

STATE OF CALIFORNIA

Energy Resources
Conservation and Development Commission

In the Matter of:

Application For Small Power Plant
Exemption for the
**GREAT OAKS SOUTH BACKUP
GENERATING FACILITY**

DOCKET NO. 20-SPPE-1

**DECLARATION OF MASOUD
ZAFARIPOUR**

I, Masoud Zafaripour, declare as follows:

1. I am presently employed as Construction Director with Equinix Operating Company.
2. A copy of my professional qualifications and experience is included with this Opening Testimony and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to all subjects for the Application for Small Power Plant Exemption for the Great Oaks South Backup Generating Facility (California Energy Commission Docket Number 20-SPPE-1).
4. It is my professional opinion that the attached prepared testimony is valid and accurate with respect to issues that it addresses.
5. I am personally familiar with the facts and conclusions related in the attached prepared testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury, under the laws of the State of California, that the foregoing is true and correct to the best of my knowledge and that this declaration was executed at San Jose, CA on August 9th, 2021.



Masoud Zafaripour

STATE OF CALIFORNIA

Energy Resources
Conservation and Development Commission

In the Matter of:

Application For Small Power Plant
Exemption for the
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GENERATING FACILITY**

DOCKET NO. 20-SPPE-1

**DECLARATION OF DAVID L.
SMITH**

I, David L. Smith, declare as follows:

1. I am presently employed as Director of Design with Equinix Operating Company.
2. A copy of my professional qualifications and experience is included with this Opening Testimony and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to all subjects for the Application for Small Power Plant Exemption for the Great Oaks South Backup Generating Facility (California Energy Commission Docket Number 20-SPPE-1).
4. It is my professional opinion that the attached prepared testimony is valid and accurate with respect to issues that it addresses.
5. I am personally familiar with the facts and conclusions related in the attached prepared testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury, under the laws of the State of California, that the foregoing is true and correct to the best of my knowledge and that this declaration was executed at Chicago, Illinois on August 11, 2021.



David L. Smith

STATE OF CALIFORNIA

Energy Resources
Conservation and Development Commission

In the Matter of:

Application For Small Power Plant
Exemption for the
**GREAT OAKS SOUTH BACKUP
GENERATING FACILITY**

DOCKET NO. 20-SPPE-1

**DECLARATION OF BRUCE
FRANDSEN**

I, Bruce Frandsen, declare as follows:

1. I am presently employed as Director Global Renewable Energy and Cleantech with Equinix.
2. A copy of my professional qualifications and experience is included with this Opening Testimony and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to all subjects for the Application for Small Power Plant Exemption for the Great Oaks South Backup Generating Facility (California Energy Commission Docket Number 20-SPPE-1).
4. It is my professional opinion that the attached prepared testimony is valid and accurate with respect to issues that it addresses.
5. I am personally familiar with the facts and conclusions related in the attached prepared testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury, under the laws of the State of California, that the foregoing is true and correct to the best of my knowledge and that this declaration was executed at Kalamazoo, MI on August 11, 2021.

Bruce Frandsen

Bruce Frandsen

STATE OF CALIFORNIA

Energy Resources
Conservation and Development Commission

In the Matter of:

Application For Small Power Plant
Exemption for the
**GREAT OAKS SOUTH BACKUP
GENERATING FACILITY**

DOCKET NO. 20-SPPE-1

**DECLARATION OF MICHAEL
LISENREE**

I, Michael Lisenbee, declare as follows:

1. I am presently employed as Senior Project Manager with David J. Powers & Associates.
2. A copy of my professional qualifications and experience is included with this Opening Testimony and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to all subjects for the Application for Small Power Plant Exemption for the Great Oaks South Backup Generating Facility (California Energy Commission Docket Number 20-SPPE-1).
4. It is my professional opinion that the attached prepared testimony is valid and accurate with respect to issues that it addresses.
5. I am personally familiar with the facts and conclusions related in the attached prepared testimony and if called as a witness could testify competently thereto.

