# BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Integrate And Refine Procurement Policies and Consider Long Term Procurement Plans Rulemaking 10-05-006 (Filed May 6, 2010) Tracks I and III

## PREPARED TESTIMONY OF KEVIN WOODRUFF ON BEHALF OF THE UTILITY REFORM NETWORK REGARDING TRACKS I AND III

Kevin Woodruff
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August 4, 2011

1	INTF	RODUCTION
2		
3	Q.	Please introduce yourself.
4	A.	I am Kevin Woodruff. I am the Principal of the consulting firm of Woodruff Expert
5		Services. I have testified before this Commission on many occasions regarding electric
6		utility resource planning and procurement and project valuation issues. My resume is
7		appended hereto as Attachment 1.
8		
9	Q.	On whose behalf are you testifying?
10	A.	I am providing this testimony on behalf of The Utility Reform Network (TURN), an
11		organization that has long represented the interests of smaller consumers before this
12		Commission.
13		
14	Q.	What issues are you addressing in your testimony?
15	A.	This testimony supports the Settlement Agreement (SA) filed yesterday to resolve major
16		Track I issues. <sup>1</sup> This testimony also addresses three Track III issues.
17		
18	Q.	Will you be addressing other Track I or Track III issues during the course of hearings?
19	A.	Possibly. I may want to respond to proposals other parties make in their testimony being
20		filed concurrently today. If so, I anticipate TURN will request the opportunity for oral
21		rebuttal during the hearings set for August 11 and 12, consistent with the direction
22		provided in the ALJ's June 10 Ruling.
23		
24	TRA	CK I SETTLEMENT AGREEMENT
25		
26	Q.	What are your recommendations regarding the SA filed yesterday regarding major Track
27		I issues?
	1	See Motion for Expedited Suspension of Track 1 Schedule, and for Approval of Settlement Agreement

Direct Testimony of Kevin Woodruff on Behalf of The Utility Reform Network Rulemaking 10-05-006 – Tracks I and III August 4, 2011 Page 1 of 9

between and among [numerous parties], filed August 3, 2011 in this docket.

A.	The Commission should adopt the SA as it was submitted. I have monitored and
	reviewed the joint efforts of the California Independent System Operator (CAISO) and
	the Investor-Owned Utilities (IOUs) to quantify renewable integration needs since May
	2009. I believe the SA reasonably resolves renewable integration issues given the current
	record in this case and TURN has signed and supports the SA.
	A.

I should also note that if an acceptable SA had not been filed, my testimony would instead have addressed renewable integration modeling issues and their policy implications in significant detail. And if the SA is adopted, I will raise my concerns about the renewable integration modeling conducted to date informally with the CAISO and other parties and attempt to resolve such concerns before significant modeling effort begins in the first quarter of 2012. If I cannot resolve these concerns and others that may emerge before the CAISO provides its results around March 31, 2012, I anticipate presenting them to the Commission in formal testimony in the 2<sup>nd</sup> quarter of 2012.<sup>2</sup>

#### TRACK III ISSUES

- Q. What are your recommendations regarding the three Track III issues you address below?
- 19 A. As explained more fully below, the Commission should:
  - Reject Southern California Edison's (SCE's) proposal that the CAISO assume
    responsibility for determining "need" for new capacity for certain reliability purposes
    and conduct a "New Generation Auction Mechanism" to procure and manage such
    capacity.
  - 2) Adopt ratemaking policies that hold IOUs accountable for the cost and performance estimates of Utility-Owned Generation (UOG) resources used when comparing such proposed UOG resources to resources that would be developed and owned by non-utility entities pursuant to Power Purchase Agreements (PPAs).

See pp. 5-6 of *Settlement Agreement*... for a proposed schedule for CAISO completion and Commission consideration of renewable integration modeling and related issues.

