

1 **BEFORE THE PUBLIC UTILITIES COMMISSION OF NEVADA**

2 **PRE-FILED REDACTED DIRECT TESTIMONY OF**

3 **DAVID M. SIMS**

4 **Sierra Pacific Power Company**

5 **Second Amendment to its 2007 Integrated Resource Plan**

6 **DOCKET NO. 08 - _____**

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10 **1. Q. PLEASE STATE YOUR NAME, OCCUPATION, AND BUSINESS**
11 **ADDRESS.**

12 **A.** My name is David M. Sims. I am the Director of Project Development for
13 Sierra Pacific Power Company ("Sierra") and Nevada Power Company
14 ("Nevada Power") (together, the "Companies"). My business address is
15 6226 West Sahara Avenue, Las Vegas, Nevada 89146.
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18 **2. Q. PLEASE DESCRIBE YOUR RESPONSIBILITIES AS DIRECTOR**
19 **OF PROJECT DEVELOPMENT FOR THE COMPANIES.**

20 **A.** I am responsible for overseeing new generation project development at the
21 Companies, including site selection, permitting, public consultation,
22 technology selection, fuel supply and transportation, and ancillary
23 facilities such as water and rail. Specifically, I am the Project Manager for
24 the permitting and development of the Ely Energy Center ("EEC"). I
25 direct both company and outside resources in the areas of permitting, cost
26 control, scheduling, legal, financing, engineering, and construction to
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ensure the facilities will be developed in a timely and cost-effective manner.

3. **Q. WOULD YOU PLEASE DESCRIBE YOUR EXPERIENCE IN THE ENERGY INDUSTRY?**

A. I have 30 years experience in the development and project management of large capital projects, including refining and petrochemical complexes, manufacturing facilities, and residential and industrial land development. Since 1990, I have been responsible for the development of power generation facilities. I have successfully developed over 1,200 MW of greenfield power generation facilities in the U.S. and Canada, including peaking, combined cycle, baseload cogeneration and distributed power. I performed this and related work for a variety of employers, including Brown & Root, Air Liquide America and Coastal Power Company. My statement of qualifications is provided in Exhibit Sims-Direct-1.

4. **Q. WHAT IS THE PURPOSE OF YOUR PRE-FILED DIRECT TESTIMONY IN THIS PROCEEDING?**

A. In this testimony I provide updated information regarding the status of the EEC project, progress made in meeting the major milestones for the EEC project, and an assessment of the expected completion schedule for the EEC project. I also support Sierra's requests for approval to: (i) deviate from the timeline for filing the EEC Amendment that the Commission

1 directed the Companies to prepare in Docket Nos. 06-06051 and 06-
2 07010, (ii) update the budget for the development and permitting of EEC,
3 and (iii) revise the proposed EEC construction schedule.
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6 **5. Q. WHAT IS THE STATUS OF THE PROPOSED EEC?**

7 A. In June 2006, Nevada Power and Sierra sought resource planning approval
8 to proceed with the permitting and development of the EEC, a coal-fired
9 generating facility to be located in White Pine County, Nevada. In
10 November 2006, the Commission ordered the Companies to proceed with
11 developing the EEC, and authorized the Companies to expend \$300
12 million on development activities through the receipt of a Record of
13 Decision ("ROD") from the Bureau of Land Management ("BLM"),
14 which, at the time, was anticipated in July 2008. The Commission further
15 limited this grant of authority to \$155 million through the receipt of a final
16 Air Permit from the Nevada Department of Environmental Protection
17 ("NDEP"), which, at the time, was anticipated in January 2008.
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21 Consistent with this order, Nevada Power and Sierra have actively pursued
22 development of the EEC. Specifically:

- 23 ▪ Air permitting activities are underway. The Companies filed an air
24 permit application for Phase 1, and received a Draft Air Permit
25 from NDEP in October, 2007. The NDEP conducted a public
26 hearing in January 2008, at which it indicated that the Companies'
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application met all state and federal standards, and that it is assessing comments received from the public. Although the final Air Permit has been delayed beyond the original estimate of January, 2008, the Companies are confident that the final Air Permit will be issued following completion of NDEP's review and response to public comments.

