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IDAHO PUBLIC
UTILITIES COMMISSION

BEFORE THE IDAHO PUBLIC UTILITIES COMMISSION

| | | |
|----------------------------------|---|----------------------|
| IN THE MATTER OF THE APPLICATION |) | CASE NO. AVU-E-11-01 |
| OF AVISTA CORPORATION FOR THE |) | |
| AUTHORITY TO INCREASE ITS RATES |) | |
| AND CHARGES FOR ELECTRIC AND |) | |
| NATURAL GAS SERVICE TO ELECTRIC |) | DIRECT TESTIMONY |
| AND NATURAL GAS CUSTOMERS IN THE |) | OF |
| STATE OF IDAHO |) | ROBERT J. LAFFERTY |
| |) | |

FOR AVISTA CORPORATION

(ELECTRIC ONLY)

1 I. INTRODUCTION

2 Q. Please state your name, employer and business
3 address.

4 A. My name is Robert J. Lafferty. I am employed as
5 the Director of Power Supply at Avista Corporation, located
6 at 1411 East Mission Avenue, Spokane, Washington.

7 Q. Would you briefly describe your educational and
8 professional background?

9 A. Yes. I received a Bachelor of Arts degree in
10 Business Administration and a Bachelor of Science degree in
11 Electrical Engineering from Washington State University,
12 both in 1974. I began working as a distribution engineer
13 for Avista in 1974 and held several different engineering
14 positions with the Company. In 1979, I passed the
15 Professional Engineering License examination in the state
16 of Washington. I have held management positions in
17 engineering, marketing, demand-side-management and energy
18 resources. I began work in the Energy Resources Department
19 in March 1996, and have held various positions involving
20 the planning, acquisition and optimization of energy
21 resources. I became the Director of Power Supply in March
22 2008, where my primary responsibilities involve management
23 and oversight of the short- and long-term planning and
24 acquisition of power resources for the Company.

1 **Q. What is the scope of your testimony in this**
2 **proceeding?**

3 A. My testimony provides an overview of Avista's
4 resource planning and power supply operations. This
5 includes summaries of the Company's generation resources,
6 the current and future load and resource position, future
7 resource plans, and an update on the Company's plans
8 regarding the acquisition of new renewable resources. As
9 part of an overview of the Company's risk management
10 policy, I will provide an update on the Company's hedging
11 practices. I will address hydroelectric and thermal
12 project upgrades, followed by an update on recent
13 developments regarding hydro licensing.

14 A table of contents for my testimony is as follows:

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| 22 | | |

23 **Q. Are you sponsoring any exhibits?**

24 A. Yes. I am sponsoring Exhibit No. 4, Schedule 1,
25 which includes Avista's 2009 Electric Integrated Resource
26 Plan, Schedule 2 which provides a forecast of Company load
27 and resource positions from 2011 through 2031, and
28 confidential Schedule 3C which includes Avista's Energy
29 Resources Risk Policy.

30

1 **II. RESOURCE PLANNING AND POWER OPERATIONS**

2 Q. Would you please provide a brief overview of
3 Avista's generating resources?

4 A. Yes. Avista's resource portfolio consists of
5 hydroelectric generation projects, base-load coal and
6 natural gas-fired combined-cycle generation facilities,
7 woodwaste-fired generation, natural gas-fired peaking
8 generation, long-term contracts, including wind and Mid-
9 Columbia hydroelectric generation, and market power
10 purchases and exchanges. Avista-owned generation
11 facilities have a total capability of 1,777 MW, which
12 includes 56% hydroelectric and 44% thermal resources.

13 Illustration No. 1 below summarizes the present net
14 capability of Avista's owned generation resources:

15 **Illustration No. 1: Avista's Generation**

| Avista-Owned Generation | | | | | |
|---------------------------------|-----------------|-------------------------------------|------------|---------------------------------------|------------|
| Hydroelectric Generation | MW | Base-Load Thermal Generation | MW | Natural Gas Peaking Generation | MW |
| Noxon Rapids | 557 | Colstrip Units 3 & 4 | 222 | Northeast CT | 56 |
| Cabinet Gorge | 255 | Coyote Springs 2 | 278 | Kettle Falls CT | 7 |
| Post Falls | 18 | Kettle Falls | 50 | Boulder Park | 24 |
| Upper Falls | 10 | | | Rathdrum CT | 149 |
| Monroe Street | 15 | | | | |
| Nine Mile | 18 | | | | |
| Long Lake | 83 | | | | |
| Little Falls | 35 | | | | |
| Total Hydroelectric | 991 | Total Base-Load Thermal | 550 | Total Peaking | 236 |
| Total Owned Generation | 1,777 MW | | | | |

