



LEESA NAYUDU
Executive Consultant
13802 Kerry Ln
San Diego, CA 92130
Ph: (619) 780-4055
Cell: (206) 910-7529
Email: Leesa@JouleMega.com

ENERGY CONSULTING QUALIFICATIONS SUMMARY

ABOUT THE COMPANY:

Joule Megamorphosis Energy Consulting (“Consultant”) is a California sole proprietorship and independent energy consulting firm. The name is derived by combining (i) “joule,” an international unit of work or energy, (ii) “mega,” meaning one million, large or great, and (iii) “morphosis,” meaning change. Together, the name represents the great changes taking place in the energy industry, and my endeavor to help my clients manage many of these changes. The company is a WBENC¹ certified Woman-Owned and Small Business Enterprise and a California Department of General Services certified Small and Diverse Business Enterprise.

- Legal Name: Leesa Nayudu dba Joule Megamorphosis Energy Consulting
- Form of Business – California Sole Proprietorship
- EIN: 90-0858612
- San Diego Business License #B20160141777
- DUNS #078417322
- Woman-Owned Business Enterprise – WBENC Certification #WBE1700191
- Woman-Owned Small Business Enterprise – WBENC Certification #WOSB170133
- U.S. Small Business Administration – Self-Certified Small Business Enterprise
- California Department of General Services Small Business Certification ID #1745336

CONTACT INFORMATION:



¹ WBENC = Women’s Business Enterprise National Council, the nation’s largest third party certifier of businesses owned and operated by women in the US.





QUALIFICATIONS – EMPLOYMENT HISTORY:

DATES	COMPANY	LOCATION	POSITION(S)
Oct 2016 – Present	Joule Megamorphosis Energy Consulting	San Diego, CA	Owner / Executive Consultant
Mar 2013 – Oct 2016	Pasadena Water & Power	Pasadena, CA	Resource Planning Manager
Jul 2011 – Mar 2013	Leesa Nayudu Energy Consulting	San Diego, CA	Consultant
Sep 2010 – Jul 2011	Calpine Corporation	Dublin, CA	Director – Strategic Origination & Development
Sep 2001 – Sep 2010	Sempra Generation	San Diego, CA	Director – Origination / Origination Regional Director – West
Jan 2000 – Jun 2001	RW Beck, Inc.	Seattle, WA	Executive Consultant
Aug 1996 – Jan 2000	Illinova Energy Partners, Inc.	Seattle, WA	Director of Regional Marketing, Pacific Northwest
Jul 1994 – Aug 1996	Power Resource Managers, LLC	Bellevue, WA	Vice President of Marketing / Manager of Scheduling & Dispatch / Contract Administrator
Feb 1994 – Jul 1994	Merrill Schultz and Associates	Seattle, WA	Associate
Jan 1988 – Feb 1994	Seattle City Light	Seattle, WA	Power Analyst / Power Dispatcher / Assistant Power Dispatcher
Aug 1983 – Jan 1988	Deseret Generation & Transmission	Vernal, UT	Bonanza [Coal Fired] Generating Station: Control Room Operator / "A" Operator
Aug 1981 – Aug 1983	Colorado Ute Electric Association	Craig, CO	Craig [Coal Fired] Generating Station: Plant Equipment Operator / Utility Person



QUALIFICATIONS – EDUCATION/DEGREES

- Executive Masters of Business Administration (MBA) – University of Washington, Seattle, WA (2001)
- Bachelor of Science (BS) – Technology & Engineering Management – City University, Seattle, WA (1994)
- Commercial & Industrial Electricity Certificate – Colorado Mountain College, Steamboat Springs, CO (1981)
- General Studies – Angelo State University, San Angelo, TX (1978)

QUALIFICATIONS – EXAMPLES OF EXPERIENCE, SKILLS AND CHARACTERISTICS:

ELECTRIC UTILITY INDUSTRY KNOWLEDGE AND EXPERIENCE

Leesa Nayudu has been actively involved in the electric power industry for over 35 years. She was previously the Resource Planning Manager at Pasadena Water and Power, where she was responsible for the group developing and implementing the City's integrated resource plan, and procuring long-term resources. Her experience includes but is not limited to: renewable energy projects and contracts; power plant operations; power dispatch and reliability; power marketing; power contract origination, negotiation, and administration; power management; resource planning and analytics; transmission; and CAISO operations. This experience was gained throughout California, the desert Southwest, the Pacific Northwest, and Rocky Mountain regions. Ms. Nayudu's current and target clients include several independent power and transmission project developers and electric utilities.

CAISO AND OTHER BALANCING AUTHORITY PARTICIPATION

Ms. Nayudu has been actively involved in the CAISO markets since 2001, as an employee of Sempra Generation, Calpine, Pasadena Water & Power, and as a consultant. She is very familiar with the CAISO tariff, transmission and market operations, various contracts, business practices and regulations. Her transactional experience also spans virtually every balancing authority in the WECC, including the Pacific Northwest and western Canada, California, Desert Southwest and Mexico, and Rocky Mountain regions.

NEGOTIATING, COORDINATING AND ADMINISTERING CONTRACTUAL ARRANGEMENTS

Ms. Nayudu has been originating, evaluating, negotiating and managing power contracts for over 25 years. As a Director of Origination for approximately ten years, her duties included originating and structuring long-term capacity and energy transactions to hedge and optimize the output of independent power generation facilities, including a number of new renewable generation projects. Some examples of contracts she has been responsible for originating, negotiating, and/or administering are:



- Bonneville Power Administration (BPA) Power Sales Contracts among BPA, Pacific Northwest regional public utilities, investor-owned utilities and direct service industries. Ms. Nayudu represented Seattle City Light and several other public utilities that were clients of Power Resource Managers, including the members of the Pacific Northwest Generating Cooperative.
- Regional Load Curtailment and Share-the-Shortage Agreements among utilities in the Pacific Northwest. Ms. Nayudu represented Seattle City Light in these multi-party negotiations.
- Palomar Energy Project – Ms. Nayudu originated and was the lead negotiator for this turnkey contract between Sempra Generation to SDG&E to construct and transfer ownership of the 565 MW natural gas plant in Escondido, CA. The project achieved commercial operation in 2006 and was the first large-scale new power-generation facility to be built in San Diego County in three decades.
- El Dorado Solar – Ms. Nayudu originated, negotiated and administered the 20-year agreement between Sempra Generation and PG&E for construction and power sales from the 10 MW photovoltaic solar project located near Boulder City, NV. The project achieved commercial operation in 2008.
- Copper Mountain Solar – Phase I – Ms. Nayudu originated, negotiated and administered the 20-year agreement between Sempra Generation and PG&E for construction and power sales from the 58 MW photovoltaic solar project located near Boulder City, NV. The project achieved commercial operation in December of 2010.
- Copper Mountain Solar – Phase II – Ms. Nayudu originated and negotiated the 20-year agreement between Sempra Generation and PG&E for construction and power sales from the 150 MW photovoltaic solar project located near Boulder City, NV. The first 92 MW achieved commercial operation in late 2012, using existing interconnection capacity. The remaining 58 MW achieved commercial operation in 2015, when the interconnection capacity was expanded.
- Mesquite Solar I – Ms. Nayudu originated, negotiated and administered the 20-year agreement between Sempra Generation and PG&E for construction and power sales from the 150 MW photovoltaic solar project located at the Palo Verde hub in Arizona. The first 42 MW of the project achieved commercial operation in late 2011, with the final project completion in 2013.
- Energia Sierra Juarez Wind – Ms. Nayudu originated, and initially negotiated the 20-year agreement for the 155 MW wind project. The agreement was later terminated by Ms. Nayudu on behalf of Sempra Generation due to CPUC approval delays. Ms. Nayudu then originated and negotiated on behalf of Sempra Generation with SDG&E for construction and power sales from the wind project, which is located near Tecate, MX. The project achieved commercial operation in 2015.
- Kingbird Solar A – Ms. Nayudu negotiated and administered the 20-year agreement between Pasadena Water & Power and First Solar for construction and power sales from