3) Adopt an enhanced version of the staff proposal related to Independent Evaluators 1 (IEs) that monitor IOU procurement processes by specifying that IEs be hired, 2 managed and paid directly by the Commission rather than the IOUs. 3 4 5 SCE PROPOSAL FOR CAISO-MANAGED "NEW GENERATION AUCTION MECHANISM" Please describe SCE's proposal for a "New Generation Auction Mechanism". Q. 6 7 A. In its Track III testimony, SCE proposes a "New Generation Auction Mechanism".<sup>3</sup> Under this proposal "...the CAISO would run an auction every three years to procure 8 new generation that it determines is needed for local capacity requirements and 9 renewable integration". The CAISO would then "...make long-term (up to twenty 10 years) commitments to new generation developers who win in the auction, to be 11 recovered through the authority in the CAISO's tariff". 5 12 13 What would be the role of this Commission in this mechanism? 14 Q. SCE suggests that the "CPUC would play a meaningful role" in the CAISO process. A. 15 However, the Commission's role would apparently be limited to tasks such as 16 "establishing its jurisdictional share of need", working with the CAISO to "finalize need" 17 determination for each jurisdictional share", and "approv[ing] the short list of contracts 18 that apply to its jurisdictional share". 6 SCE also said in response to a TURN data request 19 that the Commission could have a role in the auction if and when an IOU submits a bid.<sup>7</sup> 20 But all other aspects of the auction – including need determination, its administration, the 21 signing and management of long-term contracts, and cost allocation and recovery – 22 would be managed by the CAISO.8 23 24 25 What are your concerns with SCE's proposal? Q.

Exhibit No. SCE-3, pp. 4-8.

Direct Testimony of Kevin Woodruff on Behalf of The Utility Reform Network Rulemaking 10-05-006 – Tracks I and III August 4, 2011 Page 3 of 9

Id., 6:8-10; footnote omitted. See also SCE response to TURN Data Request 2, Question 4, subparts 'c' to 'e', provided as Attachment 2.

<sup>&</sup>lt;sup>5</sup> Id., 6:20-22.

<sup>&</sup>lt;sup>6</sup> Id., 6:12-20.

SCE response to TURN Data Request 2, Question 3, provided as Attachment 3.

<sup>8</sup> Exhibit No. SCE-3, 6:7-7:6.

2		1) The Commission would lose authority over setting need, managing procurement, and
3		allocating costs to the Federal Energy Regulatory Commission (FERC).
4		2) The CAISO is not suited for making determinations for long-term needs for new
5		generation.
6		3) The CAISO is not suited for soliciting, selecting, negotiating and managing PPAs for
7		new resources.
8		
9	Q.	Why are you concerned that the Commission would lose authority under SCE's proposal?
10	A.	SCE's proposal would be a radical reduction to the Commission's role in the
11		authorization and procurement of new resources, including the Commission's current
12		central role in determining need, reviewing and approving contracts for new generation to
13		meet such need, and allocating the costs of such contracts among CPUC-jurisdictional
14		ratepayers. Just last year the Commission rejected a centralized forward capacity market
15		largely due to concerns about FERC jurisdiction.9 Nothing has changed in the last year to
16		invalidate the Commission's basic rationale for that finding.
17		
18	Q.	Why do you think the CAISO is not suited for making determinations regarding long-
19		term needs for new generation?
20	A.	The CAISO has unique expertise and data available that can enlighten discussions about
21		need issues. However, the CAISO is not suited for making long-term need
22		determinations. As a general principle, system operators have a tendency to favor more
23		rather than fewer resources. This inclination is one of the reasons why the system
24		planning and operations functions have consistently been separated in the utility industry.
25		The CAISO in particular has neither a focus on nor experience in least-cost resource
26		planning. And my observations of the CAISO suggest that a bias toward more generation
27		would likely emerge in any assessment of resource needs pursuant to SCE's proposal.
28		And consistent with my concerns above about the Commission's loss of jurisdiction to

I have three basic concerns with SCE's proposal, which are:

1

A.

Direct Testimony of Kevin Woodruff on Behalf of The Utility Reform Network Rulemaking 10-05-006 – Tracks I and III August 4, 2011 Page 4 of 9

Decision 10-06-018 in Rulemaking 05-12-013.

2		same rights and ability to be heard that this Commission's hearing process provides.
3		
4	Q.	Why do you think the CAISO is not suited for soliciting, selecting, negotiating and
5		managing long-term PPAs for new resources?
6	A.	The CAISO has some strong suits, specifically transmission planning and the operation
7		of its market and the physical electric system. However, the CAISO has no background
8		in the solicitation, evaluation, negotiation and administration of PPAs for new power
9		projects. Nor is such expertise is among the traditional functions of system operators,
10		including modern ISOs or Regional Transmission Organizations (RTOs). Given my
11		concerns about the CAISO's likely bias toward more rather than less generation, I do not
12		think it appropriate that the CAISO have any role in these particular tasks.
13		
14	Q.	What parties are capable of soliciting, evaluating, negotiating and managing PPAs for
15		new power projects?
16	A.	The best candidates for performing these tasks in a manner that is cost-effective and
17		subject to Commission review are the IOUs. The IOUs operate power procurement
18		departments, have routine contact with the development community and understand the
19		process of developing and operating new power plants.
20		My confidence that the IOUs will be better at this task than the CAISO is bolstered by
21		my participation in each IOU's Procurement Review Group (PRG) for the past eight
22		years, in which I have had the opportunity to review each IOU's procurement of new
23		resources. Though I have not always agreed with the IOUs' choices or the Commission's
24		actions on the IOUs' choices, it is clear that the IOUs can reasonably administer the
25		solicitation, evaluation, negotiation and administration of long-term PPAs for new
26		resources. The CAISO has no such track record, nor - to my knowledge - does any ISO
27		or RTO.
28		
29	Q.	What specific action should the Commission take with regard to SCE's proposal?