16
17 In addition, the Company currently has long-term
18 contractual rights for 134 aMW from Mid-Columbia

1 hydroelectric projects in 2012, from projects owned and
2 operated by the Public Utility Districts of Chelan, Douglas
3 and Grant counties. Avista also has a long-term power
4 purchase agreement (PPA) in place entitling the Company to
5 dispatch, purchase fuel for and receive the power output
6 from the 275 MW Lancaster combined-cycle combustion turbine
7 project located in Rathdrum, Idaho.

8 **Q. Would you please provide a summary of Avista's**
9 **power supply operations and planning for new resources?**

10 A. Yes. Avista uses a combination of owned and
11 contracted-for resources to serve its load requirements.
12 The Power Supply Department is responsible for dispatch
13 decisions related to those resources for which the Company
14 has dispatch rights. The Department monitors and routinely
15 studies capacity and energy resource needs. Short- and
16 medium-term wholesale transactions are used to economically
17 balance resources with load requirements. Longer-term
18 resource decisions such as the acquisition of new
19 generation resources, upgrades to existing resources,
20 energy efficiency measures, and long-term contract
21 purchases are generally made in conjunction with the
22 Integrated Resource Plan (IRP) and will typically include a
23 Request for Proposals (RFP) or other market due diligence
24 process.

25 **Q. Please summarize the current load and resource**
26 **position for the Company.**

1 A. Avista's 2009 Electric Integrated Resource Plan
2 shows forecasted annual energy deficits beginning in 2018,
3 and sustained annual capacity deficits beginning in 2019.¹
4 These capacity and energy load/resource positions are shown
5 on pages 2-27 and 2-28, respectively of Schedule 1 of
6 Exhibit No. 4. However, our most recent load and resource
7 projection, which is attached as Schedule 2 of Exhibit No.
8 4, indicates that the annual deficits have moved out
9 another year. Therefore, Avista's current projection shows
10 an annual energy deficit beginning in 2020 of about 19 aMW,
11 and increasing to a 406 aMW deficit in 2031. The Company's
12 January capacity resource position, based on an 18-hour
13 peak event (6 hours per day and over 3 days), is currently
14 projected to be surplus through 2021. Sustained annual
15 capacity deficiencies, based on a January peak, begin at
16 148 MW in 2022 and increase to a 779 MW deficit in 2031.
17 The Company's August capacity resource position, based on
18 an 18-hour peak event, is currently projected to be surplus
19 through 2018. Sustained annual capacity deficiencies,
20 based on an August peak, begin at 56 MW in 2019 and
21 increase to a 667 MW deficit in 2031.

22 **Q. How does the Company plan to meet future energy**
23 **and capacity needs beginning in 2020 and 2019,**
24 **respectively?**

¹ The Company has a 150 MW capacity exchange agreement with Portland General Electric that ends in December 2016 which results in short-term annual capacity deficits in 2015 and 2016. Sustained annual capacity deficits begin in 2019.

1 A. The Company will be guided by its Preferred
2 Resource Strategy. The current Preferred Resource Strategy
3 is described in the 2009 Electric IRP, which is attached as
4 Schedule 1 of Exhibit No. 4. The IRP provides details
5 about projected resource needs, specific resource costs,
6 resource operating characteristics, and the scenarios used
7 for evaluating the mix of resources for the Preferred
8 Resource Strategy.

9 The Company's 2009 Electric IRP was submitted to the
10 Commission in August 2009, following the completion of a
11 public process involving six Technical Advisory Committee
12 meetings. The IRP represents the preferred resource plan
13 at a point in time, however, the Company will continue
14 evaluating resource options to meet future load
15 requirements, including medium-term market purchases,
16 generation ownership, hydroelectric upgrades, renewable
17 resources, distribution efficiencies, energy efficiency
18 measures, long-term contracts, and generation lease or
19 tolling arrangements. As stated earlier, longer-term
20 resource decisions are generally made in conjunction with
21 the Company's IRP and RFP processes, although the Company
22 may acquire some resources outside of formal RFP processes.