I declare under penalty of perjury, under the laws of the State of California, that the foregoing is true and correct to the best of my knowledge and that this declaration was executed at San Jose, California on August 10, 2021.



Michael Lisenbee

**SV1, LLC
GREAT OAKS SOUTH BACKUP GENERATING FACILITY
ALL SUBJECTS
OPENING TESTIMONY**

I. Name: Masoud Zafaripour
David Smith
Bruce Frandsen
Michael Lisenbee

II. Purpose:

Our testimony addresses all technical subjects associated with the construction and operation of the Great Oaks South Backup Generating Facility (GOSBGF) as described in the Application For Small Power Plant Exemption (SPPE), CEC Docket 20-SPPE-1.

III. Qualifications:

Masoud Zafaripour: I am presently employed by Equinix Operating Company the Director of Construction and have been for the past 11 years. I have a Bachelor of Science Degree in Mechanical Engineering from Fairleigh Dickinson University and a Master's Degree in Electrical Engineering from Syracuse University. I have 28 years of experience developing industrial and critical infrastructure projects such as data centers. I am the Project Manager for the GOSBGF and the Great Oaks South Data Center (GOSDC). I caused to be prepared and reviewed the Application For SPPE, as well as the post-filing information, data responses, and supplemental filings.

David Smith: I am presently employed by Equinix Operating Company the Director of Design and have been for the past 3 years. I have a Bachelor of Science Degree in Engineering Technology from Old Dominion University. I am a Registered Professional Engineer in the District of Columbia, Maryland, Virginia, West Virginia and Pennsylvania. I have 35 years of experience developing industrial and critical infrastructure projects such as data centers. I am the Design Manager for the GOSBGF and the Great Oaks South Data Center (GOSDC). I reviewed and prepared portions of the Application For SPPE, as well as the post-filing information, data responses, and supplemental filings.

Bruce Frandsen: I am presently employed by Equinix Operating Company as Director Global Renewable Energy and Cleantech and have been for the past 6 years. I have a Bachelor of Science Degree in Mining Engineering from South Dakota Mines University. I have 37 years of experience of diversified leadership experience in renewable energy, energy risk management/procurement, sustainability, facilities engineering, and maintenance management fields. The past 6 years have been with Equinix overseeing their renewable energy and cleantech strategy. I reviewed and prepared portions of the post-filing information, data responses, and supplemental filings related to the Equinix Clean Energy Program and Alternative Measure to comply with the City of San Jose GHG Reduction Strategy.

Michael Lisenbee: I am presently employed as a Senior Project Manager at David J. Powers & Associates and have been for the past 15 years. I have a Bachelor's Degree in Environmental Studies from the University of California Santa Barbara and I have 15 years of experience in preparing and reviewing California Environmental Quality Act (CEQA) documents. I have been engaged by SV1, LLC to prepare the Application for SPPE for the GOSBGF and additional documents for docketing at the CEC. I managed the preparation of the Application for SPPE and reviewed and developed several related data responses.

Detailed descriptions of our qualifications are presented in the resume which is included in Attachment A to this Opening Testimony package.

To the best of our knowledge all referenced documents and all of the facts contained in this testimony are true and correct. To the extent this testimony contains opinions, such opinions are our own. We make these statements and provide these opinions freely and under oath for the purpose of constituting sworn testimony in this proceeding.

IV. Exhibits

In addition to this written testimony, we will be sponsoring the exhibits listed on SV1, LLC's Proposed Exhibit List which will be attached to its PreHearing Conference Statement.

V. Opinion and Conclusions

We have reviewed the Staff Proposed Final Environmental Impact Report (PFEIR) published by California Energy Commission (CEC) Staff on July 28, 2021 (TN 239063) and we agree with its findings, analysis and conclusions including the new and modified mitigation measures except for Staff Proposed Mitigation Measure MM GHG-1, which was proposed to ensure compliance with the City of San Jose (City) 2030 GHG Reduction Strategy. The City's GHG Reduction Strategy is a qualified Climate Action Plan pursuant to Section 15183.5 of the CEQA Guidelines, and the project's compliance ensures a less than significant impact.