the FERC, the CAISO's "stakeholder process" does not provide California parties the

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Direct Testimony of Kevin Woodruff on Behalf of The Utility Reform Network Rulemaking 10-05-006 – Tracks I and III August 4, 2011 Page 5 of 9

2		
3	Q.	SCE argues that its proposed mechanism would provide an equitable allocation of the
4		costs of new generation needed for system reliability. 10 Do you share SCE's concerns
5		about the importance of allocating the costs of such system resources to all customers?
6	A.	Yes. TURN agrees that all benefitting customers should share the costs of capacity
7		required to maintain reliable service. TURN anticipates pursuing the implementation of
8		such cost allocation practices in other proceedings, such as those that will update the Cost
9		Allocation Mechanism.
10		
11	ACCC	OUNTABILITY FOR ESTIMATED COSTS IN COMPARISON OF UOG AND PPA
12		OPTIONS
13	Q.	Is the issue of the IOUs' comparisons of UOG proposals to non-utility PPA proposals at
14		issue in Track III of this case?
15	A.	Yes. In his June 10 Ruling, the ALJ re-iterated that Track III would consider
16		"refinements to the bid evaluation process, particularly weighing competing bids between
17		utility-owned generation and power purchase agreements" (p. 6). That Ruling also
18		directed that parties should specify whether their proposals should be approved by year-
19		end, be considered on an ongoing basis as general policy recommendations, or be
20		reviewed and acted upon in the future (pp. 6-7).
21		
22	Q.	Do you have any specific recommendations on the bid evaluation process for comparing
23		UOG and PPA projects?
24	A.	Yes. I have one very specific recommendation the Commission should adopt this year
25		for use in all future IOU solicitations for conventional or renewable power. This
26		Commission should require that the critical cost parameters of any bid that may result in
27		selection of a UOG project – whether such projects are being developed and proposed by
28		an IOU or are being offered for sale to an IOU by a third party – be binding upon the

The Commission should simply reject SCE's proposal.

1

A.

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Direct Testimony of Kevin Woodruff on Behalf of The Utility Reform Network Rulemaking 10-05-006 – Tracks I and III August 4, 2011 Page 6 of 9

Exhibit No. SCE-3, 6:22-7:1 and 7:18.

1		IOU's future recovery in rates of the costs of such a project for the first ten years of its
2		operation.
3		
4	Q.	Can you provide examples of such "critical cost parameters"?
5	A.	Yes. One key parameter would be the capital cost of a plant, including both its initial
6		capital cost and future capital additions. Other key parameters would be the major
7		drivers of its operating costs, including fixed and variable operations and maintenance
8		costs and, in the cases of thermal plants, heat rates. The economic life of a UOG project
9		can also be a critical determinant of its value relative to a PPA.
10		
11	Q.	Why do you make this proposal?
12	A.	A key complicating factor in comparing UOG to PPA resources – and a particular risk to
13		ratepayers when a UOG resource is chosen – is the potential for the costs of UOG
14		resources to escalate from those upon which the evaluation and selection was based. In
15		such cases, ratepayers may pay more for the resource than was projected during the
16		evaluation process. This proposal would provide ratepayers some additional assurance
17		that new UOG resources would actually turn out to be the best choice.
18		
19	Q.	Have cost caps been imposed on new UOG resources in recent years to limit ratepayer
20		exposure to unexpected costs of such resources?
21	A.	Yes. Utility cost recovery for some new UOG resources has been limited by the
22		Commission in recent years. But I do not believe that there is any mechanism that ties
23		the cost estimates used in the competitive evaluation of a UOG project through to the
24		IOU's recovery of such project's costs.
25		
26	COM	MMISSION – NOT IOUs – SHOULD HIRE AND MANAGE INDEPENDENT EVALUATORS

Direct Testimony of Kevin Woodruff on Behalf of The Utility Reform Network Rulemaking 10-05-006 – Tracks I and III August 4, 2011 Page 7 of 9

Is the role of IEs an issue in Track III of this case?

