFP process provides customers and  
21 regulatory agencies with the assurance that the resource  
22 selection process was competitive, all potential suppliers  
23 had an equal opportunity to participate, and that the best  
24 resource alternative was selected.

1 Q. Did the Company engage an independent third-  
2 party to review the Company's RFP and bid evaluation  
3 process?

4 A. Yes. The Company retained R. W. Beck, an  
5 independent consulting company offering a complete range of  
6 consulting and engineering services to the utility  
7 industry, to assist us with the RFP process. Specifically,  
8 R. W. Beck was retained to assist with preparation of the  
9 RFP, the draft power purchase and tolling agreements,  
10 development of the evaluation criteria and manual, and  
11 evaluation of the proposals received in response to the  
12 RFP, including the self-build alternative. Mr. Steven  
13 Stein, R. W. Beck Principal & Executive Consultant, was R.  
14 W. Beck's project manager and the principal consultant  
15 involved in supporting our RFP process.

16 Q. Please describe the parameters the Company  
17 set for the responses to the RFP.

18 A. The parameters set for this RFP can be  
19 grouped into four categories; product, quantity, proposal  
20 size, and term. The product was specified as dispatchable,  
21 first call, non-recallable, physically delivered firm, or  
22 unit contingent energy, commencing not later than June 1,  
23 2012, that is dedicated solely to Idaho Power's use. The  
24 RFP indicated that the product requirements could be met

1 through Power Purchase Agreements ("PPA") or Tolling  
2 Agreements ("TA"). The RFP also advised that the Company  
3 would include in the bidding process a Company-developed  
4 CCCT that would provide a benchmark resource for  
5 consideration. Build-and-transfer proposals were not  
6 considered in this RFP process. The quantity of  
7 dispatchable firm or unit contingent energy requested was  
8 initially specified as between approximately 250 MW and 600  
9 MW. On June 25, 2008, the quantity was revised to  
10 approximately 300 MW. The minimum and maximum proposal  
11 sizes were initially specified as 50 MW and approximately  
12 600 MW, respectively. When the quantity was revised to  
13 approximately 300 MW, the maximum proposal size also was  
14 adjusted to approximately 300 MW. Regarding term, each  
15 respondent was required to submit one proposal with a term  
16 of 15 years and 1 five-year renewal option.

17 Q. Why didn't the Company allow build-and-  
18 transfer proposals?

19 A. When the Company made the decision to pursue  
20 a combined cycle project, Company employees visited a  
21 number of combined cycle projects. During these site  
22 visits, Company employees observed significant design  
23 differences between similar sized projects. Simply put,  
24 some designs were much better than others.

1           If a build-and-transfer option was permitted, and  
2 projects with significant design differences were proposed,  
3 the evaluation process could become extremely complicated  
4 and somewhat subjective. The Company concluded that the  
5 best way to eliminate significant design differences  
6 between the proposals and assure an effective evaluation  
7 process was to prepare and issue a detailed specification  
8 with the RFP to ensure uniform design criteria between  
9 projects.

10           Given the decision to accelerate the on-line date to  
11 2012, information obtained regarding critical equipment  
12 manufacturing lead times, and the aforementioned  
13 differences in project design, in the Company's opinion, it  
14 did not have enough time to prepare a detailed design  
15 specification and release the RFP in time to meet the 2012  
16 on-line date.

17           Q.       Please describe the response the Company  
18 received to the RFP.

19           A.       The Company received six proposals. One  
20 proposal was returned unopened because the bidder did not  
21 submit a Notice of Intent to Bid as required by the RFP.  
22 The five remaining valid proposals represented a total of  
23 thirteen alternative resources. The alternatives included:

1 one Power Purchase Agreement, nine TAs, two hybrid  
2 proposals, and the Benchmark Resource.

3 The nine TAs offered included three different  
4 technology classes; three TAs were for large frame simple  
5 cycle CTs, two TAs were for advanced aeroderivative simple  
6 cycle CTs, and five TAs were for 1 x 1 combined cycle CTs.

7 Q. Please describe the process the Company  
8 followed to evaluate and rank the responses to the RFP.

9 A. The process the Company followed to evaluate  
10 and rank the responses received in response to the RFP is  
11 outlined in the Proposal Evaluation Manual prepared for the  
12 2012 Baseload Generation RFP. The Proposal Evaluation  
13 Manual was finalized before any of the proposals were  
14 received. The evaluation process can be characterized as a  
15 three stage screening process.

