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IDAHO PUBLIC
UTILITIES COMMISSION

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

IN THE MATTER OF THE PETITION OF)
IDAHO POWER COMPANY FOR)
MODIFICATION OF THE LOAD GROWTH)
ADJUSTMENT FACTOR WITHIN THE POWER) CASE NO. IPC-E-06-08
COST ADJUSTMENT (PCA) METHODOLOGY)
_____)

DIRECT TESTIMONY OF
DR. DON READING
ON BEHALF OF
THE INDUSTRIAL CUSTOMERS OF IDAHO POWER (ICIP)

SEPTEMBER 15, 2006

1 **Q. PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2 A. My name is Don Reading and my business address is Ben Johnson
3 Associates, 6070 Hill Road, Boise, Idaho.

4 **Q. WHAT IS YOUR OCCUPATION?**

5 A. I am a principal with Ben Johnson Associates.

6 **Q. HAVE YOU PREPARED AN EXHIBIT OUTLINING YOUR
7 QUALIFICATIONS AND BACKGROUND?**

8 A. Yes. Exhibit No. 201 serves that purpose.

9 **Q. ARE YOU SPONSORING ANY OTHER EXHIBITS WITH THIS
10 TESTIMONY?**

11 A. No.

12 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS
13 CASE NO. IPC-E-06-08?**

14 A. I have been retained by the Industrial Customers of Idaho Power (ICIP)
15 to review the load growth adjustment rate used in the true-up portion of the Power Cost
16 Adjustment (PCA) methodology.

17 **Q. DR. READING, COULD YOU PLEASE GIVE AN OVERVIEW
18 OF THE POLICY DECISION PRESENTED IN THIS CASE FOR THE
19 COMMISSION?**

20 A. Yes. While the specific calculations and applications of the load growth
21 adjustment rate are complex, the policy choice for the Commission is straightforward and
22 easily defined. The basic question being presented to the Commission is whether the
23 calculation of the load growth adjustment rate should be changed from a marginal basis to

1 an average basis. The complexity of the mechanism being discussed in the case can tend
2 to cloud this central issue. All parties agree, however, that the load growth adjustment
3 rate is currently based on a marginal analysis. Idaho Power is asking that this be
4 fundamentally changed, and is advocating that the load growth adjustment be calculated
5 on an average- or embedded-cost basis. Other PCA-related issues are not a part of this
6 docket.

7 **Q. SINCE THE LOAD GROWTH ADJUSTMENT IS PART OF THE**
8 **POWER COST ADJUSTMENT, COULD YOU FIRST GIVE A BRIEF HISTORY**
9 **OF HOW IDAHO POWER'S POWER COST ADJUSTMENT WAS**
10 **ESTABLISHED?**

11 A. In 1981, the Idaho Commission approved setting power supply costs
12 based on multiple hydro years, or normalized conditions. *See* Case No. U-1006-185. It
13 was assumed this approach would make the Company whole in the long run. However,
14 severe droughts followed which caused the Company to file for drought surcharges due to
15 deteriorated hydro conditions. The Commission found this method of dealing with
16 volatile hydro conditions to be undesirable, and the PCA was subsequently developed and
17 implemented.

18 In its Order implementing the PCA the Commission explained,

19 Since we adopted the current system of normalization, Idaho Power
20 has requested and received two separate drought related surcharges. . . .
21 We find that the current system of normalizing power supply costs and
22 granting Idaho Power a surcharge during drought years is defective
23 because it is unpredictable and ratepayers do not receive any rate reduction
24 during high water years. . . . [W]hile ratepayers are subject to a surcharge
25 in poor years, they currently do not receive any reduction in rates in high
26 water years leading most customer groups to believe that the current
27 system works to their disadvantage when hydro conditions are good. The
28 PCA we adopt addresses this concern and will produce consumer benefit

1 in the form of lower rates during years of favorable stream flows. (IPUC
2 Order No. 24806, Case No. IPC-E-92-25, March 1993, pgs. 4,5).
3

4 Thus, the PCA mechanism was established as a result of dissatisfaction on the part
5 of the Company's customers and the Commission itself. Its purpose was to create a
6 system where both Idaho Power and its customers would share in the costs and benefits of
7 changes in power supply costs, caused primarily by variations in stream flows, that occur
8 between general rate filings. The PCA looks at year-to-year changes in power supply
9 costs caused primarily by changing water conditions. It is first set on a forward looking
10 basis, then trued up after loads and power costs are known.

