

DOCKETED

Docket Number:	19-SPPE-02
Project Title:	Walsh Data Center
TN #:	232680
Document Title:	651 WL LLC's Opening Testimony Package - WBGF
Description:	N/A
Filer:	Scott Galati
Organization:	DayZenLLC
Submitter Role:	Applicant Representative
Submission Date:	4/6/2020 4:18:43 PM
Docketed Date:	4/6/2020

STATE OF CALIFORNIA

Energy Resources
Conservation and Development Commission

In the Matter of:

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

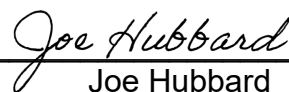
DOCKET NO. 19-SPPE-2

**DECLARATION OF JOE
HUBBARD**

I, Joe Hubbard, declare as follows:

1. I am presently employed as with Senior Director, Design-Central & West Regions with Digital Realty.
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 Walsh Backup Generating Facility (California Energy Commission Docket Number 19-SPPE-2).
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 Dallas, Texas on April 6, 2020.


Joe Hubbard

STATE OF CALIFORNIA

Energy Resources
Conservation and Development Commission

In the Matter of:

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

DOCKET NO. 19-SPPE-2

**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 Walsh Backup Generating Facility (California Energy Commission Docket Number 19-SPPE-2).
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 April 6, 2020.



Michael Lisenbee

STATE OF CALIFORNIA

Energy Resources
Conservation and Development Commission

In the Matter of:

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

DOCKET NO. 19-SPPE-2

**DECLARATION OF GREGORY
DARVIN**

I, Gregory Darvin, declare as follows:

1. I am presently the owner of Atmospheric Dynamics, Inc.
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 Air Quality for the Application for Small Power Plant Exemption for the Walsh Backup Generating Facility (California Energy Commission Docket Number 19-SPPE-2).
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 Carmel, California on April 6, 2020.



Gregory Darvin

**651 Walsh Partners, LLC
WALSH BACKUP GENERATING FACILITY
ALL SUBJECTS
OPENING TESTIMONY**

I. Name: Joe Hubbard
Michael Lisenbee
Gregory Darwin

II. Purpose:
Our testimony addresses all technical subjects associated with the construction and operation of the Walsh Backup Generating Facility (WBGF) as described in the Application For Small Power Plant Exemption (SPPE), CEC Docket 19-SPPE-2.

III. Qualifications:

Joe Hubbard: I am presently employed as Senior Director, Design-Central & West Regions with Digital Realty, the managing partner of the 651 Walsh Partners, LLC (WP). I have been employed by Digital Realty for the past 8 years. I have a Bachelor of Arts Degree in Biology from Carson Newman University, and I have 26 years of experience developing critical infrastructure projects such as data centers.

I am the Project Manager for the WBGF and the Walsh Data Center. I caused to be prepared and reviewed the Application For SPPE, as well as the post-filing information, data responses, and supplemental filings.

Michael Lisenbee: I am presently employed as a Senior Project Manager at David J. Powers & Associates and have been for the past 13 years. I have a Bachelor's Degree in Environmental Studies from the University of California Santa Barbara and I have 13 years of experience in preparing and reviewing California Environmental Quality Act (CEQA) documents.

I have been engaged by WP to prepare the Application for SPPE for the WBGF 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.

Gregory Darwin: I am presently employed at Atmospheric Dynamics and have been for the past 19 years. I have a Graduate Degree in Atmospheric Science and I have 32 years of experience in air quality meteorology, dispersion model development and application, and air quality consulting.

I prepared the Air Quality section of the Application For SPPE, as well as the post-filing information, data responses, and supplemental filings.

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 WP's Proposed Exhibit List which will be attached to its PreHearing Conference Statement.

V. Opinion and Conclusions

We have reviewed the Initial Study/Mitigated Negative Declaration published by CEC Staff on February 18, 2020 (TN 232078) and we agree with its findings, analysis and conclusions including the new and modified mitigation measures.

We also agree with Staff's Responses to Comments on the Initial Study/Mitigated Negative Declaration docketed on April 1, 2020 (TN 232611). However, we have additional testimony related to Staff's response to BAAQMD Comment 1 and Comment 2.

BAAQMD Comment 1 – GHG Emissions

Mr. Lisenbee provides the additional testimony to supplement Staff's Response to Comment BAAQMD-1 pertaining to GHG emissions.