27

Q.

1	A.	Yes. In particular, the ALJ's June 10 Ruling asked that Track III testimony regarding
2		procurement oversight rules address a specific Commission staff proposal on IEs that was
3		attached to the Ruling. <sup>11</sup>
4	0	
5	Q.	What does the staff proposal state about the entity that hires the IE?
6	A.	The staff proposal states that "[a]n IE shall be contracted with, by the IOU" and "the IE
7		shall be under contract to the IOU". But the staff proposal quickly suggests
8		"[a]lternatively, the Executive Director may hire contractors to perform IE tasks, with
9		management oversight of the IEs to be provided by the Energy Division". 12
10		
11	Q.	Do you have any recommendations to offer regarding this aspect of the staff proposal?
12	A.	I believe that staff's proposed "alternative" should instead be the general policy, that is,
13		that the Commission should hire and the Energy Division (ED) should manage IEs rather
14		than the IOUs.
15		
16	Q.	Why do you propose that the Commission hire IEs directly?
17	A.	I am concerned that IOU retention of IEs poses potential conflicts of interests to IEs.
18		Specifically, IEs retained by IOUs may face a conflict between their business interests -
19		which require satisfying the interests of their client – and the Commission's goal in
20		having IEs hired - which may at times require IEs to oppose the business interests of
21		their client. I believe direct retention of IEs by the Commission would mitigate this
22		potential conflict. I also believe that this potential conflict is the reason that IEs in many
23		states across the U.S. – if not most – are hired by Commissions rather than utilities.
24		
25	Q.	Do you think IEs provide valuable services to ratepayers even if they are hired by the
26		IOUs?
27	A.	Yes. Based on my observations of the IOUs' procurement processes as part of each
28		IOU's PRG and my detailed review of IE reports in some cases, I think IOU-retained IEs
	11 12	See page 7 of the Ruling and Attachment 1 of Section 1 of Appendix B of the Ruling. Id., p. 8 of Appendix B.

Direct Testimony of Kevin Woodruff on Behalf of The Utility Reform Network Rulemaking 10-05-006 – Tracks I and III August 4, 2011 Page 8 of 9

1		have provided a valuable service to the Commission and ratepayers. But I think the
2		services would be enhanced if the Commission retained IEs directly.
3		
4	Q.	Given the state's budget challenges, how could the Commission pay for IEs?
5	A.	The staff proposal offered a solution to the state budget challenge by proposing that the
6		IOUs pay the Commission's costs and then recover such costs from ratepayers. 13
7		
8	CON	CLUSION
9		
LO	Q.	Does this conclude your testimony?
11	Α	Yes

Id., pp. 8-9.

## ATTACHMENT 1

Resume of Kevin Woodruff

## **RESUME**

## **Kevin Woodruff**

Principal, Woodruff Expert Services

## **EXPERIENCE**

WOODRUFF EXPERT SERVICES 1100 K Street, Suite 204 Sacramento, California 95814 916-442-4877 (voice) 916-442-2029 (fax) kdw@woodruff-expert-services.com November 2002 –	PRINCIPAL Analyze complex policy and business issues faced by electric utilities, generators, customers, and other industry players. Communicate to clients analytic findings and corollary recommendations for action. Help clients communicate findings and recommendations to other parties, including preparing expert testimony for and supporting litigation efforts.
HENWOOD ENERGY SERVICES, INC. (aka Ventyx and acquired by ABB May 2010, previously aka Global Energy Decisions) April 1988 – November 2002	PRINCIPAL CONSULTANT (as of July 1992) Helped manage Henwood's transition into leading supplier of electric power system and market analytic software by managing complex software development and implementation projects and managing the development, marketing, and sales of software products.  Helped develop Henwood's power market analysis consulting practice into national leader by managing individual projects, managing and developing other staff to provide such services, identifying and developing new and enhanced services, and marketing and selling services to new and existing clients.  Provided variety of consulting services to clients with interests in energy utility industry, including preparing expert testimony and supporting litigation efforts, analyzing, modeling, and forecasting operations of power systems, power markets, and individual generating units, forecasting utility and project revenues, costs, and rates, and analyzing and consummating business transactions.
CALIFORNIA STATE UNIV, SACRAMENTO September 1994 – May 1995 (part-time)	LECTURER IN MANAGEMENT Taught upper division courses in Finance.
SIERRA ENERGY AND RISK ASSESSMENT May 1986 – April 1988 November 1985 – May 1986 (part-time)	STAFF CONSULTANT Provided clients analysis of gas and electricity project economics and utility revenues, costs, and rates.
PRIOR EXPERIENCE	Five years with private legislative reporting firm; California state economic development, regulatory, and tax agencies and Legislature; and labor organization.