11 **Q. BY ESTABLISHING A PCA BASED ON ANNUAL CHANGES IN**
12 **STREAM FLOWS, AND HENCE POWER SUPPLY COSTS, WAS THE**
13 **COMMISSION ABANDONING THE APPROACH IT TOOK IN 1981 OF**
14 **NORMALIZING POWER SUPPLY COSTS BASED ON MULTIPLE HYDRO**
15 **YEARS?**

16 A. No. The Commission stated expressly that it viewed the normalization
17 procedure (basing power supply costs on multiple hydro years) as a valuable tool in
18 setting rates in a general rate case. The PCA mechanism, on the other hand, is a limited
19 exception to the usual reliance on normalization procedure. In adopting the PCA, the
20 Commission explained the limited departure from the multi-year normalization procedure
21 that the PCA represents. The Commission stated,

22 We find, therefore, that it is in the best interests of ratepayers and
23 shareholders alike to adopt a PCA for Idaho Power. We emphasize,
24 however, that *our decision is limited to the unique circumstances of Idaho*
25 *Power's highly variable power supply costs.* While it is difficult for a
26 normalization process to capture these large annual changes, we continue
27 to believe that normalization is a valuable ratemaking methodology for
28 other types of expenses and revenues. *Nothing in this Order should be*

1 *construed to the contrary.* (IPUC Order No. 24806, pg. 5) (emphasis
2 added).
3

4 Later, in the same order, the Commission explained the PCA was not intended to
5 substitute for normal prudence review of costs incurred by Idaho Power to serve load
6 growth. The Commission explained,

7 We recognize and support the Company's right to recover costs
8 associated with prudent plant additions. *Our decision to not allow a PCA*
9 *mechanism to recover costs to offset legitimate plant costs caused by load*
10 *growth in no way prevents the Company from recovering these costs in*
11 *traditional ratemaking proceedings. A PCA is not intended to replace the*
12 *prudence review process inherent in a general rate case.* (IPUC Order No.
13 24806, pg.20) (emphasis added).
14

15 Thus, although the Commission believed it appropriate to allow a PCA to modify
16 rates based on large annual changes in power supply costs due to variability in fuel costs
17 (primarily hydro variations), it did not believe that the PCA should become a mechanism
18 through which Idaho Power could avoid traditional ratemaking review of its other costs,
19 including costs incurred in order to serve load growth. The PCA is meant to adjust for
20 the change (up or down) in power supply costs each year from those set between rate
21 cases.

22 The cost of generation used to serve additional load, that is, load in addition to the
23 load accounted for in the PCA year, is different from the cost of generation established in
24 a general rate case. It thus represents a different type of cost than that for which the PCA
25 was intended to provide automatic recovery in rates.

26 **Q. COULD YOU EXPLAIN BRIEFLY WHAT FUNCTION THE**
27 **LOAD GROWTH ADJUSTMENT SERVES IN THE PCA MECHANISM?**

1 A. The load growth adjustment was implemented by the Commission to prevent the
2 Company from double-recovering certain costs under the PCA. (IPUC Order No. 24806).
3 The load growth adjustment factor is used to adjust for power supply costs that the
4 Company has already recovered from customers through their rates. Although new
5 customers (or other new loads) add to Idaho Power's power supply costs over and above
6 those established through rate case normalization procedures, these new customers (or
7 other increased loads) pay Idaho Power's rates for the power they receive. Allowing the
8 Company to automatically recover in the PCA the full costs of serving new load would
9 therefore result in an over-recovery by the Company. In other words, if the PCA were not
10 adjusted to take into account the revenues the Company receives from new customers or
11 increased load, the Company would again receive them automatically in the PCA as
12 higher power supply costs.