Pursuant to the City's GHG Reduction Strategy Compliance Checklist, applicants may propose Alternative Measures to demonstrate compliance with the GHG Reduction Strategy. SV1 submitted an Alternative Measure to the City for review on July 30, 2021 and provided additional backup information on August 4, 2021. The complete package of information describing the Equinix Clean Energy Program as an Alternative Measure was docketed on August 6, 2021 (TN 239199) and will be identified as an Exhibit on SV1 LLC's Proposed Exhibit List.

SV1 requests the CEC find that the Equinix Clean Energy Program, as an Alternative Measure, ensures compliance with the intent and objectives of the City's 2030 GHG Reduction Strategy, specifically the "Renewable Energy Development" requirement. SV1 requests the City and the CEC additionally find that with the incorporation of the Alternative Measure into the GOSDC Project Description, MM GHG-1 proposed in the Final Environmental Impact Report (TN239063) is not necessary to ensure compliance with the City's 2030 GHG Reduction Strategy, nor required to mitigate any environmental impact.

ATTACHMENT A
EXPERT WITNESS RESUMES

Masoud Zafaripour, PE

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Los Gatos, CA 95032

(408) 594-9547

Email: mzafaripour@equinix.com

Profile

Broad and proven skills in Data Centers, Semiconductor, and office facility design systems - gained from 30+ years over a range of roles:

- **Project management/Construction management;** Successful completion of large and complex construction projects from inception to completion. Presently responsible for design and construction of a \$120M data center.
- **MEP Engineering:** Expertise gained over a range of roles and experience by leading engineering team and construction of facility systems for semiconductor manufacturing firms.
- **Corporate Facilities:** Proven management and skill in supporting acquisitions, construction, mobilization, and operation – performed for Intel consisting of several acquisitions and moves.
- Project manager for design/construction of several mission critical data centers/upgrades in range of \$30M-\$150M. Directly responsible for success and overall performance of the work scope.
- Facility manager for large data centers with 24x7x365 days operation with zero customer impact.
- Project manager for several major office consolidation and new office building/labs in range of \$10M.

Professional Experience

Equinix Operating Company, Santa Clara, CA 2010 – Present

Director – Construction

- Successfully managed and completed a \$140M new 2 story building with potential IT load of 4800MW (phase 1) in 2021.
- Managed a \$50M and \$30M fit-out of 5 story building (1st and 2nd phase).
- Successfully drove the design and construction of a 15MW, \$110M data center under budget and on schedule.
- Oversaw construction of a 14MW data center at a cost of \$80M. Overcame schedule, field complexities resulted due to redesign of structural and control system during the GC award.
- Responsible to manage Projects from inception to completion including scope development, estimate, funding approval, design, and construction.

Intel Corporation, Santa Clara, CA 2000 – 2010

Senior Project Manager

- Yearly managed large number of projects totaling \$5M-\$20M under budget and schedule.
- Completed consolidation/relocation projects in range of \$9M-\$12M including brand new building, new offices, labs, and data center space receiving customer recognition on time and budget.
- Successfully completed a site major electrical PM for 12KV/480V distribution systems with a cost of >2M on time and re-energized with zero issue.
- Successfully executed a \$10M data center upgrade including developing a paralleling load transfer sequence to transfer load from existing UPS (2400KW) system to new UPS system without any shutdown of the data center.

Grubb & Ellis Corporation, Poughkeepsie, NY 1993 - 2000

Facility Manager

- Successfully established a new customer account including staffing, operating procedures, training, SPF, operating budget to completely manage a mission critical 25,000 SF Data Center, 7x24x365 days for a new Semiconductor client in CA. Established additional \$200K of new business with outside client.

Masoud Zafaripour, PE

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- Identified optimum solutions to harden and improve facility systems in working closely with customer.
- Was responsible for environmental compliance, facility systems, and safety programs and systems improvements for a 4MSF manufacturing and development site.
- Evaluated proposals, reviewed design/shop drawings and negotiated contracts.