23 Avista's 2009 Preferred Resource Strategy includes 5
24 MWS of distribution efficiencies, 339 MWS of energy
25 efficiency, 5 MWS of upgrades to existing hydroelectric
26 plants, 750 MWS of natural gas-fired combined-cycle
27 combustion turbine (CCCT), and 350 MWS of wind located in

1 the Pacific Northwest. The timing of these resources as
2 published in the 2009 IRP is shown in Illustration No. 2
3 below.

4 **Illustration No. 2: 2009 Electric IRP Preferred Resource**
5 **Strategy**
6

| Resource Type | By the End of | Nameplate | Energy |
|-------------------|---------------|-----------|---------|
| Northwest Wind | 2012 | 150.0 | 48.0 |
| Distribution | 2010 / 2015 | 5.0 | 2.7 |
| Little Falls | 2013 / 2016 | 3.0 | 0.9 |
| Northwest Wind | 2019 | 150.0 | 50.0 |
| CCCT | 2019 | 250.0 | 225.0 |
| Upper Falls | 2020 | 2.0 | 1.0 |
| Northwest Wind | 2022 | 50.0 | 17.0 |
| CCCT | 2024 | 250.0 | 225.0 |
| CCCT | 2027 | 250.0 | 225.0 |
| Energy Efficiency | All Years | 339.0 | 226.0 |
| Total | | 1,449.0 | 1,020.6 |

7
8 **Q. Are there any costs specifically associated with**
9 **meeting Washington State's renewable portfolio standard**
10 **included in this case?**

11 **A. No.** All direct costs related to meeting
12 Washington State's renewable portfolio standards have been
13 assigned to Washington customers.

14 **Q. Can you provide some background regarding why the**
15 **Company initiated an RFP for renewable resources in 2011.**

16 **A. Yes.** Avista has continued to monitor renewable
17 resource market conditions, particularly with respect to
18 projects bid into its 2009 renewable resource RFP. Avista
19 was recently made aware of a significant drop in prospective
20 project costs associated with construction of new wind
21 generation facilities that are still in a position to take

1 advantage of currently available near-term tax incentives
2 for projects brought on-line prior to December 31, 2012. The
3 material drop in project cost was the primary reason for the
4 Company's decision to issue a request for proposals in
5 February 2011 for up to 35 aMW of renewable energy. The
6 2011 renewable resource RFP seeks qualifying projects or
7 project output for the 2012 to 2032 time period. Avista
8 stated in the RFP that the Company expected that bids should
9 not exceed \$62/MWh and that Avista would not submit a self-
10 build option. The combination of the significant drop in
11 project cost and the substantial tax incentives available
12 today for projects completed by December 31, 2012 point
13 toward long-term benefits for customers compared to the
14 alternative of waiting until a later time when tax
15 incentives, attractive project pricing, and particularly
16 attractive wind project sites may no longer be available to
17 Avista.

18 **Q. What is the status of the 2011 renewable resource**
19 **request for proposals?**

20 A. The Company completed its due diligence and
21 negotiations for the 2011 renewable resource request for
22 proposals. The Company has signed a 30-year power purchase
23 agreement with Palouse Wind, LLC, (Palouse Wind) an
24 affiliate of First Wind Energy, LLC. Under the PPA, Avista
25 will acquire all of the power produced by a wind project
26 being developed by Palouse Wind in Whitman County,
27 Washington. The project will have approximately 100 MW of

1 nameplate capacity and is expected to produce approximately
2 40aMW. Deliveries are expected to begin in the second half
3 of 2012.

4 **Q. What is the status of the Reardan wind project?**

5 A. Avista continues to study the Reardan wind
6 project site in preparation for later development. The
7 Company expects to issue an RFP at a later date to meet
8 additional future resource needs, and expects that the
9 Reardan project would be considered in that later process.
10 The Company chose not to introduce a Reardan project option
11 into the 2011 renewable resource RFP primarily because of
12 the short time frame available to secure competitive bids
13 for turbines and balance of plant construction. When the
14 Company decided in mid-February to initiate a 2011
15 renewable resource RFP, potential bidders had indicated
16 that they would need a power purchase agreement executed by
17 early to mid-May in order to be able to complete a project
18 that would qualify for all of the available tax incentives.
19 Therefore, Avista sought projects that were ready to be
20 built and required bids to be due by March 7, 2011. The
21 competitive bidding for wind turbines and balance of plant
22 work necessary to prepare the Reardan project for
23 evaluation did not fit into the short bidding window for
24 this RFP.