13 Additionally, since this load growth is on the margin, Idaho Power incurs marginal
14 power generation costs to serve the load. The load growth adjustment also serves the
15 purpose of preventing the Company from *automatically* recovering the marginal costs of
16 serving new load. As stated above, the marginal costs of serving new load are properly
17 subjected to prudence review in general rate proceedings.

18 **Q. HOW DOES THE PCA ADJUST FOR THE POTENTIAL OVER-**
19 **RECOVERY OF POWER SUPPLY COSTS?**

20 A. Each year the PCA surcharge is established based on normalized
21 Company loads and forecast stream flow conditions that are a significant driver of power
22 supply costs. Because these are simply projections, actual power supply costs for the year
23 will differ from the forecast. The difference between actual and projected power supply

1 costs are 'trued-up,' and then become part of the coming year's PCA rate. During the
2 true-up step, the load growth adjustment rate is multiplied by the difference between
3 actual MWh sales and those used as base loads in the PCA original calculation. This
4 amount is then subtracted from the costs that are to be recovered by the PCA surcharge.
5 When the Company's loads are growing, the load growth adjustment results in a
6 reduction of the PCA surcharge. This prevents the PCA from recovering an amount that
7 would represent a double-recovery of the revenues it receives from new loads, and from
8 collecting an amount that would automatically compensate the Company for the marginal
9 costs it incurs to meet new loads. If the Company's loads decrease between the time the
10 PCA is established and the time of the true-up, the load growth adjustment would
11 increase the PCA rate.

12 **Q. THIS IS A COMPLEX ADJUSTMENT THAT WAS**
13 **IMPLEMENTED BY THE COMMISSION IN ESTABLISHING THE PCA**
14 **SURCHARGE. COULD YOU GIVE AN EXAMPLE TO HELP CLARIFY YOUR**
15 **EXPLANATION?**

16 A. As stated above, the PCA is set based on assumptions of stream flow
17 conditions and normalized loads. If all of the assumptions that go into the PCA
18 calculations turned out to perfectly match actual conditions and costs, then forecasted
19 power supply costs and actual power supply costs would be exactly the same. However,
20 if over the course of the PCA year the Company had experienced load growth or decline,
21 such that actual loads differed from what was assumed in the original PCA calculation,
22 then actual costs will not match forecasted costs. If loads have increased above forecasts,
23 then the costs of serving those loads would have been incurred by the Company and

1 power supply costs will be higher than projected. Allowing the Company to collect all of
2 those increased costs through the next year's PCA, however, would result in a double
3 recovery by the Company of significant costs because the new customers (or other
4 sources of increased loads) that came onto the system have already paid the Company's
5 rates for the power they have received. Without a load growth adjustment, the extra
6 revenues received due to the increased load would not be accounted for, and the
7 Company would simply collect its increased costs, without an offset for the revenues
8 produced by the increased load.

9 Also, in addition to preventing a double-recovery by the Company of the costs
10 associated with new load, the load growth adjustment prevents the Company from
11 automatically recovering the marginal costs of serving new load. The load growth
12 adjustment currently removes from the PCA the marginal costs of serving new load. If it
13 did not remove these costs, the Company would automatically get them through the PCA,
14 and the Commission and Idaho Power's customers would lose the opportunity to be
15 involved in a review of the prudence of those costs.

16 **Q. IS IT TRUE NONE OF THE PARTIES ARE REQUESTING THE**
17 **ELIMINATION OF THE LOAD GROWTH ADJUSTMENT, BUT ARE,**
18 **RATHER PRESENTING DIFFERING METHODS OF HOW IT SHOULD BE**
19 **DETERMINED?**

20 **A.** Yes. As stated above, the issue before the Commission in this
21 proceeding is simply whether the load growth adjustment should be calculated based on
22 the marginal costs of serving new load, or whether it should be calculated based on the
23 embedded cost of serving load. Throughout the history of the PCA, the load growth

1 adjustment has been based on marginal costs of serving new load. However, Idaho Power
2 is now advocating that it should be based on embedded costs.