IBM Corporation, Poughkeepsie, NY 1982-1993

Plant Engineer

- Executed design/construction of office, lab HVAC, chilled water system, compressed air, steam piping and instrumentation/controls system for a 4MSF manufacturing site. Developed technical specifications for projects, performed design calculations, selected vendors, and coordinated work within plant.
- Successfully managed a \$15M industrial waste treatment upgrade to increase the plant capacity, accounting for manufacturing long-term needs and bringing the plant into regulatory compliance.
- Executed \$8M site wide control system upgrade for utility system to centralize plant operation and improve reliability and efficiency.
- Renovated 45000SF of office and lab space (\$3M), meeting aggressive schedule and budget.
- Oversaw \$6M design/construction of a carbon adsorption facility in support of manufacturing tools meeting schedule and budget goals.

Education

MS Electrical Engineering, Syracuse University, 1995

BS Mechanical Engineering, Fairleigh Dickinson University, 1981



David L. Smith, PE

Design Director at Equinix

Heathsville, Virginia, United States ·



Equinix



Old Dominion University

About

Highly technical engineer and manager with executive experience in consulting engineering and IT management arenas. Experience includes roles in all aspects of design, installation, operation and commissioning of commercial building systems, with an emphasis on mission critical facilities. Working knowledge of enterprise network and computing systems in data center management role.

Specialties: Registered Professional Engineer in DC, Maryland, Virginia, West Virginia and Pennsylvania

Experience



Equinix

12 yrs 1 mo

Design Director

Full-time

Jun 2018 – Present · 3 yrs 3 mos

Senior Mechanical Engineer

Sep 2009 – Jun 2018 · 8 yrs 10 mos



Manager, Data Center Facilities

Fannie Mae

Apr 2004 – Aug 2009 · 5 yrs 5 mos

Manage data center facility

Vice President of Engineering

Ai

Sep 1995 – Apr 2004 · 8 yrs 8 mos

Vice President and Director of Engineering. Served in a technical engineering leadership, and business development and client management role in multi-disciplined architectural, interior and engineering design firm.

Associate, Mechanical Engineer

Einhorn, Yaffee, Prescott, PC

Sep 1993 – Aug 1995 · 2 yrs

Washington, DC

Mechanical design leader for commercial, institutional and technology projects

Education



Old Dominion University

BS, Engineering Technology

1984 – 1986

Activities and Societies: Tau Alpha Pi - Engineering Technology Honor Society, Graduated Summa Cum Laude

Hagerstown Community College

AA, Engineering Technology

1982 – 1984

Bruce Frandsen

5953 Texas Drive, Kalamazoo, MI 49009
Home: 269-544-0328 - Cell: 269-720-2814 - bafrandsen@gmail.com

Executive Summary

Accomplished management/technical professional with 37 years of diversified experience in energy supply & sustainability; facilities engineering; and maintenance management functions. Extensive knowledge of global energy markets with focus on renewable energy and a proven track record of strong leadership and relationship-building skills.

Core Qualifications

- Expert on global renewable energy strategy implementation
 - Global energy markets and regulatory tariffs
 - Contract review and negotiation
 - Budgeting and forecasting
 - Equipment procurement/purchasing
 - Facilities infrastructure, HVAC, TAC Controls, energy management systems
 - Excellent written and verbal communication skills
 - Strategic and creative thinker
-

Selected Career Accomplishments

Global renewable energy and sustainability expertise

At Equinix:

- Head up global renewable energy and cleantech strategy for 230 sites across 26 countries.
- Oversee implementation of global strategy to achieve 100% renewable energy by 2025 and carbon neutral by 2030 goals. Activities include:
 - Originate Power Purchase Agreements (PPA's) component (market assessment; financial modeling; agreement negotiation; operational and financial monitoring of completed projects, etc).
 - Procurement of all required unbundled Renewable Energy Attributes (REC's, IREC's, JREC's GoO's, etc.)
 - Prepare annual budget for financial performance of portfolio and monitor spend throughout the year.
 - Investigate, research, and analyze cleantech opportunities as part of global strategy portfolio.
 - Monitor regulated utility tariffs for changes/opportunities that impact renewable energy.
- Work in conjunction with the sustainability program for GHG reporting and communication/PR.
- Provide regular updates to C-Suite/upper management on status of renewable energy/cleantech strategy.
- Interface with other energy teams to assure the renewable energy strategy fits with overall energy procurement/risk management work.