- Water rights applications have been filed with the State Engineer for groundwater withdrawal in Steptoe Valley, as well as adjacent water basins in Butte and Jakes Valleys. Groundwater from Steptoe Valley appears to be the most likely source for water required for the EEC. To ensure sufficient water for Phase 1, some farms in Steptoe Valley and their associated certificated irrigation rights were placed under option or were purchased. This action was taken to secure the availability of water for the EEC while the development and permitting proceeded.

- The Owners' Engineer, HDR|Cummins & Barnard, has produced a specification for bidding by equipment vendors, and engineering and construction contractors. The vendors and contractors submitted bids in the summer of 2007. From the initial bids, two short-listed bidders were chosen in the major equipment categories and the engineering, procurement and construction ("EPC") contractors.

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- Proposals have been solicited from both the Union Pacific and BNSF railroads to determine the expected cost of rail transportation of coal from the Powder River Basin to the EEC.
- A local project office with onsite representation has been opened in Ely, Nevada, a project website has been designed and opened, and a full-time Project Communications Director was brought on in 2007 to expand and coordinate project communication.
- An application for acquisition of up to 2,500 acres and grants of rights-of-way sufficient for both phases of the EEC has been filed with the BLM's Ely Regional Office.
- BLM is preparing an Environmental Impact Statement ("EIS"), which will assess impacts of the development of the site, transmission and ancillary facilities on biological, cultural and socio-economic communities, and other areas as required by the National Environmental Policy Act ("NEPA"), the Endangered Species Act, the National Historic Resources Preservation Act, and the Clean Water Act, among others.
- The Companies have initiated studies to support the improvement and operation of portions of the Nevada Northern Railway ("NNRy") to accommodate high-speed unit coal trains between the Union Pacific main line and the Steptoe Valley. A preliminary design of the rehabilitation has been completed; and an application has been made to the Corps of Engineers to obtain a Section 404

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permit (necessary in order to address a small amount of wetlands which may be impacted by the railroad rehabilitation). Initial cultural surveys have been performed. Through the Corps of Engineers, consultation has begun with the State Historic Preservation Office ("SHPO") regarding possible cultural issues. The Corps of Engineers has indicated it will wait for completion of the cultural consultations prior to issuance of the Section 404 permit.

- The Companies have begun discussions with the City of Ely and the White Pine Historical Railroad Foundation to establish commercial terms and conditions regarding the rehabilitation of the NNRy track and operation of coal trains on the NNRy rights-of-way.

6. Q. WHAT HAS SIERRA EXPENDED AND COMMITTED TO AS OF THE DATE OF THIS FILING?

A. To date the Companies have expended approximately \$50,000,000 to develop the project, and committed roughly \$15,000,000 in additional funds, for a total of approximately \$65,000,000.

7. Q. HOW DOES THIS LEVEL OF EXPENDITURE COMPARE TO THE BUDGETED EXPENSES THAT THE COMMISSION APPROVED IN DOCKET NOS. 06-06051 AND 06-07010?

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A. Under the original project schedule, the Companies planned to pursue a parallel development approach pursuant to which they would simultaneously conduct permitting and construction work. Specifically, through January 2008, the Companies expected to expend or commit \$155 million on three major categories of costs: permitting (air permit and preparation of the EIS), procuring some owner-provided equipment and beginning upgrades to the NNRy.

Although the air permit application is somewhat delayed, the BLM has revised the EIS schedule several times in order to accommodate their work on other projects and provide additional time for federal agency review. The BLM's Ely Field Office, which is responsible for preparing the EIS, is processing several other EIS applications, all of which involve significant biological, environmental and cultural studies and reviews, as required by NEPA. Consequently, BLM has advised the Companies that the expected issuance of the Draft EIS for public comment is now November 2008, and the ROD is now expected in December 2009, a delay of at least 17 months.