3 **Q. WHAT ARE SOME OF THE REASONS THE IDAHO**
4 **COMMISSION RELIED ON WHEN IT ORIGINALLY ADOPTED THE USE OF**
5 **MARGINAL COSTS RATHER THAN AVERAGE COSTS IN DETERMINING**
6 **THE LOAD GROWTH ADJUSTMENT?**

7 A. In its Order establishing the PCA mechanism for Idaho Power, the
8 Commission agreed with the Commission Staff's recommendation that the load growth
9 adjustment method be based on marginal costs. The Commission stated,

10 We find that the net power supply costs associated with serving
11 differences in load between normal and actual should be removed from the
12 PCA. We adopt the method proposed by the Staff for making this
13 adjustment; it was the only method proposed. We agree with Staff that
14 Idaho Power's proposal unduly broadens the scope of this proceeding,
15 which is simply to devise a mechanism for the recovery of power supply
16 costs that include the sum of fuel costs, non-firm energy purchases and
17 CSPP costs less revenues from non-firm energy sales and FMC secondary
18 sales. Idaho Power's proposed PCA allows it to double recover fuel costs
19 associated with load growth which, essentially, offsets the cost of
20 constructing additional plant. (IPUC Order No. 24806, p 20).
21

22 **Q. IN HIS TESTIMONY IN THIS CASE, COMPANY WITNESS MR.**
23 **SAID IMPLIES THAT THE COMPANY NEVER WEIGHED IN ON WHETHER**
24 **THE LOAD GROWTH ADJUSTMENT SHOULD BE BASED ON THE**
25 **MARGINAL OR EMBEDDED COSTS OF SERVING GROWTH. DO YOU**
26 **BELIEVE THAT THE COMMISSION FAILED TO CONSIDER WHETHER**
27 **THE LOAD GROWTH ADJUSTMENT SHOULD IN FACT BE BASED ON**
28 **EMBEDDED COSTS RATHER THAN MARGINAL?**

29 A. No. The full Question and Answer you refer to by Mr. Said is:

1 Q. In the original PCA case, did the Company state a position
2 regarding the appropriateness of the Staff proposed load growth
3 adjustment rate?

4 A. No. At the time the PCA was created, the Staff's proposed
5 marginal load growth adjustment rate seemed like a small detail compared
6 to the larger goal of establishing a PCA mechanism. It was only after some
7 time had passed that the Company came to realize the impacts of the
8 penalty introduced by setting the load growth adjustment at a marginal
9 level rather than an embedded level. (Direct Testimony of Said, IPC-E-
10 06-08, p. 11).

11
12 However an examination of the record in the original PCA case, as pointed out
13 below, shows that the Commission had an ample opportunity to consider, and decide, on
14 the record that the load growth adjustment should not be based upon embedded average
15 costs. In the original PCA Case the Commission agreed with the marginal approach
16 proposed by Staff. In the current docket the Commission is being asked to re-decide the
17 same issue again. The Commission agreed with its Staff in the original PCA proceeding
18 by ruling that the load growth adjustment should be based on the marginal costs of
19 serving new load. The Commission rejected Idaho Power's proposed approach. It
20 refused to allow the Company to automatically collect the costs it incurs in serving load
21 growth.

22 In surrebuttal testimony in the case establishing the PCA (IPC-E-92-25), Staff
23 witness Mr. Hessing responded to an example presented by the Company witness Mr.
24 Said of the types of costs Idaho Power incurs in serving load growth. In that example the
25 Company assumed to serve a base load of 100,000 MWh at a cost of \$300,000, or \$3 per
26 MWh. The Company went on to assume that an increase in load of 10,000 MWh would
27 cost an additional \$30,000, meaning the costs for serving new customers would remain at
28 \$3 per MWh. (Said Rebuttal Testimony, IPC-E-92-25, p. 19). Staff witness Hessing
29 answered this Company example by stating,

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Although his example is technically possible it is far from normal. It requires that the Company's resources be operated in an uneconomic manner. The example assumes that 10,000 MWh of additional energy can be supplied in a given situation for the same average cost as the initial 100,000 MWh. Since load growth is served from the marginal resource it will be served at a higher incremental cost than average cost. Thus Mr. Said's example which demonstrates a \$3 MWh additional and a \$3 per MWh incremental cost is at best an anomaly. (Hessing Surrebuttal, IPC-E-92-25, p. 5).