- the 20 MW photovoltaic solar project located in Kern County, CA. The project achieved commercial operation in April of 2016.
- Antelope Big Sky Ranch and Summer Solar – Ms. Nayudu negotiated and administered, on behalf of Pasadena Water & Power, the agreements between SCPPA and Silverado for construction and power sales from the two 20 MW photovoltaic solar projects (40 MW total) located in the Antelope Valley of Southern CA. The projects achieved commercial operation in 2016.
 - Columbia Two and Clearwater Solar – Ms. Nayudu negotiated and administered, on behalf of Pasadena Water & Power, the agreements between SCPPA and Recurrent Energy for construction and power sales from these photovoltaic solar projects totaling 35 MW and located in the Antelope Valley of Southern CA. The 15 MW Columbia Two project was subsequently sold to Dominion and achieved commercial operation in December 2014. The 20 MW Clearwater project defaulted, and did not achieve commercial operation.
 - Boulder Canyon Project (Hoover Dam) Post 2017 Power Sales Agreement – Ms. Nayudu represented Pasadena Water & Power negotiating a 50-year renewal, starting in July 2017, of the large hydroelectric power sales contract among the Western Area Power Administration, US Bureau of Reclamation and 51 power purchasers.
 - Intermountain Power Project Second Amendatory Power Sales Contract and Post-2027 Renewal Agreement – Ms. Nayudu represented Pasadena Water & Power negotiating a material amendment allowing for repowering of the coal-fired project to natural gas, and a 20-year renewal, starting in 2027, of the power sales contract between the Intermountain Power Agency and over 30 power purchasers.

INTEGRATED RESOURCE PLANS

Ms. Nayudu has been involved in the development and/or review of utility integrated resource plans for approximately 20 years. Most recently, Ms. Nayudu was in charge of the development, public involvement, and approval process for Pasadena Water & Power's 2015 Integrated Resource Plan. She also participated in IRP related workshops at the California Energy Commission. She is well prepared to assist in the development of IRPs that comply with all regulatory requirements and industry best practices.

TRANSMISSION ASSETS

Ms. Nayudu has been involved in evaluating, applying for and negotiating transmission contracts throughout the western United States for over 20 years over systems that include the Bonneville Power Administration, CAISO, LADWP and others. She has represented owners and customers of jointly-owned transmission projects, including most recently the Pacific Direct Current Intertie (PDCI), the Mead-Adelanto and Mead-Phoenix transmission projects, and the Intermountain Power Southern and Northern Transmission Systems (STS and NTS). She is currently providing market assistance to the developer of a large multi-state transmission project in the southwestern U.S.



WORKING WITH SCPPA MEMBERSHIP AND STAFF COMMITTEES

As the Resource Planning Manager at Pasadena Water & Power for three and one-half years, Ms. Nayudu was actively involved with all of the Southern California Public Power Authority (SCPPA) members and was Pasadena Water & Power's representative, participating in several of the committees and workgroups. These included the Renewables Working Group, Resource Planning Working Group, Energy Storage Working Group, Transmission Users Working Group, Renewable Operating/Coordinating Working Group, Greenhouse Gas Working Group, Natural Gas Reserves Working Group, and as chair of the Regulatory Working Group.