16 In stage 1 screening, proposals were checked against  
17 the minimum requirements set forth in the RFP. This  
18 screening involved checking proposals for completed forms,  
19 minimum quantities, minimum term, addressing environmental  
20 costs, an Interconnection Feasibility Study Report, and  
21 signatures.

22 At the Stage 2 screening level, a busbar analysis  
23 was used to determine the cost of each proposal. Levelized

1 fixed, variable and total costs, and non-levelized total  
2 costs at various capacity factors were calculated.

3           During Stage 3 screening, price and non-price  
4 factors, or criteria, were scored for each proposal using a  
5 weighted scoring system. The price factors received a  
6 total of 60 points. Price factors were based on the net  
7 present value ("NPV") of the estimated total revenue  
8 requirement associated with each proposal. Each proposal  
9 making it to Stage 3 screening was modeled and its impact  
10 on Idaho Power's system costs was simulated using the  
11 Aurora Electric Market Model. The results of the Aurora  
12 analysis were used to determine the NPV of the revenue  
13 requirements associated with adding that project to Idaho  
14 Power's portfolio of resources. Non-price factors  
15 received a total of 40 points. Non-price criteria  
16 included: project development, project characteristics,  
17 product characteristics, project location, environmental,  
18 credit factors, and financial strength. A total of 40  
19 points were distributed between these six non-price  
20 criteria. Sensitivity analyses were run for high and low  
21 gas price scenarios, but these results did not impact the  
22 price and non-price scores.

23           Q.       How did the Company address transmission  
24 costs in the RFP process?

1           A.           One of the minimum requirements of the RFP  
2 was that proposals relying on a new generating resource to  
3 be developed in Idaho Power's service territory were  
4 required to submit an Interconnection Feasibility Study  
5 report prepared by Idaho Power's Delivery Planning group  
6 with their proposal. The cost estimates provided by Idaho  
7 Power's Delivery Planning group in the Interconnection  
8 Feasibility Study Reports or, in one case, a System Impact  
9 Study were used to set the transmission costs of each  
10 proposal.

11           Q.           What fuel cost assumptions were used in  
12 evaluating the bids?

13           A.           The same assumptions for the cost of fuel  
14 delivery to the Northwest Pipeline mainline tap, in  
15 \$/MMBtu, were used to evaluate all proposals, including the  
16 Benchmark Resource. Any costs from the main line tap to  
17 the proposed resource locations were considered to be  
18 project specific. The natural gas price forecast used to  
19 evaluate bids showed an increase from \$9.39/MMBtu in 2012  
20 to \$15.55/MMBtu in 2036. This forecast is provided as  
21 Exhibit No. 1.

22           Q.           How was the cost of AFUDC evaluated for the  
23 Benchmark Resource?

1           A.       The benchmark proposal included an estimate  
2 of AFUDC costs expected to be incurred during the  
3 construction of the project. The Benchmark Resource team's  
4 AFUDC estimate was calculated by applying a 7 percent  
5 annual capitalized interest charge to the funds spent on  
6 construction of the project. The estimated AFUDC costs  
7 were added to the accumulated construction work in progress  
8 balances each month. The total amount of AFUDC included in  
9 the plant portion of the Benchmark Resource evaluation was  
10 approximately \$49 million. For the Benchmark Resource  
11 proposal, this amount was included in the capitalized cost  
12 of the project, which was used to calculate the estimated  
13 revenue requirement for the Benchmark Resource.

14           Q.       How do the total costs of the selected  
15 Langley Gulch Project compare to the other bids received by  
16 the Company in response to the RFP?

17           A.       Exhibit No. 2 shows the total revenue  
18 requirement for each of the three short-listed CCCT  
19 projects. The Benchmark Resource is Project D. Exhibit  
20 No. 3 shows the 20 year net present value ("NPV") of the  
21 difference in revenue requirement between the short-listed  
22 three CCCT projects.

23           Q.       What does Exhibit No. 3 show?

1           A.       Exhibit No. 3 shows that the 20-year NPV of  
2 the revenue requirements for the Langley Gulch Project were  
3 \$108 million less than the next closest combined cycle  
4 project on the short-list. To put the \$108 million  
5 difference in perspective, it is about 3.8 percent less  
6 than the 20-year NPV of the revenue requirements of the  
7 combined cycle project finishing in second place.