Thus, Staff made clear its position that Idaho Power incurs higher marginal costs in order to serve load growth and that the load growth adjustment should be based on those marginal costs.

Additionally, the record shows that Idaho Power advocated for a PCA that would allow it to automatically collect the marginal costs it incurs in serving new loads. In his Rebuttal Testimony, Idaho Power witness Gail argued that Staff failed to include in the PCA a host of other factors that contribute to the costs of serving new load other than fuel costs.

With increasing economic prosperity comes increasing employment and increasing population. Load growth associated with increasing population causes other costs than just variable energy costs. Load growth of this type means new services, line extensions, meters, meter reading, customer service activity, contract construction, and other miscellaneous costs which vary with additional customers. Witness Hessing fails to consider these other incremental costs in his analysis and his recommendation to exclude the power supply expenses associated with load growth from the PCA. (Gail Rebuttal, IPC-E-92-25, p. 14).

Thus, as demonstrated by the above quotes, Idaho Power was advocating for a PCA that allowed it to automatically recover the costs of serving new load. Commission Staff, on the other hand, argued that the marginal costs of serving new load should be removed

1 from the PCA, and that those costs were more appropriately part of a general rate
2 proceeding.

3 After reviewing the positions of both the Commission Staff and the Company, this
4 Commission accepted the marginal approach proposed by its staff. The Commission
5 explained in its order adopting the PCA,

6 Our decision to not allow a PCA mechanism to recover costs to
7 offset legitimate plant costs caused by load growth in no way prevents the
8 Company from recovering these costs in traditional ratemaking
9 proceedings. *A PCA is not intended to replace the prudence review*
10 *process inherent in a general rate case.* (IPUC Order 24806, pg.20,
11 emphasis added).
12

13 **Q. HAVE YOU REVIEWED THE RECORD AND PARTIES'**
14 **POSITIONS IN THE ORIGINAL PCA DOCKET?**

15 A. Yes. I have reviewed the record and the positions taken by Idaho Power
16 and the Commission's Staff in the original docket.

17 **Q. WHAT, IF ANYTHING, HAS CHANGED SINCE THAT TIME**
18 **SUCH THAT THE COMMISSION SHOULD REVERSE ITSELF ON THIS**
19 **ISSUE?**

20 A. Nothing.

21 **Q. WHERE DO YOU STAND ON SETTING THE LOAD GROWTH**
22 **ADJUSTMENT ON A MARGINAL OR AVERAGE BASIS?**

23 A. I agree with the Idaho Commission's decision in the original PCA case
24 to set the load growth adjustment based on the marginal costs of serving new load. The
25 Company's arguments presented in this docket simply rehash an issue settled by the
26 Commission some time ago, when it established the PCA. The underlying reasons for

1 setting the load growth adjustment based on the marginal costs of serving new load
2 remain sound and compelling. The Company's proposal in this proceeding to set the load
3 growth adjustment based on an average, embedded-cost basis would fundamentally
4 change the nature of the PCA.

5 **Q. WHY IS IT APPROPRIATE TO USE THE MARGINAL**
6 **APPROACH FOR THE LOAD GROWTH ADJUSTMENT RATE?**

7 A. Using a load growth adjustment based on the marginal cost of serving
8 new load is the most appropriate method to prevent the Company from automatically
9 recovering too much from the Company's customers under the PCA. Using a marginal
10 cost-based load growth adjustment allows the PCA to achieve its intended purposes, and
11 preserves the prudence review of other costs incurred by the Company to serve new load
12 growth for general rate proceedings. The Commission can best evaluate the prudence of
13 load growth costs in a general rate case, before they are charged to customers.