## **EDUCATION**

A.B., Economics, University of California, Berkeley, 1976 M.B.A, California State University, Sacramento, 1990

9/10

## ADDENDUM 1

## to Resume of Kevin Woodruff

## **EXPERIENCE WITH WOODRUFF EXPERT SERVICES**

CLIENT	PROJECTS
THE UTILITY REFORM NETWORK  115 Sansome Street, Suite 900 San Francisco, CA 94104 415-929-8876  Mr. Bob Finkelstein, Legal Director	ANALYZE IOUs' PROPOSALS TO DEVELOP OR ACQUIRE POWER PLANTS. Sep 03 – present.  Review, analyze, comment, and testify on California Investor-Owned Utilities' (IOUs') various plans to purchase output from or acquire specific power plants, both conventional and renewable.
Mr. Matt Freedman, Staff Attorney	MONITOR CALIFORNIA IOUs' SHORT- AND MID-TERM ELECTRIC PROCUREMENT. Aug 03 – present.  Review, analyze, and comment on California IOUs' short- and mid-term electric power procurement and related activities by participating in their confidential Procurement Review Groups.
	ANALYZE ELECTRIC RESOURCE PLANNING AND ADEQUACY POLICIES. May 03 – present.  Review, analyze, comment and testify on California electric resource planning issues, including Resource Adequacy policies, the development of new power plants, and the integration of renewable resources.
	MONITOR INITIATIVES TO CHANGE CALIFORNIA TRANSMISSION PLANNING PROCESSES. Feb 04 – Aug 05 and Jul 08 – present.  Review, analyze and comment as appropriate on California state agencies' various initiatives to change transmission planning and evaluation processes.
OFFICE OF THE ARKANSAS ATTORNEY GENERAL, CONSUMER UTILITIES RATE ADVOCACY DIVISION 323 Center Street, Suite 200 Little Rock, AR 72201 501-682-1321	ANALYZING ENTERGY ARKANSAS, INC. FUTURE SYSTEM PLANNING AND OPERATION OPTIONS. Jun 10 – present.  Analyzing alternatives for Entergy Arkansas, Inc. (EAI) to plan and operate its electric generation and transmission systems upon its withdrawal from the Entergy System Agreement (APSC Docket No. 10-011-U).
Mr. M. Shawn McMurray, Senior Assistant Attorney General Mr. Emon Mahony, Assistant Attorney General	ANALYZING TRANSMISSION PLANNING ISSUES. Feb 09 – present.  Analyzing proposals to restructure Entergy's transmission planning processes (APSC Docket No. 08-136-U).
	ANALYZED TRANSMISSION COST RECOVERY ISSUES.  Mar 10 – Apr 10.  Analyzed utility proposals to expedite recovery of transmission and related costs (APSC Docket Nos. 09-074-U and 09-084-U).
	ANALYZED PROPOSAL TO INSTALL ENVIRONMENTAL CONTROLS ON COAL POWER PLANT. Mar 09 – Dec 09.  Analyzed proposal of EAI and other owners to install scrubbers and low NOx burners at the coal-fired White Bluff Steam Electric Station (APSC Docket No. 09-024-U).