8           Q.       Do Exhibits Nos. 2 and 3 reflect the  
9 Company's Commitment Estimate amount?

10          A.       No. The comparisons shown in these exhibits  
11 are based on the final costs submitted by the short-listed  
12 bidders. However, I do not believe use of the Commitment  
13 Estimate in the comparison would change the ranking of the  
14 bids.

15          Q.       How did the non-price attributes compare  
16 among the various responders to the RFP?

17          A.       Although each project was unique, overall,  
18 the non-price scoring for the short-listed projects was  
19 actually quite close. Less than 3 points separated the  
20 non-price scores for all of the short-listed projects and  
21 less than 2 points separated the non-price scores of the  
22 short-listed combined cycle projects. Out of a possible 40  
23 non-price points, the scores for the short-listed combined

1 cycle projects ranged from 30.1 to 28.6. In this RFP, the  
2 non-price scores were not a significant differentiator.

3 Q. Why did the Company ultimately select the  
4 Langley Gulch Project as the preferred bidder?

5 A. The Company's ultimate decision to select  
6 the Langley Gulch Project, based on the results of the RFP,  
7 was primarily dictated by its substantially lower price.  
8 The differential between the 20 year NPV of the revenue  
9 requirements of the Langley Gulch and the closest Tolling  
10 Agreement for a combined cycle project shows the second  
11 place project was approximately \$108 million more  
12 expensive, and the NPV analysis for the Tolling Agreement  
13 for the third-place combined cycle project was \$220 million  
14 more expensive than the Langley Gulch Project. Exhibit No.  
15 3 shows this differential graphically.

16 Q. Are there any unique issues associated with  
17 a utility-owned resource?

18 A. There are certain risks and benefits  
19 associated with selecting a traditional utility rate-based  
20 project. By selecting the Langley Gulch Project and  
21 providing a Commitment Estimate, the Company and its  
22 shareholders take on project development and construction  
23 risk. Customers retain the risk of fuel cost increases  
24 under either a tolling agreement or a utility-owned

1 resource. However, with the utility-owned resource, any  
2 savings resulting from the Project realizing a better than  
3 expected heat rate will be shared with customers through  
4 the PCA. That leaves the risk that the Company may not be  
5 able to operate and maintain the Project as efficiently as  
6 another operator. While this is a possible risk,  
7 conversely, if the Company is able to operate and maintain  
8 the Project for less than its anticipated costs, customers  
9 will have an opportunity to receive those savings. The  
10 potential operating risk needs to be balanced against the  
11 possible operating savings, plus the benefit of a projected  
12 20 year NPV reduction in revenue requirement of \$108  
13 million, plus the residual value associated with the  
14 Langley Gulch Project at the end of 20 years. It is the  
15 Company's conclusion that the above-described benefits to  
16 customers outweigh the risks associated with developing and  
17 operating a traditional utility rate-based project.

18 Q. The Company's 2006 IRP ten year resource  
19 plan recommends that a baseload resource be on-line in  
20 2012. What is the schedule for the Project's commercial  
21 operation date?

22 A. Initially, the 2012 base load resource was  
23 expected to be on-line in time to meet peak-hour loads  
24 during the summer of 2012. However, given the current

1 economic crisis, the Company anticipates difficulty  
2 financing this project without receiving a Certificate of  
3 Public Convenience and Necessity ("CPCN") with specific  
4 ratemaking or cost-recovery assurances. The Company  
5 estimates that it may take up to 6 months to obtaining a  
6 CPCN containing the needed regulatory assurances.  
7 Acknowledging the IPUC's need to carefully consider the  
8 Company's request, the Company has negotiated with the  
9 Langley Gulch Project's EPC contractor to postpone  
10 additional expenditures until a CPCN is received.  
11 Unfortunately, postponing additional expenditures for 6  
12 months is expected to delay the project's on-line date by 6  
13 months. Assuming that a Notice to Proceed is issued on  
14 September 1, 2009, the project is expected to be on-line in  
15 October 2012, and in commercial operation on December 1,  
16 2012.