14 The Company claims in its Application that there is a "mismatch" caused in using
15 the marginal approach for the load growth adjustment because it collects costs at the
16 embedded rate. However, new loads are served by the marginal units in the Company's
17 resource stack. These resources are higher cost resources and push up the power supply
18 costs at a greater rate than the average of all the Company's resources. This increment is
19 then reflected in higher power supply costs at the end of the PCA period. It is not a
20 mismatch, then, to use the Company's marginal fuel costs to offset these higher power
21 supply expenses incurred to serve load growth. Contrary to the Company's position, it is
22 important for the load growth adjustment to be based on marginal costs of serving new

1 load, so that it can prevent the Company's automatic recouping of those marginal costs
2 without the appropriate prudence review.

3 The Commission established the PCA to account only for annual changes in power
4 costs, caused primarily by stream flow variations. The Commission has clearly stated,
5 however, that other costs that may be associated with serving additional load should be
6 adjudicated in a general rate case and not through the PCA mechanism. I agree with the
7 Commission's original position on this issue. The PCA should not become a mechanism
8 through which Idaho Power can automatically recover the costs it incurs in serving new
9 growth. Those costs should be reviewed in a general rate proceeding.

10 **Q. ARE THERE ANY OTHER PROBLEMS RAISED BY**
11 **ALLOWING THE PCA TO BE USED BY IDAHO POWER TO RECOVER**
12 **COSTS ASSOCIATED WITH LOAD GROWTH?**

13 A. Yes. The PCA moves on a very fast track. It is typically filed in late
14 April or early May, with an effective date of June 1st. There is not enough time to do a
15 thorough prudency review in that short of a time. We would, in effect, have to turn each
16 PCA into a general rate case, which would defeat the purpose of a PCA.

17 **Q. WHAT IS THE CURRENT LOAD GROWTH ADJUSTMENT**
18 **RATE?**

19 A. The current load growth adjustment rate is \$16.84 per MWh.

20 **Q. WHAT VALUE FOR THE LOAD GROWTH ADJUSTMENT**
21 **RATE ARE OTHER PARTIES TO THIS PROCEEDING PROPOSING?**

22 A. Idaho Power is proposing that it be decreased to \$6.81 per MWh. In the last
23 general rate case that was fully presented to the Commission (IPC-E-03-13), Commission

1 Staff advocated that it should be raised to \$29.41 per MWh. The Staff's position has
2 likely changed to reflect higher current marginal costs of serving new load.

3 **Q. WHAT VALUE OF LOAD GROWTH ADJUSTMENT ARE YOU**
4 **ADVOCATING?**

5 A. As stated above, I believe the marginal approach, which is consistent
6 with the Commission's orders, is the correct method to use. Staff, in its calculation, uses
7 the AURORA power supply model and increases loads 10MWa for each hour of the year
8 and then compares that to fuel costs for the base amount and finds the incremental fuel
9 costs. I do not have the AURORA model available and cannot verify its algorithms or
10 input assumptions. However, there are several proxies that can be found that indicate
11 marginal fuel costs for Idaho Power.

12 **Q. COULD YOU PLEASE OUTLINE THOSE PROXY MEASURES**
13 **THAT COULD BE USED AS ESTIMATES FOR MARGINAL FUEL COSTS FOR**
14 **IDAHO POWER?**

15 A. There are three that come immediately to mind. First, one could use the
16 marginal cost study that the Company uses in general rate cases for rate design, which
17 finds marginal fuel costs. Second, the AURORA model is used to calculate PURPA rates
18 paid to Qualifying Facilities (QFs). The energy portion of the current PURPA rate can be
19 used because it represents marginal fuel costs for the Company. Third, the Company's
20 fuel costs of the Company's newest resource, Bennett Mountain, could be used under the
21 assumption that its latest resource is its marginal unit.