Because of the delays experienced in the EIS process, the Companies determined that it would be inappropriate to maintain the parallel development approach and issue contracts to vendors and contractors at this time. Therefore, major equipment expenditures, as well as

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expenditures for rehabilitation of the NNRy, have been postponed. The Companies have focused their efforts and expenditures on permitting, preliminary engineering and construction management services, and acquisition of water rights sufficient for Phase 1 of the project.

8. Q. HOW HAVE DELAYS IN THE PERMITTING PROCESS IMPACTED THE COMPANIES' DEVELOPMENT BUDGET FOR THE EEC?

A. The Companies request authorization to expend a total of \$155 million (\$90 million in incremental expenditures) on permitting and related development work through February 2010. The details behind this spending authorization are set forth below. The Companies will return to the Commission no later than July 1, 2009, in a future amendment to Sierra's 2007 IRP. In that filing, the Companies will provide the Commission with a further update on the permitting schedule and costs, and may seek additional spending authority to carry the project beyond March 2010 to the currently anticipated major funding commitment date of October 2010.

9. Q. WHAT IS THE LIKELY SCHEDULE FOR THE EEC PROJECT NOW?

A. The delay in the EIS forces the Companies to consider alternative development scenarios. The first approach (an "Early Schedule") assumes

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that equipment and construction contracts will be awarded prior to the BLM ROD. The milestones associated with the Early Schedule are indicated in Table Sims-Direct-1, below, along with the expected date of completion:

**Table Sims-Direct-1
Early Schedule**

MILESTONE ACTIVITY – Early Schedule	EXPECTED DATE OF COMPLETION
Final Air Permit from the Nevada Department of Environmental Protection (“NDEP”)	In Process
Draft Environmental Impact Statement	November 2008
Award EPC contract	April 2009
Award Owner Furnished Equipment	July 2009
BLM Record of Decision	December 2009
BLM Notice to Proceed (Site Construction)	April 2010
Unit 1 Commercial Operation	June 2014
Unit 2 Commercial Operation	June 2015

The Companies also have prepared a preferred Sequential Schedule, pursuant to which equipment and construction contracts would not be awarded until after the final Air Permit has been received, the ROD issued, notices to proceed have been approved by the BLM, and the Commission has processed the compliance filing for the EEC. As reflected in Table Sims-Direct-2 below, under the Sequential Schedule approach the Companies would delay significant spending until all the permits are in hand, deferring the majority of expenditures until 2010 (following the ROD at the end of 2009).

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**Table Sims-Direct-2
Sequential Schedule**

MILESTONE ACTIVITY – Sequential Schedule	EXPECTED DATE OF COMPLETION
Final Air Permit from the Nevada Department of Environmental Protection (“NDEP”)	In Process
Draft Environmental Impact Statement	November 2008
BLM Record of Decision	December 2009
BLM Notice to Proceed (Site Construction)	April 2010
Award EPC contract	April 2010
Award Owner Furnished Equipment	October 2010
Full Notice to Contractor to Proceed	June 2011
Unit 1 Commercial Operation	June 2015
Unit 2 Commercial Operation	June 2016

10. Q. IS THE EN-TI TRANSMISSION LINE STILL CONSIDERED PART OF THE EEC PROJECT FOR PURPOSES OF PERMITTING AND DEVELOPMENT?

A. Yes, the EN-Ti transmission line is still being permitted and developed with the EEC. The EN-Ti will be reviewed and approved as part of the NEPA process being conducted by the BLM, and will be addressed in the Draft and Final EIS and ROD. Construction of the EN-Ti will likewise follow a Notice to Proceed from the BLM and Commission approval of the EEC amendment. The first 500 kV line, expected to be in-service in late 2012, will connect the new Robinson Summit Substation in White Pine County to the Harry Allen Substation in Clark County, and will connect Sierra’s 345 kV system in the north with Nevada Power’s 500 kV system in the south. This will enable the Companies to continue to meet

1 their contractual obligations to transfer contracted renewable energy from
2 north to south. Additional equipment required for the interconnection of
3 the EEC into Robinson Summit substation in the north will follow in early
4 2014 in order to connect the EEC plant into Robinson Summit.
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7 **11. Q. HAVE PERMITTING DELAYS IMPACTED THE EXPECTED**
8 **COST OF THE EEC?**