17 Q. How is the fuel supply delivered to the  
18 project?

19 A. Ideally, Idaho Power would like to have the  
20 ability to access and deliver natural gas from both the  
21 Western Canadian Sedimentary Basin (British Columbia and  
22 Alberta) and the U.S. Intermountain West, or Rockies  
23 region. Idaho Power has transportation rights on Williams'  
24 Northwest Pipeline from Sumas, Washington, to Elmore,

1 Idaho. Idaho Power also has committed to acquire  
2 additional transportation rights on Northwest Pipeline from  
3 Stanfield, Oregon, to the Boise area and we are  
4 investigating the acquisition of additional transportation  
5 rights, also on Northwest Pipeline, from the Rockies region  
6 to the Boise area. Idaho Power intends to deliver natural  
7 gas to the Project site via Williams' Northwest Pipeline.  
8 Northwest Pipeline will be tapped and a short lateral line,  
9 approximately 1 mile in length, will be constructed to  
10 connect the Project to Northwest Pipeline.

11 Q. Were there other material considerations  
12 that should be considered when reviewing the Company's bid  
13 evaluation process?

14 A. Yes. There are two items that I would like  
15 to stress. The first is imputed debt. The RFP evaluation  
16 process did not assign any additional costs to the PPAs or  
17 TAs to cover the costs Idaho Power would incur by issuing  
18 additional equity to maintain its debt and equity ratios if  
19 the rating agencies imputed additional debt on Idaho  
20 Power's balance sheet as a result of entering into a long-  
21 term PPA or TA.

22 The second item is treatment of the costs associated  
23 with not selecting the Langley Gulch Benchmark Resource.  
24 While the Company recognizes that there may be loss of

1 equipment deposits, reservation fees, cancellation charges,  
2 and other penalties or costs that Idaho Power would incur  
3 if the Benchmark Resource was not selected, these potential  
4 costs were not considered in the bid evaluation. If all  
5 other things were equal, PPA or TA proposals would not have  
6 had to win by more than Idaho Power's cancellation costs to  
7 have been considered the winner.

8 Q. Did R. W. Beck provide a written assessment  
9 of the Company RFP process?

10 A. Yes. A copy of their assessment is attached  
11 as Exhibit No. 4.

12 Q. What did R. W. Beck conclude concerning the  
13 quality of the Company's RFP process?

14 A. R. W. concluded:

15 Finally, based on our work with  
16 the Idaho Power RFP Evaluation  
17 Team as described above, we  
18 believe that the Idaho Power 2012  
19 Baseload RFP process was conducted  
20 fairly and properly and that  
21 offers provided to Idaho Power as  
22 part of the RFP process, including  
23 the Benchmark Resource, were  
24 treated objectively and  
25 consistently as set forth in  
26 Section 5.5 of the RFP. (R. W.  
27 Beck Report, p. 3.)

28 Q. Are there other attributes of the Langley  
29 Gulch Project that you believe should be important to the  
30 Commission's consideration?

1           A.       Yes.  Although not directly evaluated in the  
2 RFP process, there are several other benefits associated  
3 with adding a combined cycle combustion turbine to Idaho  
4 Power's generation resources.  First, by using new, state  
5 of the art technology, the Langley Gulch Project will  
6 benefit from technological advancements resulting in  
7 improved efficiency which can be passed through to  
8 customers in the form of reduced operating costs and  
9 greater secondary sales revenues.  Second, the improved  
10 efficiency and the low variable operating costs of the  
11 Langley Gulch Project will result in the unit being  
12 dispatched more frequently.  Having the unit on-line more  
13 frequently gives Idaho Power another resource to assist  
14 with integrating wind or other intermittent resources.  
15 Third, the Langley Gulch Project is expected to have a  
16 residual value, and be available to serve customers at the  
17 end of 20 years.  Finally, adding a combined cycle project  
18 to Idaho Power's portfolio provides the Company with an  
19 opportunity to shift generation from coal-fired resources  
20 to a natural gas-fired combined cycle resource during  
21 certain times of the year, reducing the Company's CO<sub>2</sub>  
22 emissions from its coal-fired resources.

1           Q.       The Company is requesting that the  
2 Commission expedite its review of the Application.  Could  
3 you explain why?

4           A.       An expedited review of the Company's  
5 application will enable the Company to proceed with the  
6 project reducing the amount of time that project costs are  
7 subject to escalation.  Also, an expedited approval process  
8 may enable the project to be on-line for the summer of  
9 2012.