1 **Q. COULD YOU PROVIDE THE VALUES FOR EACH OF THESE**
2 **PROXY MEASURES OF MARGINAL OR INCREMENTAL FUEL COSTS FOR**
3 **IDAHO POWER?**

4 A. The Company provided its 2005 Marginal Cost Study in Case IPC-E-05-
5 28 (Brilz workpapers). On Schedule 1 of that study the Company lists “Marginal Energy
6 Cost at Service Level: Power Supply” with an annual value of \$40.96 per MWh.
7 According to the text of the document, the Company’s marginal cost analysis follows the
8 concept and design from the National Economic Research Association (NERA) with
9 input values primarily from their 2004 IRP.

10 The energy portion of the current QF rates were set in IPC-E-04-25. The adjustable
11 portion of that rate for Idaho Power was set at \$36.42 per MWh. This value is derived by
12 using the cost of a surrogate avoided plant – in this case a gas combined cycle combustion
13 turbine. The Commission has found this type of plant to be the Company’s avoided
14 resource. Therefore its fuel costs are a reasonable proxy for marginal fuel for the
15 Company.

16 For costs of Bennett Mountain, the Commission could refer to page 403 of Idaho
17 Power’s 2005 FERC Form 1, which lists the costs and output for its Bennett Mountain
18 plant over the course of 2005. Line 12 shows generation from the facility of 56,222,000
19 Kwh and line 20 lists the fuel expense at \$2,744,349. Dividing output by fuel expense
20 yields 4.881 cents per Kwh or \$48.81 per MWh. Since Bennett Mountain is the last
21 resource brought on line by Idaho Power, it is its marginal unit and its fuel costs are the
22 Company’s marginal fuel cost.

1 Marginal fuel costs found for these three proxies are relatively close and range
2 from \$36.42 to \$48.81 per MWh. They are, of course, very different from the \$6.81
3 advocated by the Company based on an embedded approach. What is clear is that the
4 Company's marginal fuel costs to serve new load centers around \$40 per MWh. Without
5 the use of the AURORA model, I would recommend the use of the Company's latest
6 marginal cost study that yields \$40.96 per MWh as the value to be used for the load
7 growth adjustment. It is based on an accepted marginal cost methodology and adjusts for
8 line losses. Any of the proxies or the results of the AURORA model would be
9 acceptable. The important decision is that a marginal approach be used for estimating the
10 value of the load growth adjustment.

11 **Q. YOU STATED ABOVE THAT THE COMMISSION'S STAFF HAS**
12 **CALCULATED THE LOAD GROWTH ADJUSTMENT BY RUNNING AURORA**
13 **WITH A LOAD INCREASE OF 10 AVERAGE MW FOR EVERY HOUR. DO**
14 **YOU KNOW WHAT THIS APPROACH YIELDS?**

15 A. The Commission Staff asked Idaho Power to perform an AURORA
16 model run with the same 10 aMW load increase. (Response to Request No. 4, First
17 Production Request of Staff). The results indicate power supply costs \$3,578,900 higher
18 than the base amount filed in the Company's last rate case (IPC-E-05-28, Exhibit 20).
19 This means the marginal cost of power supply for the Company is \$40.86 per MWh.
20 (3578900/87600). This value is essentially the same level as that found in the Company's
21 marginal cost study that I recommended to use as the load growth adjustment above.

1 **Q. AVISTA ALSO HAS A POWER COST ADJUSTMENT**
2 **MECHANISM. DO YOU KNOW IF THEY USE A LOAD GROWTH**
3 **ADJUSTMENT, AND IF IT IS SET ON A MARGINAL ENERGY COST BASIS?**

4 A. The Commission does use the marginal cost of generation in adjusting for
5 load growth in Avista's power cost adjustment. According to page 46 of the
6 Commission's Order No. 29602 in Case No. AVU-04-1, the current level is \$36.38
7 dollars per MWh.