CLIENT	PROJECTS
ARKANSAS ATTORNEY GENERAL (continued)	ANALYZED UTILITY PROPOSAL TO PURCHASE POWER PLANT. Nov 07 – Jun 08.  Analyzed EAI proposal to purchase Ouachita (combined cycle power) Plant and related wholesale resale, cost allocation and ratemaking issues (APSC Docket No. 06-152-U).
MAINE PUBLIC ADVOCATE OFFICE 112 State House Station Augusta, ME 04333-0112 207-287-2445  Mr. Richard Davies, Public Advocate Ms. Agnes Gormley, Senior Counsel	ANALYZING PROPOSED TRANSMISSION LINE. Aug 10 – current. Performing review of feasibility and cost-effectiveness of Algonquin Power Corporation's proposed Northern Maine Interconnect.
AVONDALE GLEN ELDER NEIGHBORHOOD ASSOCIATION (c/o LEGAL SERVICES OF NORTHERN CALIFORNIA) 515 – 12 <sup>th</sup> Street Sacramento, CA 95814 916-551-2150  Mr. Colin Bailey, Attorney Mr. Stephen Goldberg, Attorney	ANALYZE NEED FOR PROPOSED GAS STORAGE PROJECT. Dec 10 – Jan 11.  Reviewed, analyzed and testified on need for proposed Sacramento Natural Gas Storage Project.
ATTORNEY GENERAL OF WASHINGTON, PUBLIC COUNSEL SECTION 800 5 <sup>th</sup> Street, Suite 2000 Seattle, WA 98104-3188 206-389-3055  Mr. Simon J. ffitch, Senior Assistant Attorney General, Section Chief	ANALYZED UTILITY POWER SUPPLY COST FORECAST AND PROPOSED POWER CONTRACT. Feb 09 – Dec 09 Analyzed proposal of Avista to assign to Avista Utilities a Power Purchase Agreement (PPA) and related contracts related to the Lancaster (combined cycle) Generating Facility and other aspects of Avista's forecast of its 2010 power supply costs.
DIVISION OF RATEPAYER ADVOCATES of the CALIFORNIA PUBLIC UTILITIES	ANALYZED COST-EFFECTIVNESS OF PROPOSED TRANSMISSION LINES.
COMMISSION 505 Van Ness Avenue San Francisco, CA 94102 415-703-1418	Dec 06 – Jan 09.  Led team of consultants analyzing cost-effectiveness of San Diego Gas & Electric Company's proposed Sunrise Powerlink.
Mr. Scott Logan, Regulatory Analyst	Aug 05 – Jan 07.  Led team of consultants analyzing cost-effectiveness of Souther California Edison's proposed Devers–Palo Verde No. 2  Transmission Line Project (DPV2).
MAINE PUBLIC UTILITIES COMMISSION 242 State Street, State House Station 18 Augusta, ME 04333 207-287-1394	ANALYZED COST-EFFECTIVENESS OF PROPOSED TRANSMISSION LINE. Oct 08 – Jan 09.  Initiated analysis of cost-effectiveness of Maine Public Service and Central Maine Power Company's proposed Maine Power Connection.

Addendum 1 to Resume of Kevin Woodruff Page 2 of 3

CLIENT	PROJECTS	
NEVADA OFFICE OF THE ATTORNEY GENERAL, BUREAU OF CONSUMER	ANALYZED COST-EFFECTIVNESS OF PROPOSED GENERATION AND TRANSMISSION RESOURCES.	
PROTECTION 555 E. Washington Avenue, Suite 3900 Las Vegas, NV 89101 702-486-3129	Jun 07 – Sep 07 and Jul 08 – Aug 08.  Reviewed and analyzed resource plans and amendments filed by the Nevada Power Company and Sierra Pacific Power Company	
/02-480-3129	Jun 06 – Nov 06.	
Mr. Eric Witkoski, Chief Deputy Attorney General	Led team of consultants analyzing proposals to build significant new generation and transmission resources made by the Nevada Power Company and Sierra Pacific Power Company in their 2006 Integrated Resource Plan filings.	
TEXAS OFFICE OF PUBLIC UTILITY COUNSEL 1701 N. Congress Ave., Suite 9-180 Austin, TX 78701-	ANALYZED REASONABLENESS OF EL PASO ELECTRIC COMPANY'S POWER PURCHASES. Feb 05 - Mar 06. Reviewed and filed testimony regarding reasonableness of three	
512-936-7500	contracts signed by El Paso Electric Company in 2001 for delivery of power in 2002.	
Mr. Clarence L. Johnson, Director, Regulatory Analysis (retired)	441.01) 02 po 110 2002.	
UTILITY CONSUMERS' ACTION NETWORK 3100 5 <sup>th</sup> Ave., Suite B San Diego, CA 92103 619-696-6966	ANALYZED SAN DIEGO GAS & ELECTRIC PROPOSAL TO DEVELOP NEW POWER PLANTS. Sep 03 – Sep 06.  Review, analyze, and testify on SDG&E's plan to purchase Palomar power plant, contract for power from Otay Mesa power plant, and make other transactions. (Joint effort with TURN.)	
Mr. Michael Shames, Executive Director		
PASADENA WATER AND POWER 150 S. Los Robles Ave., Suite 200 Pasadena, CA 91101	ESTIMATED HISTORIC GAS COSTS. Apr – May 03. Reviewed, analyzed, and provided testimony to Federal Energy Regulatory Commission regarding the gas costs facing Pasadena	
Contact Woodruff for reference.	Water and Power during the period from October 2000 to June 2001.	
NORTHERN CALIFRONIA POWER AGENCY 180 Cirby Way	CONFIDENTIAL PROJECT. Feb – Apr 03.	
Roseville, CA 95678 916-781-3636		
Mr. Don Dame, Assistant GM, Power Management		