At Schneider Electric:

- Manage portfolio of global clients with annual energy spend in excess of \$500 million across more than 500 sites.
- Indirect/dotted line managerial reporting responsibility for 6 employees.
- Collaborate with cross functional teams to bring seamless delivery of all contracted services to each client consistently achieving ratings of 8.5 - 8.8 out of 10 on annual client satisfaction surveys. Services include:
 - Conduct electric supply RFP's, recommend supplier, negotiate contracts & ensure contract compliance.
 - Monitor energy use & spend and follow up on variances from expected.
 - Develop annual budgets for all global sites.
 - Audit all energy invoices for accuracy and compliance with contracts.
 - Monitor regulated utility tariffs for changes/opportunities that impact client's sties.
- Direct the delivery of sustainability services ranging from GHG reporting to full strategy development and implementation across global footprints.
- Apply methodical problem-solving skills to bring about creative/value added solutions that fit client's needs.
- Explore and implement added value services in multiple categories including: demand response, energy efficiency, bill payment services, etc.

At Perrigo Company:

- Oversaw annual operations/energy budgets of over \$20 million.
- Direct reporting responsibility for up to 11 engineers; 7 maintenance technicians; and 4 shift supervisors; and indirect reporting responsibility for 70 maintenance department technicians.
- Facilitated the development and execution of \$15 - \$30 million annual capital expense budget for new construction, renovation, and equipment projects.
- Collaborated with state regulatory agencies and legislative interest groups related to enacting energy regulations/laws.

Work History

Director Global Renewable Energy & Cleantech

February 2015 to Present

Schneider Electric - Kalamazoo, MI

Client Manager - Energy & Sustainability Services

January 2002 to February 2015

Schneider Electric - Kalamazoo, MI

Facilities Engineering and Maintenance Manager

November 1984 to January 2002

Perrigo Company - Allegan, MI

Education

Bachelor of Science: Mining Engineering, 1982

South Dakota Mines University - Rapid City, SD

Affiliations

Member of Toastmasters International for 28 years. Served in multiple leadership roles including on Board of Directors from 1995-97.

Michael Lisenbee

Senior Project Manager

Office: (408) 248-3500 x101
Direct: (408) 454-3401
Email: Mlisenbee@davidjpowers.com



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San José, CA 95126
www.davidjpowers.com



Michael Lisenbee is a Senior Project Manager and has been with the company for over 13 years. His experience includes numerous projects involving residential, commercial, and industrial development, public facilities and parks projects, and infrastructure projects such as bridge retrofitting, sanitary sewers, and storm drain lines. He also specializes in data center projects processed by local Lead Agencies and the California Energy Commission.

As a Senior Project Manager, Mr. Lisenbee:

- Prepares environmental documents including: Environmental Impact Reports (EIRs), Initial Studies, Environmental Assessments, Constraints Analyses, Categorical Exclusions/ Exemptions, and Mitigation Monitoring and Reporting Programs in conformance with requirements of CEQA and NEPA.
- Performs research, provides detailed analysis of potential environmental impacts, identifies mitigation measures, and prepares Mitigation Monitoring Plans.
- Coordinates with applicants, subconsultants, and local planning staffs in processing environmental documents.

Education

B.A. Environmental Studies
University of California, Santa Barbara, 2006

Experience

Senior Project Manager
David J. Powers & Associates,
2006 - Present

Professional Organizations

Association of Environmental Professionals

Relevant Project Experience

- WBGF SPPE Application (CEC)
- MCBGF SPPE Application (CEC)
- CoreSite Coronado Drive Data Centers and Substation (Santa Clara)
- SC-1 Data Center (Santa Clara)
- Terremark/Verizon Corvin Drive Data Centers (Santa Clara)
- Equinix Data Centers (San Jose)
- China Mobile Data Center (San Jose)