9 A. Yes. The total project costs for the EEC are estimated to be approximately
10 \$5.0 billion if construction were to begin at the time of this
11 filing. Depending on the timing of construction, negotiation of certain
12 contracts, the potential initiation of any litigation challenging the project,
13 and the timing and terms of permitting, among other factors, actual costs,
14 scope, and timing of the completion of the project will likely differ
15 materially from initial estimates. For modeling purposes assuming
16 commercial operation dates of June 2015 and June 2016, the estimated
17 total cost for the EEC in nominal dollars is approximately \$ [REDACTED]
18 (exclusive of AFUDC) (\$ [REDACTED] for the 1,500 MW coal plant and
19 \$ [REDACTED] for the transmission work) or about \$ [REDACTED] /kW.
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23 The majority of the increase in the cost estimate is an almost 40% increase
24 in the cost to construct the plant—increases driven primarily by
25 escalations in equipment, materials, engineering services and skilled craft
26 labor that are impacting electric generation projects globally.
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12. Q. **HOW WAS THE CURRENT EEC ESTIMATE DEVELOPED?**

A. For major equipment items (boilers, steam turbine generators and air quality control systems), the Companies solicited bids from multiple manufacturers and then short-listed two suppliers in each category. A similar strategy was employed for the EPC contractors, who provided indicative bids, from which two were short-listed. The cost of the NNRy railroad upgrade was based on bids received from three short-listed contractors. Owners' items such as permitting and development costs were estimated internally and by third-party consultants. The costs for the transmission components were based on third-party consultant and internal estimates.

Once the base bids were assembled, contingencies were applied to account for various risk elements in the project. The base estimate, which reflects a base cost for 2008, was then escalated to the expected commercial operation dates for each unit.

13. Q. **DO THE COMPANIES ANTICIPATE CONSTRUCTION COST INCREASES TO CONTINUE TO EXERT UPWARD PRESSURE ON THE PROJECT BUDGET?**

A. Historically, major capital expansions occur in waves. As demand for a specific commodity or capital item increases, so typically will the price. At the time bids for major equipment and EPC contractors were first

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solicited, several major U.S. coal-fired projects were anticipated and numerous U.S. utilities had significant scrubber projects underway.

On the construction side, EPC contractors originally expressed reservations about the ability to secure qualified skilled labor without incentive packages, citing robust demand for labor in the Southeast (related to rebuilding from Hurricane Katrina), as well as a large number of petrochemical and refinery expansions. These projects are also nearer to completion and it is anticipated that skilled construction labor may be more available, both locally and the rest of the country.

The Companies expect that the most recent round of bids received (at the end of 2007) represent the peak of the market, and anticipate more moderate escalation or perhaps even a decline in the short term. The Companies therefore feel it is important to continue making prudent permitting and development expenditures to retain the ability to go forward with the coal option at Ely.

14. **Q. WHEN WILL SIERRA RETURN TO THE COMMISSION FOR FINAL APPROVAL OF THE PROJECT**

A. If BLM maintains its current schedule for the EIS, the Companies would expect to return to the Commission in April 2010. This schedule will allow the Companies sufficient time once the ROD is issued (December

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2009) to revise and update pricing from vendors and contractors, to prepare an updated project cost estimate, and to allow the Staff, BCP and a third party engineering firm to review the project cost estimates (as contemplated by paragraph 230 of the Commission's Order in Sierra's 2007 IRP).

15. Q. WHAT DEVELOPMENT WORK WILL BE PERFORMED ON THE EEC IN 2008 THROUGH FEBRUARY 2010?

A. Sierra and Nevada Power will continue with all necessary development and permitting activities to ensure that the above milestones are achieved, including project development and commercial negotiations, completion of engineering studies and selection of technologies, hydrogeologic testing to support groundwater permit applications, and completion of the EIS process for both the generation plant site and transmission facilities.