Evaluating the project's emissions in 2050 with any specificity would be highly speculative due to uncertainties in the future regulatory environment and the rapidly evolving nature of data center equipment and operations. Neither the State's CEQA Guidelines nor BAAQMD's CEQA Guidelines require that a project's emissions be compared to 2050 statewide targets, or that a project show at the time of approval it will meet those targets 30 years into the future. As stated in the May 2017 BAAQMD CEQA Guidelines (Page D-4), "...the 2020 timeframe is examined in this threshold evaluation because doing so for the 2050 timeframe (with respect to population, employment, and GHG emissions projections) would be too speculative. Advances in technology and policy decisions at the state level will be needed to meet the aggressive 2050 goals. It is beyond the scope of the analysis tools available at this time to examine reasonable emissions reductions that can be achieved through CEQA analysis in the year 2050." Instead of evaluating the project's emissions in 2050, it is more appropriate to qualitatively discuss the project's consistency with existing local, regional, and statewide efforts to meet interim GHG targets as part of an overall strategy to achieve the 2050 reduction goal along a trajectory of continual emissions reduction. The project's consistency with relevant plans and policies adopted as part of an overall effort to meet the State's long term goals is included on pages 5.8-11 through 5.8-16 of the Initial Study.

Further, BAAQMD adopted its most recent Clean Air Plan in 2017. As stated in the Clean Air Plan (Page D-24), "Consistent with the GHG reduction targets adopted by the state of California, the plan lays the groundwork for a long term effort to reduce Bay Area GHG emissions 40 percent below 1990 levels by 2030 and 80 percent below 1990 levels by 2050." In other words, the Clean Air Plan is intended to outline BAAQMD's strategy for conforming with the State's long term GHG reduction policies. The project's consistency with the Clean Air Plan is discussed on page 5.8-14 of the Initial Study. By evaluating the project's consistency with the Clean Air Plan, the project's consistency with the State's long term GHG emission goals was also analyzed, since the Clean Air Plan represents BAAQMD's own plan for conformance with those goals.

Additionally, as discussed throughout the Initial Study, Silicon Valley Power would be required to adhere to SB 100, which requires 100 percent of total retail sales of electricity in California to come from eligible

renewable energy resources and zero-carbon resources by 2045. As shown on page 5.8-11 of the Initial Study, greater than 99% of the project's GHG emissions are related to consumption of electricity provided by Silicon Valley Power. As a result, by 2045 the project's GHG emissions would be less than 1% of the currently estimated emissions upon project approval, putting the project on track to meet the State's long term goals discussed in the comment.

BAAQMD Comment 3 - Cumulative Health Risk San Jose Airport Operations

Mr. Darvin provides the additional testimony to supplement Staff's Response to Comment BAAQMD-3 pertaining to Health Risk Assessment.

If you look at the cumulative operational impacts for toxics from the operations at the airport, the cumulative analysis has the total risk at 38 in a million and includes all background stationary sources, roads, highways, railways etc. that the BAAQMD requires for cumulative assessments. The maximum location is just west-southwest of the end of the southern edge of the runway. The Walsh project risk impact measured as cancer risk at that location is 0.017 in a million. Thus, the total combined project risk would be 38.017 in a million risk, which is well below the BAAQMD 100 in a million cumulative risk significance level.

As an additional step, adding the Walsh maximum risk impact location (PMI) to the maximum airport risk impact location of 38 in a million (which is now based on two separate and distinct locations), the resulting total risk of 48 in a million is still well below the 100 in a million threshold.

This clearly demonstrates that when both of these projects are combined using the worst case assumption that, the maximum location from one project is added to the maximum location of the other project, the total cancer risk levels are still insignificant and are well below the BAAQMD cumulative risk significance level.

ATTACHMENT A
EXPERT WITNESS RESUMES

JOSEPH HUBBARD

3803 VZ CR 2301, Canton, TX 75103 · (214)697-3133

lazyh@live.com

Dedicated and knowledgeable professional with vast experience in design management of mission critical facilities. Successful 26-year career as a talented and well-regarded project manager experienced in using technical and creative knowledge to complete projects to meeting industry demands.

EXPERIENCE

07/2010 – PRESENT

SENIOR DIRECTOR - DESIGN, DIGITAL REALTY TRUST

Responsible for all designs related to mission critical facilities in the central and western U.S.

03/2008 – 06/2012

OFFICE LEAD/PROJECT MANAGER, EXP US SERVICES

Office manager and lead project manager for engineering firm specializing in mission critical facilities.

03/1994 – 04/2008

SENIOR PROJECT MANAGER, VERIZON

Responsible for design and construction of new mission critical facilities across the U.S.

EDUCATION

DECEMBER 1992

EAST TENNESSEE STATE UNIVERSITY

Post graduate courses in bioengineering. No degree conferred.