25 **Q. Can you provide an update of the Company's**
26 **evaluation of a direct connection of Avista transmission to**
27 **the Bonneville Power Administration's Lancaster substation?**

1 A. Yes. Avista is currently engaged in a process
2 with the Bonneville Power Administration (BPA) to jointly
3 study interconnecting Avista's transmission lines to the
4 BPA Lancaster substation, where the Lancaster plant is
5 currently interconnected. The proposed project would
6 interconnect the transmission systems of BPA and Avista at
7 the BPA Lancaster substation. An Avista transmission
8 interconnection to the BPA substation, however, would
9 continue to utilize the BPA Lancaster substation. The
10 costs associated with continued use of the substation would
11 be subject to negotiation between the Company and BPA.

12 Pursuant to Avista's Line and Load Interconnection
13 request dated September 2, 2009, Bonneville completed its
14 Line and Load Interconnection System Impact Study on August
15 20, 2010 and is in the process of finalizing its Line and
16 Load Interconnection Facilities Study, currently expected
17 to be completed in August of 2011. Upon completion of the
18 Line and Load Interconnection Facilities Study, Bonneville
19 will tender a Construction Agreement to Avista. Bonneville
20 has communicated to Avista that its current engineering and
21 construction schedule suggests that the Avista-Bonneville
22 Lancaster 230 kV interconnection may be constructed in
23 2013.

24 Construction of a stand-alone Avista interconnection
25 (where the Lancaster project is disconnected from the
26 Bonneville system and connected directly to the Avista
27 system) would not provide the reliability benefits and

1 additional import capacity that an Avista-Bonneville 230 kV
2 transmission interconnection provides, therefore, this form
3 of a self-build option has not received any further
4 consideration as part of the joint study work.

5

6

III. RISK MANAGEMENT POLICY

7

8

Q. Can you provide a high level summary of Avista's risk management program for energy resources?

9 A. Yes. Avista Utilities uses several techniques to
10 manage the risks associated with serving load and managing
11 Company-owned and controlled resources. Avista's Energy
12 Resources Risk Policy provides general guidance to manage
13 the Company's energy risk exposure relating to electric
14 power and natural gas resources over the long-term (more
15 than 36 months), the short-term (monthly and quarterly
16 periods up to approximately 36 months), and the immediate
17 term (present month). A copy of the current Energy
18 Resources Risk Policy is in Confidential Schedule 3C in
19 Exhibit No. 4.

20 The Energy Resources Risk Policy is not a specific
21 procurement plan for buying or selling power or natural gas
22 at any particular time, but is a guideline used by
23 management when making procurement decisions for electric
24 power and natural gas fuel for generation. Several
25 factors, including the variability associated with loads,
26 hydroelectric generation, and electric power and natural
27 gas prices, are considered in the decision-making process

1 regarding procurement of electric power and natural gas for
2 generation.

3 The Company aims to strategically develop or acquire
4 long-term energy resources as suggested by the Company's
5 IRP acquisition targets, while taking advantage of
6 competitive opportunities to satisfy electric resource
7 supply needs in the long-term period. On the other end of
8 the time spectrum, electric power and fuel transactions in
9 the immediate term are driven by a combination of factors
10 that incorporate both economics and operations, including
11 near-term market conditions (price and liquidity),
12 generation economics, project license requirements, load
13 and generation variability, reliability considerations, and
14 other near-term operational factors.

15 For the short-term timeframe, the Company's Energy
16 Resources Risk Policy guides its approach to hedging
17 financially open forward positions. A financially open
18 forward period position may be the result of either a short
19 or a long position. A calendar quarter occurring at a
20 future time is an example of such a forward period. A short
21 position situation occurs when the Company has not yet
22 purchased the fixed price fuel to generate power, nor,
23 alternatively, has it purchased fixed price electric power
24 from the market, in order to meet a projected average load
25 for a forward time period. The amount of load that is in
26 excess of the amount of fixed price power available for
27 that forward time period represents an open short position.

1 A long position situation occurs when the Company has fixed
2 priced generation or fueled generation above its expected
3 average load needs (e.g. hydroelectric generation during
4 the May-June time period) and has not yet made a fixed
5 price sale of that surplus power into the market in order
6 to balance resources and loads. The amount of fixed priced
7 generation that is in excess of the average load for that
8 forward period represents an open long position.