4/11

#### **ADDENDUM 2**

#### to Resume of Kevin Woodruff

## EXPERIENCE RELATED TO ELECTRIC RESOURCE PLANNING AND ASSET VALUATION

#### Woodruff Expert Services

Sacramento, California November 2002 to present

- Analyze and provide expert testimony regarding cost-effectiveness of California Investor-Owned Utilities'
   (IOUs') specific proposals to contract for or acquire electric generating projects, both conventional and renewable.
- Analyzing alternatives for Entergy Arkansas, Inc. (EAI) to provide or procure electric system planning and operation services following its withdrawal from the Entergy System Agreement.
- Analyzing California's electric Resource Adequacy Requirement and electric IOUs' long-term electric resource plans and short-term procurement and risk mitigation plans.
- Analyze and provide comments procurement and risk mitigation strategies as part of each California IOU's Procurement Review Group.
- · Monitor development of estimates of renewable transmission and other integration costs in California.
- · Analyzing proposals to restructure Entergy's transmission planning processes.
- · Analyzing potential value of Algonquin Power Corporation's proposed Northern Maine Interconnect.
- Analyzed proposal of Avista to assign to Avista Utilities a Power Purchase Agreement (PPA) and related contracts related to the Lancaster (combined cycle) Generating Facility.
- Analyzed proposal of EAI and other owners to install scrubbers and low NOx burners at the coal-fired White Bluff Steam Electric Station.
- Led effort to assess value of San Diego Gas & Electric Company's proposed Sunrise Powerlink on behalf of Commission's Division of Ratepayer Advocates (DRA).
- Initiated analysis of cost-effectiveness of Maine Public Service and Central Maine Power Company's proposed Maine Power Connection transmission project.
- · Analyzed proposal of EAI to purchase the Ouachita (combined cycle power) Plant.
- Led effort to assess value of Southern California Edison's proposed Devers-Palo Verde No. 2 Transmission Line Project (DPV2) on behalf of DRA.
- Led analysis of proposals to build significant new generation and transmission resources made by the Nevada Power Company and Sierra Pacific Power Company in their 2006 Resource Plan filings.
- Analyzed and provided analysis regarding California state agencies' initiatives to develop consistent process for planning for and evaluating new transmission projects.

#### Henwood Energy Services, Inc.

Sacramento, California

April 1988 to November 2002

- · Modeled and analyzed long-term resource planning issues of California electric IOUs
- · Modeled and analyzed short-term operations of California electric IOUs
- · Prepared resource plan for municipal utility
- · Managed and assisted public power entity's power supply Request for Proposal (RFP) processes
- · Helped generation plant owners respond to California IOU and other RFPs for electric power
- Sold, conducted, and/or managed forecasts of power market operations and prices and related valuations of generating assets
- · Prepared analyses of IOU and municipal utility revenue requirements, stranded costs, and rate design
- Managed projects to develop and implement software for electric plant and system operations, electric system forecasting and planning, risk quantification, and asset valuation
- Sold and managed projects to develop and implement maintenance planning software for vertically-integrated utilities
- · Helped electric generators buy gas commodity and pipeline capacity rights
- Prepared and defended expert testimony on behalf of applicants and interveners in Commission proceedings in California and Montana

#### Sierra Energy and Risk Assessment

Sacramento / Roseville, California

May 1986 to April 1988 (full-time)

November 1985 to May 1986 (part-time)

· Assisted analysis for CPUC advocacy staff regarding SCE's proposed Devers-Palo Verde 2 transmission line.