DECEMBER 1990

BACHELOR OF ARTS, CARSON NEWMAN UNIVERSITY

SKILLS

- Skilled project manager
- Proficient in managing multiple projects
- Some bi-lingual skills in Spanish
- Familiar with working in all parts of the U.S.
- Proficient in MS Excel, Bluebeam, MS Project, PowerPoint

Michael Lisenbee

Senior Project Manager

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



1871 The Alameda, Suite 200
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)

GREGORY S. DARVIN
Meteorologist

Summary of Experience

Mr. Darvin has specialized in the meteorological aspects of air quality issues for the last 29 years. He has extensive experience in air quality management, dispersion modeling, meteorological modeling, greenhouse gas emission inventories, monitoring, major source permitting, complex terrain model development and implementation, emission inventory and health risk assessments. His experience spans more than 25 different states and several countries.

He has been actively involved with many of the proposed power plants in California requiring a CEC license along with PSD permits for many large-scale solid fuel and gaseous fuel projects across the United States. Mr. Darvin has performed the following in support of AFC and PSD applications for utilities: baseline air quality and air quality modeling analyses (including preparation and negotiation of specialized modeling techniques), prepared the PSD and air permit regulatory applicability analyses, managed the preparation of the air quality emissions inventories and impacts sections, and preparation of Best Available Control Technology (BACT) evaluations.

Specific project experience includes emissions calculations, modeling of impacts, evaluation of regulatory applicability and compliance, New Source Review (NSR) and Prevention of Significant Deterioration (PSD) permitting, and minor source permitting. He has used and is thoroughly familiar with a number of air quality models, including AERMOD, ISC3, CALPUFF, CALMET, COMPLEX I AND II, IGM, FDM, RTDM, CTSCREEN, CTDMPPLUS, UAM, DEGADIS, SPILLS, VISCREEN, PLUVUEII, MESOPUFF, INPUFF, BLP, PAL, CAMEO, CALINE4, OCD5, RAM, TRACE, MM5, SLAB, and the Paris Airshed Model. These models have been used in scientific and development settings as well as in regulatory settings.

Education

M.S. Atmospheric Science, San Francisco State University, 1993

B.A. Physical Geography/Meteorology, University of California, Santa Barbara, 1985.

Select Project Experience

Double D Mining Project, Blythe, California. Air Quality and Public Health lead for a revised surface mining permit and negative declaration preparation for a 611-acre Gypsum mine. The project was evaluated under the applicable Mojave Desert Air Quality Management District CEQA guidelines. Both construction and operational impacts to air quality and public health were evaluated. GHG inventories were also developed. Mitigation plans were created which was used to minimize emissions of particulates which could have triggered the EIR process.



Select Project Experience (continued)

Holbrook Basin Project, American West Potash, Arizona. Project manager for preparing the air quality permit and air sections of the EIS for a 1,200-acre potash mine in Apache County, Arizona. The project included both underground and surface mining impact assessments along with assessing the potential for Class I significance criteria. Emission inventories, control technology assessments and dispersion modeling were performed.

Prevention of Significant Deterioration (PSD) Permit Modification, Kettle Falls Generating Station, Avista Corporation, Kettle Falls Washington. Prepared a PSD application for modification to the Kettle Falls Generating Station, a wood-waste fired generating facility to address emission increases resulting from a capacity increase modification at the facility. Air quality modeling analyses were required to assess compliance with ambient air quality standards and PSD increments. A toxic air pollutant evaluation was also prepared.

PSD Permitting for the Biogen Power I Facility, Nipton, California. Provided regulatory assistance and preparation of the waste fuel study for the existing power plant in order to permit the use of hazardous wastes in the fluid-bed boiler. Also prepared the application to have PSD applicability rescinded for the refuse coal power plant facility.

PSD Permitting and EIS For 2000-MW Coal-Fired Power Plant, Sierra Pacific Resources, Nevada. Managed the preparation of a Prevention of Significant Deterioration (PSD) permit application for a 2000-megawatt coal-fired power plant in northeastern Nevada proposed by Sierra Pacific Resources. Evaluation of PSD increments involved extensive air quality modeling for regions with complex terrain. Detailed air quality analyses were performed to address complex issues including: long-range transport of pollutants and subsequent effects on acid deposition, effects of plant emissions on visibility in nearby and distant Class I areas, evaluation of pollutant buildup during stagnation conditions and its effect on visibility, dust emissions from the construction and operation of the power plant, and ambient air quality standards and PSD increments. As part of the state's permitting requirements, an evaluation of air toxics was performed.

PSD Permitting for Rinker Materials Cement Kiln in Brooksville, Florida. Mr. Darwin performed the baseline air quality and air quality modeling analyses, prepared the PSD and air permit regulatory applicability analyses, managed the preparation of the air quality emissions inventory and assisted with the Best Available Control Technology (BACT) evaluation. The project fuel sources included coal, oil, and natural gas.





GREGORY S. DARVIN

Select Project Experience (continued)

Air Toxics Inventory Report for the Mt. POSO Generating Company, Bakersfield, California. Prepared the AB2588 air toxics inventory report for the coal fired power plant facility which included the coal fired fluidized bed boiler and fuel handling facilities, water treatment and cooling tower processes, and ash handling facilities.