8 **Q. DO YOU HAVE ANY ADDITIONAL COMMENTS FOR THE**
9 **COMMISSION THAT DEAL WITH THE LOAD GROWTH ADJUSTMENT?**

10 A. Yes. The load growth adjustment is a "two-edged sword." That is,
11 when loads are growing, the adjustment reduces the level of the PCA surcharge.
12 Conversely, when loads decrease, the load growth adjustment will increase the PCA rate
13 over what it would otherwise be. The load growth adjustment is comprised of two
14 components: 1) the estimate of fuel value, and 2) the change in loads. The Company is
15 advocating a significant lowering of the value of the load growth adjustment. Should the
16 Company embark on an aggressive conservation program it potentially could reduce load
17 growth. In that case a high load growth adjustment value would tend to increase the PCA
18 surcharge and allow the Company to charge higher rates. At a minimum, load growth
19 could be moderated and the impact of the load growth adjustment would be lessened.
20 This fact logically fits with the marginal approach originally approved by the
21 Commission. To the extent that the Company can avoid using its higher cost units, the
22 greater the savings in power supply costs, and therefore a smaller offset is needed.

23

1 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

2 **A. Yes, it does.**

Don C. Reading

Present position Consulting Economist with Ben Johnson Associates, Inc.:

Education B.S., Economics - Utah State University
M.S., Economics - University of Oregon
Ph.D., Economics - Utah State University

**Professional
and business
history**

Idaho Public Utilities Commission:
1981-86 Economist/Director of Policy and Administration

Teaching:

1980-81 Associate Professor, University of Hawaii-Hilo
1970-80 Associate and Assistant Professor, Idaho State University
1968-70 Assistant Professor, Middle Tennessee State University

Dr. Reading provides expert testimony concerning economic and regulatory issues. He has testified on more than 25 occasions before utility regulatory commissions in Alaska, California, Colorado, the District of Columbia, Idaho, Nevada, Texas, Utah, and Washington.

His areas of expertise include demand forecasting, long-range planning, price elasticity, marginal pricing, production-simulation modeling, and econometric modeling. He has also provided expert testimony in cases concerning loss of income resulting from wrongful death, injury, or employment discrimination.

Dr. Reading has more than 30 years experience in the field of economics. He has participated in the development of indices reflecting economic trends, GNP growth rates, foreign exchange markets, the money supply, stockmarket levels, and inflation. He has analyzed such public policy issues as the minimum wage, federal spending and taxation, and import/export balances. Dr. Reading is one of four economists providing yearly forecasts of statewide personal income to the State of Idaho for purposes of establishing state personal income tax rates.

Dr. Reading's areas of expertise in the field of energy include demand forecasting, long-range planning, price elasticity, marginal and average cost pricing, production-simulation modeling, and econometric modeling. Among his recent cases was an electric rate design analysis for the Industrial Customers of Idaho Power.

While at Idaho State University, Dr. Reading performed demographic studies using a cohort/survival model and several economic impact

studies using input/output analysis. He has also provided expert testimony in cases concerning loss of income resulting from wrongful death, injury, or employment discrimination.

Among Dr. Reading's current projects are a FERC hydropower relicensing study (for the Skokomish Indian Tribe) and an analysis of Northern States Power's North Dakota rate design proposals affecting large industrial customers (for J.R. Simplot Company). Dr. Reading has also recently completed an analysis for the Idaho Governor's Office of the impact on the Northwest Power Grid of various plans to increase salmon runs in the Columbia River Basin.

Publications

The Economic Impact of Steelhead Fishing and the Return of Salmon Fishing in Idaho, Idaho Fish and Wildlife Foundation, September, 1997.

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"Post-PURPA Views," In Proceedings of the NARUC Biennial Regulatory Conference, 1983.

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"A Note on the Distribution of Federal Expenditures: An Interstate Comparison, 1933-1939 and 1961-1965." In The American Economist, Vol. XVIII, No. 2 (Fall 1974), pp. 125-128.

New Deal Activity and the States, 1933-1939." In Journal of Economic History, Vol. XXXIII (December 1973), pp. 792-810.

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on the 14th day of September, 2006, a true and correct copy of the DIRECT TESTIMONY OF DR. DON READING ON BEHALF OF THE INDUSTRIAL CUSTOMERS OF IDAHO POWER was served as noted to:

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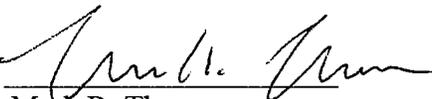
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