9 The Company employs an Electric Hedging Plan to guide
10 power supply position management in the short-term period.
11 The Risk Policy Electric Hedging Plan is essentially a
12 price diversification approach employing a layering
13 strategy for forward purchases and sales of either natural
14 gas fuel for generation or electric power in order to
15 approach a generally balanced position against expected
16 load as forward periods draw nearer.

17 **Q. Please describe the Electric Hedging Plan.**

18 A. The Electric Hedging Plan is detailed in Exhibit
19 2 of the Risk Policy (Exhibit No. 4, Confidential Schedule
20 3C). The use of the Electric Hedging Plan approach, as
21 outlined in Exhibit 2 of the Risk Policy (Confidential
22 Schedule 3C), describes what is essentially a layering
23 strategy aimed to average-in purchases or sales of electric
24 power and natural gas generation fuel over a period of
25 time. This approach aims to smooth the impacts of price
26 volatility in the energy markets.

1 The Electric Hedging Plan in the Risk Policy describes
2 the basic analytic approach that the Company utilizes to
3 guide hedging electric power positions over the short-term,
4 prompt month, and through the next 34 to 36 month period.
5 The plan guides management of financially open positions in
6 increments of 25 aMW. Open financial positions that exceed
7 25 aMW are cured with a variety of transactions as
8 permitted under the Risk Policy including fixed price
9 physical power, fixed price physical natural gas, and
10 combinations of financial fixed for floating swap
11 transactions coupled with index physical transactions. The
12 Company uses statistical price movement triggers, based on
13 historic volatility in the forward power and natural gas
14 markets, the entire short-term period and also uses
15 triggers based on expiring time periods in the nearer-term
16 period up to 18 months in the future to trigger
17 transactions to cure open positions. The trigger
18 indicators from the Hedge Scheduler statistical model are
19 indicated on the daily position reports and provide
20 guidance to management for prospective forward
21 transactions. Additional details concerning how the Hedge
22 Scheduler works can be found in Exhibit 2 of the Energy
23 Resources Risk Policy. (Exhibit No. 4, Confidential
24 Schedule 3C).

25 **Q. Can you provide some additional background**
26 **regarding how the near-term hedging plan operates?**

1 A. Yes. The Electric Hedging Plan (sometimes
2 referred to as the "Hedge Scheduler") operates somewhat
3 differently between two separate time periods within the
4 short-term 36-month window. The period beginning with the
5 prompt month and up to approximately 18 months into the
6 future, as determined by the monthly and quarterly tradable
7 forward periods, focuses on mechanically layering in
8 transactions, as well as taking advantage of price declines
9 in electric energy or fuel prices. The period
10 approximately 19 months to 36 months into the future, as
11 determined by the number of quarterly tradable forward
12 periods, primarily looks for declines in electric energy
13 prices or fuel prices.

14 Electric surplus and deficit positions are hedged
15 using the Electric Hedging Plan as a guide and may be
16 adjusted by management judgment depending upon the
17 circumstances of a particular surplus or deficit situation.
18 The short-term electric position report is distributed each
19 business day.

20 The power supply position is managed by the Director
21 of Power Supply. Similar types of position issues are also
22 addressed in regards to natural gas supplies and are
23 managed by the Director of Gas Supply. Any changes to
24 practices are communicated to the Risk Management
25 Committee.

26 The Risk Management Committee (RMC) is comprised of
27 Avista management who are not directly part of Energy

1 Resources operations, and are appointed by the Chief
2 Executive Officer. The RMC provides an oversight and
3 advisory role concerning energy resource management and
4 wholesale energy market risk policies and adherence to
5 those policies.

6 **IV. GENERATION CAPITAL PROJECTS**

7 **Q. Please describe the upgrade projects for the**
8 **Noxon Rapids generating units.**

9 A. The Company is nearing the end of a multi-year
10 program to upgrade four of the five Noxon Rapids generating
11 units from 1950's era technology². Once completed, the
12 upgrades on these four units are expected to improve
13 reliability and increase efficiency by adding 30 MW of
14 additional capacity and approximately 6 aMW of energy to
15 the Noxon Rapids project. Illustration No. 3 below
16 summarizes the upgrade schedule, and the additional
17 capacity and efficiency gains of these upgrades by unit.