Watson Cogen AFC, BP and Edison Mission Energy (August 2008-Present). Air Quality Project Manager for preparation the AFC and PSD permit for an 85 MW cogeneration project at the BP Carson Refinery.

Air Quality Permitting for an Ammonia/Urea Plant, Btu Nitrogen Company, Wallula, Washington. Prepared a Notice of Construction application for the proposed Btu Nitrogen Plant near Wallula, Washington which included a 600 ton per day ammonia plant and 1,000 ton per day urea fertilizer plant. The facility was to be located in a PM₁₀ nonattainment area. Air quality modeling was used to demonstrate compliance with PM₁₀ requirements and air quality standards for criteria and toxic air pollutants. Additionally, Best Available Control Technology analyses were prepared for both criteria and toxic air pollutants.

Power Generation Facility – 1250 MW Combined-Cycle, PSD Air Quality Permitting, Kootenai Generation LLC, Rathdrum, Idaho. Managed preparation of a PSD permit application for a proposed 1,250 MW gas-fired combined-cycle turbine power generation facility to be located in Rathdrum, Idaho. Evaluation of local and regional air quality impacts were assessed with the ISCST3 model and CTSCREEN model for impacts in complex terrain. Potential impacts on regional haze and acid deposition on distant federal Class I areas were evaluated with the CALPUFF modeling system. Other air quality evaluations required for the PSD permit application include evaluation of impacts from toxic air pollutants and evaluation of Best Available Control Technology (BACT).

Clean Fuels Refinery Modification, Chevron, Los Angeles, California. Lead air quality modeler for preparation of an Environmental Impact Report (EIR) and New Source Review permit for a large refinery modification in Los Angeles to support the Clean Fuels Program. Project also included toxic emissions calculations and preparation of a Health Risk Assessment.

Prevention of Significant Deterioration - Calpine Rocky Mountain Energy Center. Project manager for preparing PSD application for a 620 MW power plant, located near Hudson Colorado. Project required completion of a PSD permit application, air quality impact modeling analysis in both near and distant from the source, BACT demonstration, and assessment of Class I area impacts. Project was deemed complete by agency in less than 4 weeks.



Select Project Experience (continued)

Mountainview Power Plant – SCE (SCAQMD, 2005 to Present). Project Manager for preparing an air quality permit modification related to commissioning activities and plant startup/shutdown. Ongoing work involves compliance monitoring for plant operations as well as permitting new activities and performing dispersion modeling analyses.

Humboldt Bay Generating Station PSD Permit Application, Updated HRA and ATIR and Air Quality Compliance, PG&E (NCUAPCD, Ongoing). Prepared PSD increment analysis for ten (10) natural gas-fired Wartsila 18V50DF 16.3 megawatt (MW) reciprocating engine-generator sets and associated equipment with a combined nominal generating capacity of 163 MW. Project analyzed both natural gas and backup fuel oil.

Walnut Creek and Sun Valley Energy Project AFCs, Edison Mission Energy (August 2005 to Present). Air Quality Project Manager and lead air quality modeler for preparation of two AFC's and South Coast AQMD permits for over 1000 MW of generation in the South Coast Air Basin. Project includes permit negotiation, ERC/RECLAIM review, and preparation of visible cooling tower plume analyses

Caithness Blythe II AFC and PSD Permit Applications (MDAQMD, June 2009-Present). Project manager and lead modeler for the preparation of the air quality permits for a 600 MW combined cycle power plant in Blythe, California. Project included Class I impact assessments, BACT and secondary impact assessments.

Calpine Geysers Wildhorse and Buckeye PSD Permit Applications (NSAPCD, April 2011-Present). Air quality modeling in support of ongoing permitting for both criteria pollutants and toxics. Performed wind field analyses in support of upgrading the Geysers Air Monitoring Program for use with AERMOD.

Roseville Electric Project AFC, City of Roseville, Ca. (January 2003 to Present). Air Quality Project Manager for air quality analysis related to a proposed new 200 MW natural gas fired power plant. Analysis included evaluation of CEQA, Class I impacts, visibility impacts, complex terrain, and cooling tower plume modeling.

CalEnergy Blackrock AFC Geothermal Expansion (2007-Present). Lead Meteorologist for permitting three geothermal power plants in the Salton Sea area. Project was in support of a CEC license as well as local District Permits.

East Altamont Energy Center AFC (BAAQMD, 2000-2002). Lead Meteorologist for permitting large power plant, located near Tracy, Ca. Project included meteorological data set assessments, criteria pollutant and toxics impacts analysis, and construction impact modeling. Modeling was used to prepare PSD permit application as well as the AFC application for submittal to the CEC.