10          Q.       Does that complete your testimony?

11          A.       Yes.

**BEFORE THE**  
**IDAHO PUBLIC UTILITIES COMMISSION**

**CASE NO. IPC-E-09-03**

**IDAHO POWER COMPANY**

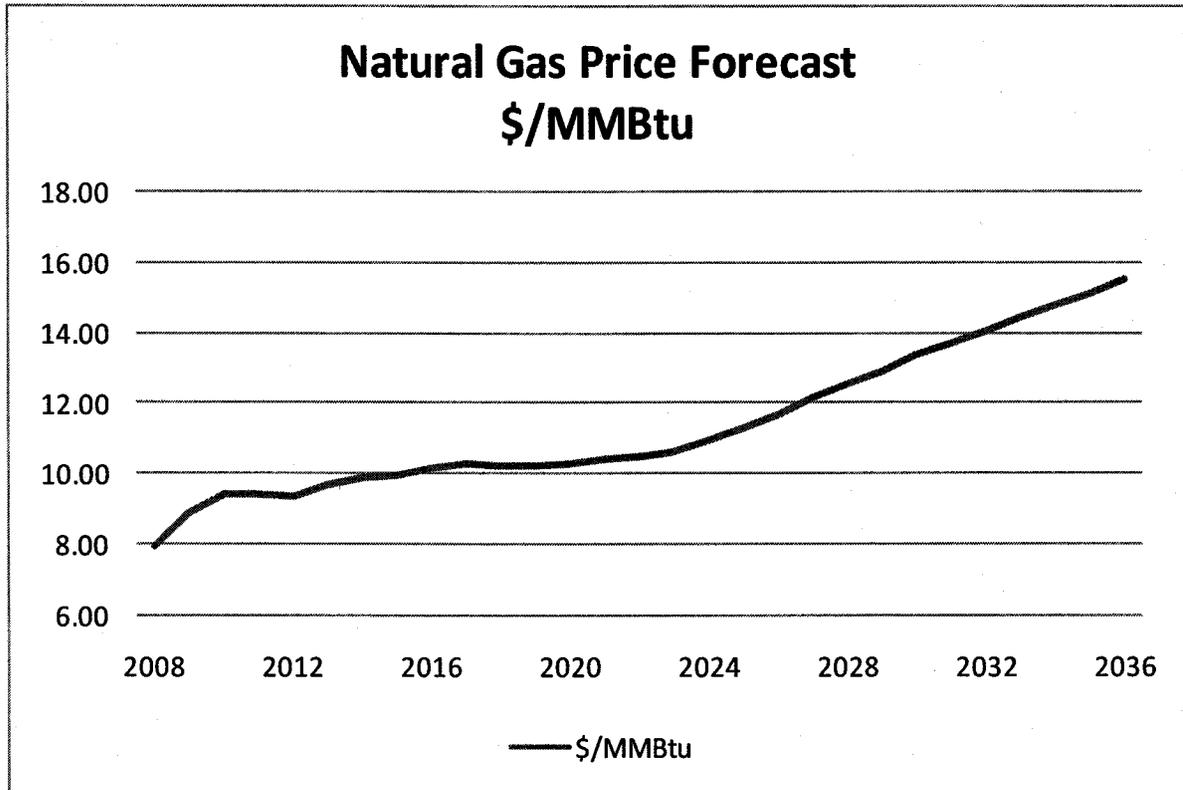
**BOKENKAMP, DI**  
**TESTIMONY**

**EXHIBIT NO. 1**

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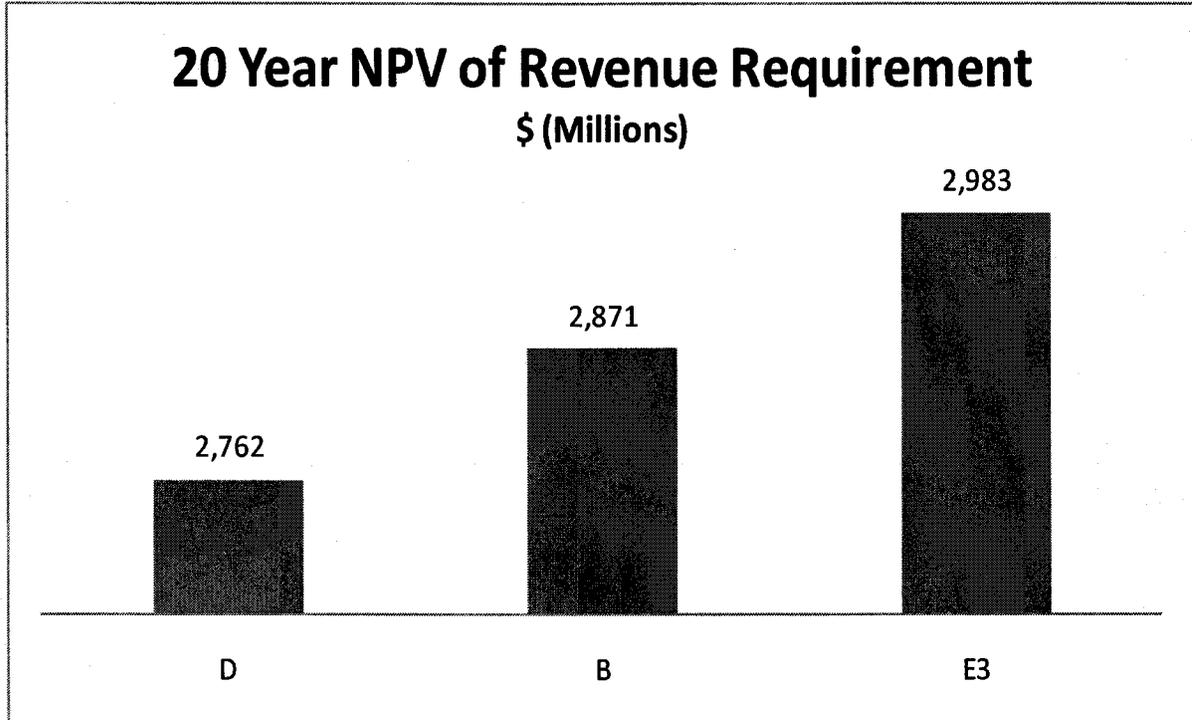
**CASE NO. IPC-E-09-03**

**IDAHO POWER COMPANY**

**BOKENKAMP, DI**  
**TESTIMONY**

**EXHIBIT NO. 2**

## 20 Year NPV of Revenue Requirement \$(Millions)



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**IDAHO PUBLIC UTILITIES COMMISSION**

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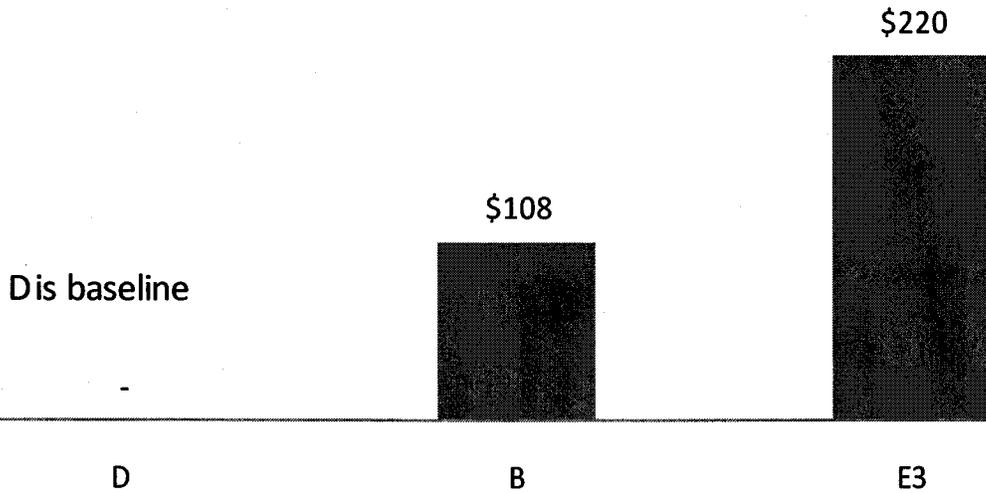
**CASE NO. IPC-E-09-03**

**IDAHO POWER COMPANY**

**BOKENKAMP, DI**  
**TESTIMONY**

**EXHIBIT NO. 3**

## Differential in 20 Year NPV of Revenue Requirement \$ (Millions)



**BEFORE THE**  
**IDAHO PUBLIC UTILITIES COMMISSION**

**CASE NO. IPC-E-09-03**

**IDAHO POWER COMPANY**

**BOKENKAMP, DI**  
**TESTIMONY**

**EXHIBIT NO. 4**

