## 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 –

## HENWOOD ENERGY SERVICES, INC.

(aka Ventyx and acquired by ABB May 2010, previously aka Global Energy Decisions)
April 1988 – 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.

## 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)

## SIERRA ENERGY AND RISK ASSESSMENT

May 1986 – April 1988 November 1985 – May 1986 (part-time)

# LECTURER IN MANAGEMENT

Taught upper division courses in Finance.

# 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

#### ADDENDUM 1

## to Resume of Kevin Woodruff

# **EXPERIENCE WITH WOODRUFF EXPERT SERVICES**

## **CLIENT**

#### THE UTILITY REFORM NETWORK

115 Sansome Street, Suite 900 San Francisco, CA 94104 415-929-8876

Mr. Bob Finkelstein, Legal Director Mr. Matt Freedman, Staff Attorney

# OFFICE OF THE ARKANSAS ATTORNEY GENERAL, CONSUMER UTILITIES RATE ADVOCACY DIVISION

323 Center Street, Suite 200 Little Rock, AR 72201 501-682-1321

Mr. M. Shawn McMurray, Senior Assistant Attorney General Mr. Emon Mahony, Assistant Attorney General

## **PROJECTS**

# 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 and/or take ownership of specific power plants, both conventional and renewable.

# 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, the integration of renewable resources and transmission planning.

# ANALYZING UTILITY PROPOSAL TO ALLOCATE "WHOLESALE BASELOAD" RESOURCES TO CUSTOMERS. Jul 12 – present.

Analyzing Entergy Arkansas, Inc. (EAI) proposal to allocate certain nuclear and coal resources now allocated to EAI's wholesale portfolio back to EAI jurisdictional customers. (APSC Docket No. 12-038-U)

# ANALYZING PROPOSAL TO INSTALL ENVIRONMENTAL CONTROLS ON COAL POWER PLANT. Mar 12 – present.

Analyzing proposal of Southwestern Electric Power Company and other owner to install environmental controls at the coal-fired Flint Creek Power Plant. (APSC Docket No. 12-008-U)

# ANALYZING ENTERGY ARKANSAS, INC. FUTURE SYSTEM PLANNING AND OPERATION OPTIONS. Jun 10 – present.

Analyzing alternatives for 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)

# ANALYZED TRANSMISSION PLANNING ISSUES. Feb 09 – Aug 09.

Analyzed 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)

CLIENT	PROJECTS
ARKANSAS ATTORNEY GENERAL (continued)	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)
	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)
ATTORNEY GENERAL OF WASHINGTON, PUBLIC COUNSEL SECTION 800 5 <sup>th</sup> Street, Suite 2000 Seattle, WA 98104-3188 206-389-3055	ANALYZING UTILITY CONTRACT FOR PURCHASE OF "COAL TRANSITION POWER". Sep 12 – present.  Analyzing Puget Sound Energy (PSE) proposal for "Coal Transition Power Purchase Agreement" (PPA) for output of TransAlta's Centralia coal plant. (WUTC Docket No. 121373)
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 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. (WUTC Docket No. 090134)
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 transmission line.
Mr. Scott Logan, Regulatory Analyst	Aug 05 – Jan 07.  Led team of consultants analyzing cost-effectiveness of Southern California Edison's proposed Devers–Palo Verde No. 2  Transmission Line Project (DPV2).
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	ANALYZED PROPOSED TRANSMISSION LINE. Aug 10  – Sep 10.  Performed review of feasibility and cost-effectiveness of Algonquin Power Corporation's proposed Northern Maine Interconnect.
MAINE PUBLIC UTILITIES COMMISSION 242 State Street, State House Station 18 Augusta, ME 04333 207-287-1394  Mr. Chuck Cohen, Hearing Examiner	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.

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.
Mr. Eric Witkoski, Chief Deputy Attorney General	Jun 06 – Nov 06.  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- 512-936-7500  Mr. Clarence L. Johnson, Director, Regulatory Analysis (retired)	ANALYZED REASONABLENESS OF EL PASO ELECTRIC COMPANY'S POWER PURCHASES. Feb 05 – Mar 06.  Reviewed and filed testimony regarding reasonableness of three contracts signed by El Paso Electric Company in 2001 for delivery of power in 2002.
UTILITY CONSUMERS' ACTION NETWORK 3100 5 <sup>th</sup> Ave., Suite B San Diego, CA 92103 619-696-6966  Mr. Michael Shames, Executive Director (former)	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.)
PASADENA WATER AND POWER 150 S. Los Robles Ave., Suite 200 Pasadena, CA 91101 Contact Woodruff for reference.	ESTIMATED HISTORIC GAS COSTS. Apr – May 03.  Reviewed, analyzed, and provided testimony to Federal Energy Regulatory Commission regarding the gas costs facing Pasadena Water and Power during the period from October 2000 to June 2001.
NORTHERN CALIFRONIA POWER AGENCY 180 Cirby Way Roseville, CA 95678 916-781-3636	CONFIDENTIAL PROJECT. Feb – Apr 03.
Mr. Thomas S.W. Lee, Mgr, Portfolio Planning	
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	ANALYZED NEED FOR PROPOSED GAS STORAGE PROJECT. Dec 10 – Jan 11.  Reviewed, analyzed and testified on need for proposed Sacramento Natural Gas Storage Project.
Mr. Stephen Goldberg, Attorney	

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#### **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 EAI proposal to allocate certain "wholesale baseload" resources to jurisdictional customers.
- Analyzing Puget Sound Energy proposal for "Coal Transition Power Purchase Agreement" (PPA) for output of TransAlta's Centralia coal plant.
- Analyzing proposal of Southwestern Electric Power Company and other owner to install environmental controls on coalfired Flint Creek Power Plant.
- 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.
- Analyzed proposals to restructure Entergy's transmission planning processes.
- Analyzed potential value of Algonquin Power Corporation's proposed Northern Maine Interconnect.
- Analyzed proposal of Avista to assign to Avista Utilities a 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.