Through February 2010, expenditures on the EEC are expected to total \$155 million (\$90 million of which has yet to be expended). Major activities will include:

- Negotiation of development agreements with governmental agencies, equipment and EPC contractors, all requiring legal support.
- Completion of permitting studies and processing of project applications with permitting agencies.

Table Sims-Direct-3
Revised Development Budget, January 2008 through February 2010¹

Project Development					
Legal Counsel					
Permitting					
Land Procurement					
Water Rights					
SPR Support					
Subtotal Owner Costs					
Rail & Pwr Engr Support					
Boiler/Major Equipment					
EPC Support					
Engineering/Proj. Mgmt.					
Subtotal 3rd Party					
Transmission					
Contingency					
Total Expenses	\$155,100,000	\$50,500,000	\$42,900,000	\$50,600,000	\$11,100,000

16. Q. IS SIERRA REQUESTING CONFIDENTIAL TREATMENT OF CERTAIN INFORMATION RELATED TO THE EEC PROJECT?

A. Yes, the information related to the expenditures detailed in my testimony contains commercially sensitive and/or trade secret information that derives independent economic value from not being generally known. Disclosure of this information to any third party would adversely affect Sierra's ability to negotiate EPC contracts at competitive prices. Outside knowledge of some of the budget detail would place Sierra in a distinctly

¹ For purposes of this filing, it is assumed that these costs will be split 80% to Nevada Power and 20% to Sierra. The cost allocations will be revisited in the "EEC Amendment."

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disadvantageous position and compromise the acquisition, bidding, and negotiation process with respect to the costs of the EEC project.

17. Q. FOR HOW LONG DOES NEVADA POWER REQUEST CONFIDENTIAL TREATMENT?

A. The requested period for confidential treatment is for no less than five years.

18. Q. WILL CONFIDENTIAL TREATMENT IMPAIR THE ABILITY OF THE COMMISSION'S REGULATORY OPERATIONS STAFF ("STAFF") OR THE NEVADA ATTORNEY GENERAL'S BUREAU OF CONSUMER PROTECTION (THE "BCP") TO FULLY INVESTIGATE THE SECOND AMENDMENT TO THE IRP?

A. No, in accordance with the accepted practice in Commission proceedings, the confidential material will be provided to Staff and the BCP under standardized protective agreements with them.

19. Q. DOES THIS CONCLUDE YOUR TESTIMONY?

A. Yes, it does.

QUALIFICATIONS OF WITNESS

DAVID M. SIMS

My name is David M. Sims. My business address is 6226 W. Sahara Avenue, Las Vegas, Nevada. I am currently employed by Nevada Power Company, and serve as the Director of Project Development for Nevada Power Company and Sierra Pacific Power Company. I have held this position since January, 2006.

I have over 30 years experience in the development of large capital and land use projects. For the last 15 years, I have specialized in the development of greenfield power generation facilities, in both the US and Canada. My previous employers in the power industry include Brown & Root Energy Development, Air Liquide America, Coastal Power, and Ingersoll-Rand Energy Systems. I have successfully developed over 1,200 MW of greenfield peaking, combined cycle, baseload cogeneration and distributed power generation facilities.

Prior to the power industry, I spend approximately 15 years in the construction and real estate development industry, in the areas of project development and project management, for employers such as Weyerhaeuser Real Estate Company and Brown & Root.

I graduated in 1974 with a BS in Chemistry from Tulane University in New Orleans, LA, and received a Masters in Business Administration from Tulane in 1976.


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AFFIRMATION

STATE OF NEVADA)
) ss.
COUNTY OF CLARK)

I, DAVID M. SIMS, do hereby swear under penalty of perjury the following:

That I am the person identified in the attached Prefiled Direct Testimony and that such testimony was prepared by me or under my direct supervision; that the answers and information set forth therein are true to the best of my knowledge and belief; and that if asked the questions set forth therein, my answers thereto would, under oath, be the same.



DAVID M. SIMS

Subscribed and sworn to before me

this 17th day of March 2008.



NOTARY PUBLIC