9/10

## ATTACHMENT 2

SCE Response to TURN Data Request 2-4

## Southern California Edison 2010 LTPP R.10-05-006

#### DATA REQUEST SET TURN/IOU-SCE-002

To: TURN
Prepared by: J. Nelson

Title: Manager, Market Design & Analysis

**Dated:** 07/18/2011

#### **Question 04:**

Answer the following questions regarding the following statement in Exhibit No. SCE-3 of SCE's July 1 testimony: "the first CAISO new generation auction should select bids by the end of 2012 in order to ensure that this new generation would have sufficient time to come online" (8:11-13):

- a. Explain why SCE believes that bids should be selected by the end of 2012 to have sufficient time to come on-line, including SCE's expected timing of possible need and the time required to develop new resources.
- b. Describe the CAISO process(es), including monthly schedule(s), that would result in such bids being selected by the end of 2012.
- c. State whether SCE expects that any process(es) intended to result in bids being selected by the end of 2012 will identify "new generation…needed for local capacity requirements" (6:8-9).
- d. State whether SCE expects that any process(es) intended to result in bids being selected by the end of 2012 will identify "new generation…needed for… renewable integration" (6:8-9).
- e. State whether SCE expects that any process(es) intended to result in bids being selected by the end of 2012 will identify "additional resource attribute needs, such as location, timing, technology and ramp rates, that would be met through the procurement of new generation" (6:15-17).

#### **Response to Question 04:**

a. Explain why SCE believes that bids should be selected by the end of 2012 to have sufficient time to come on-line, including SCE's expected timing of possible need and the time required to develop new resources.

The IOU Common Scenarios presented in the Track 1 Joint IOU Supporting Testimony (Exhibit IOU-1) indicate that under certain conditions there may be a need by 2020 for additional resources to meet load and ancillary service requirements associated with a 33% RPS target. However, as stated in IOU-1, this need varies widely among the scenarios and the IOUs intend to work with the CAISO to continue evaluating the long-term need associated with the integration of renewable resources. Should this additional work, expected to be completed during 2012, result in a finding that additional resources are needed by 2020, procurement of these resources should begin immediately. Per SCE's Track III testimony (Exhibit SCE-3), expert estimates

indicate it could take as long as seven years from planning to operation to complete new generation. Thus, to guarantee that a new resource will be on-line by 2020, bids must be awarded seven years prior, which is the start of 2013 (end of 2012).

b. Describe the CAISO process(es), including monthly schedule(s), that would result in such bids being selected by the end of 2012.

The CAISO would have to develop the schedule. But in general, based on other CAISO initiatives, we anticipate it would take at least 6 months and possibly a year of stakeholder process to develop CAISO proposals. It would take an additional 2 months for FERC approval, assuming no meaningful opposition.

c. State whether SCE expects that any process(es) intended to result in bids being selected by the end of 2012 will identify "new generation…needed for local capacity requirements" (6:8-9).

Yes. Per the proposal, the CAISO will determine if such needs exist.

d. State whether SCE expects that any process(es) intended to result in bids being selected by the end of 2012 will identify "new generation…needed for… renewable integration" (6:8-9).

Yes. Per the proposal, the CAISO will determine if such needs exist.

e. State whether SCE expects that any process(es) intended to result in bids being selected by the end of 2012 will identify "additional resource attribute needs, such as location, timing, technology and ramp rates, that would be met through the procurement of new generation" (6:15-17).

Yes. Per the proposal, the CAISO will determine if such needs exist.

## ATTACHMENT 3

SCE Response to TURN Data Request 2-3

## Southern California Edison 2010 LTPP R.10-05-006

#### DATA REQUEST SET TURN/IOU-SCE-002

To: TURN
Prepared by: J. Nelson

Title: Manager, Market Design & Analysis

**Dated:** 07/18/2011

#### **Question 03:**

Describe the "meaningful role" the CPUC would play in the "new generation auction" SCE is proposing that the CAISO operate in Exhibit No. SCE-3 of SCE's July 1 testimony on Track I Issues (pp. 5-8, esp. 6:12-13).

## **Response to Question 03:**

The CPUC's role would include the following:

- Establish a new proceeding to address issues specifically related to the "new generation auction."
- · Continue to advance California energy goals such as the role of renewable resources, distributed generation, Local Energy Resource (LERs), and preferred loading order policy.
- · Given a CAISO determination of total system needs, determine the CPUC-jurisdictional share of the system need in conjunction with the CAISO.
- · Approve a "shortlist" of contracts corresponding to the CPUC-jurisdictional share of system need.
- · IOUs can submit bids to the auction. The CPUC could have a role in this IOU process.

Details of the CPUC's role, as well as new gen auction proposal, would need to be considered in a separate CPUC proceeding as recommended by SCE in the same testimony in Exhibit SCE-3.