18 **Illustration No. 3: Noxon Rapids Upgrades**

| Noxon Rapids Unit # | Schedule of Completion | Additional Capacity | Efficiency Improvement |
|---------------------|------------------------|---------------------|------------------------|
| 1 | April 2009 | 7.5 MW | 4.16% |
| 3 | April 2010 | 7.5 MW | 4.15% |
| 2 | May 2011 | 7.5 MW | 2.42% |
| 4 | May 2012 | 7.5 MW | 1.49% |

19

20 The Noxon Unit #1 work included the replacement of the
21 stator core, rewinding the stator, installing a new turbine
22 and performing a complete mechanical overhaul. This

² The fifth unit was installed in 1977.

1 upgrade increased the Unit's energy efficiency by 4.16%,
2 and increased the unit rating by 7.5 MW. The upgrade also
3 fixed several reliability concerns for Unit #1 including
4 mechanical vibration and stator age. This work was
5 completed in 2009. The costs and additional generation of
6 this project were pro formed, and approved for recovery, in
7 Case No. AVU-E-09-01.

8 The Noxon Unit #3 upgrade, completed in May 2010,
9 increased energy efficiency by 4.15%, and boosted the unit
10 rating by 7.5 MW. The costs and additional generation for
11 Unit #3 were approved for recovery in Case No. AVU-E-10-01.

12 Noxon Unit #2 had a new turbine installed and complete
13 mechanical overhaul in May of this year. This upgrade is
14 projected to increase Unit #2 efficiency by 2.42% and
15 increase the unit rating by 7.5 MW. The costs for the Unit
16 #2 upgrade were \$9.1 million (system).

17 The upgrade work at Noxon Unit #4 involves the
18 installation of a new turbine and a complete mechanical
19 overhaul starting in August 2011 and ending in May 2012.
20 The Unit #4 upgrade is projected to increase efficiency by
21 1.49% and increase the unit capacity rating by 7.5 MW.

22 The costs associated with Noxon Unit #2 are \$9.1
23 million (system) and Unit #4, planned for completion in May
24 2012, will cost approximately \$8.8 million (system).
25 Company witness Ms. Andrews incorporates the Idaho share of
26 these costs in her adjustments. The increased generating

1 capability from these units is reflected in Mr. Kalich's
2 AURORA_{XMP} modeling of pro forma power supply costs.

3 **Q. Can you please provide a brief description of the**
4 **other generation-related capital projects that are included**
5 **in this case?**

6 A. Yes. The total 2011 and 2012 generation projects
7 included in the Company's case, as identified by Company
8 witness Mr. DeFelice and described below, total \$59.6
9 million on a system basis. The 2011 Noxon Unit #2 and Unit
10 #4 upgrade projects discussed above represent \$17.9 million
11 of this total. The other generation capital projects
12 totaling \$41.9 million (system), are discussed below.

13 **Thermal - Kettle Falls Capital Additions - \$1,731,000**

14 Kettle Falls Capital Projects include the acquisition of
15 water rights and subsequent development of the wells for
16 the long-term plant water supply beginning in 2011. The
17 other major capital project includes the replacement of the
18 boiler control system (DCS). \$731,000 of capital additions
19 for this category are for 2011 and the remaining \$1,000,000
20 of capital additions are for 2012.

21
22 **Thermal - Colstrip Capital Additions - \$11,889,000**

23 Colstrip capital additions in 2011 and 2012 include major
24 work on the ash storage ponds for Units 3 and 4. This
25 project will increase the capacity of the ponds to their
26 final permitted level and is necessary for continued plant
27 operation. During our 2011 outage on Unit 3, we completed
28 installation of a new set of low pressure rotors, a major
29 inspection of the intermediate pressure turbine, a
30 generator rewind and other capital projects as part of our
31 maintenance program to maintain plant reliability and
32 performance. Capital additions for 2012 include superheat
33 section replacement costs for Unit 4, environmental costs
34 associated with the EPA's Hazardous Air Pollutants rule,
35 and a rotor rewind. \$6,926,000 of the capital additions for
36 this category are for 2011 and the remaining \$4,963,000 are
37 for 2012 capital additions.

38
39 **Thermal - Coyote Springs 2 Capital Additions - \$11,030,000**

40 At Coyote Springs 2, we are expected to reach 48,000 hours
41 of operation. Major gas turbine components are scheduled
42 to be inspected and/or replaced in accordance with original