FACILITATING PROJECT TEAMS

Ms. Nayudu has effectively participated, facilitated and managed multi-disciplinary and multi-party project teams, including for the development and/or evaluation of project proposals, development and public outreach of integrated resource plans, joint power and industry trade association committees, and regional issue working groups. For example:

- She played a leadership role in the WSPP as the Vice Chair of the Executive Committee, Chair of the Finance subcommittee, and as an active participant in the Operating and Executive Committees and Contracts Subcommittee.
- She led and coordinated the multi-disciplinary proposal development and negotiation efforts while at Sempra Generation.
- She managed the multi-disciplinary development of Pasadena Water & Power's 2015 Integrated Resource Plan including utility staff, consultants, stakeholders and City Council.
- She was Chair of the Southern California Public Power Authority (SCPPA) Regulatory Working Group, and an active participant in several other SCPPA working groups, including Renewables, Energy Storage, Resource Planning, Transmission, Renewable Operating/Coordinating, Greenhouse Gas, and Natural Gas Reserves.

POWER RESOURCE PROPOSALS

Ms. Nayudu has prepared and evaluated hundreds of resource proposals, considering project viability, portfolio fit and overall economics. With respect to project viability, she examines factors such as:

- Whether the proposal is from a new or existing project;
- Project size and technology;
- Company or development team experience in project development, financing, ownership and operations/maintenance;
- The technical feasibility and quality of resource data;
- Project development status/milestones, including site control, permitting, financing, interconnection, transmission, and reasonableness of proposed commercial operation date;



- Risk exposure and diversification in terms of number of contracts and volume with any particular supplier, fuel source, and project location/point of delivery;
- Credit and collateral, including counterparty credit rating, willingness to provide project development and delivery term security, willingness to pay liquidated damages for contract underperformance and/or failure, form and amount of proposed collateral;
- Resource flexibility and optionality, including dispatchability, curtailability, willingness to accept standard contract provisions, and purchase option(s);

When examining portfolio fit, Ms. Nayudu considers factors such as size and location of the resource, start date and term of the contract, net dependable capacity, production profile, and other resource characteristics relative to Buyer's need.

Finally, Ms. Nayudu examines overall economics by considering factors such as:

- the value of energy (production profile vs. expected market prices);
- the value of capacity attributes;
- the value of environmental attributes (if any);
- the cost of transmission, congestion and losses;
- the cost of any required ancillary services and reserves; and
- the cost of any anticipated integration service, including increased flexible capacity requirements resulting from the addition of the proposed resource.

FACILITATING DISCUSSIONS ON ENERGY PORTFOLIO, RENEWABLE ENERGY PROJECTS AND NATURAL GAS SUPPLY

Ms. Nayudu has facilitated and/or participated in many discussions on energy portfolio and renewable energy projects, including, most recently, at SCPA, and at Pasadena Water & Power with respect to resource planning and power management, including discussions with the members of the Pasadena City Council and Stakeholder Technical Advisory Group.

TECHNICAL SUPPORT FOR REGULATORY REPORTING SUBMITTALS

Ms. Nayudu is familiar with and has supported and/or supervised the submission of a number of regulatory compliance filings and reports, including most recently to local regulatory bodies, the CAISO, NERC, the California Energy Commission (CEC) and the California Public Utilities Commission (CPUC).

DEVELOPMENT OF ANALYSIS, REPORTS, GRAPHIC MATERIALS, AND PRESENTATIONS

Ms. Nayudu is skilled in performing detailed research and analysis and developing reports and presentations for management, customers, regulators, governing bodies and others.

ORAL AND WRITTEN COMMUNICATIONS SKILLS

Ms. Nayudu has demonstrated substantial oral and written communication skills through presentations, agenda reports, expert testimony and other documents prepared for and given to



senior management, boards, city councils, customers, stakeholders, the general public and regulators in several states.

PROFICIENCY WITH MICROSOFT OFFICE APPLICATIONS

Ms. Nayudu has demonstrated proficiency with Microsoft Office applications, including Word, Excel, PowerPoint, Outlook, One Note and Project. Ms. Nayudu is also proficient in the use of other software programs, such as Adobe Acrobat.

BUSINESS RELATIONSHIPS

Ms. Nayudu has developed extensive business relationships throughout all sectors of the energy industry, including over 1,000 LinkedIn connections.