

**DOCKETED**

<b>Docket Number:</b>	16-AFC-01
<b>Project Title:</b>	Stanton Energy Reliability Center
<b>TN #:</b>	224018
<b>Document Title:</b>	Stanton Energy Reliability Center LLC's Opening Testimony
<b>Description:</b>	N/A
<b>Filer:</b>	Marie Fleming
<b>Organization:</b>	DayZen LLC
<b>Submitter Role:</b>	Applicant Representative
<b>Submission Date:</b>	6/29/2018 12:37:05 PM
<b>Docketed Date:</b>	6/29/2018

**Stanton Energy Reliability Center, LLC's  
Opening Testimony**

Stanton Energy Reliability Center (16-AFC-01)

June 29, 2018

STATE OF CALIFORNIA

Energy Resources  
Conservation and Development Commission

In the Matter of:

Application For Certification for the  
**STANTON ENERGY RELIABILITY  
CENTER**

**DOCKET NO. 16-AFC-01**


**DECLARATION OF PAUL  
CUMMINS**

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I, Paul Cummins, declare as follows:

1. I am presently employed as Vice President with Wellhead Electric.
2. A copy of my professional qualifications and experience was included with my Opening Testimony and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to Project Description for the Application For Certification for the Stanton Energy Reliability Center (California Energy Commission Docket Number 16-AFC-01).
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 on June 27, 2018.



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Paul Cummins

STATE OF CALIFORNIA

Energy Resources  
Conservation and Development Commission

In the Matter of:

Application For Certification for the  
**STANTON ENERGY RELIABILITY  
CENTER**

**DOCKET NO. 16-AFC-01**

**DECLARATION OF KARA MILES**

I, Kara Miles, declare as follows:

1. I am presently the President of W Power, LLC.
2. A copy of my professional qualifications and experience was included with my Opening Testimony and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to Project Description for the Application For Certification for the Stanton Energy Reliability Center (California Energy Commission Docket Number 16-AFC-01).
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 on June 29, 2018.



Kara Miles

STATE OF CALIFORNIA

Energy Resources  
Conservation and Development Commission

In the Matter of:

Application For Certification for the  
**STANTON ENERGY RELIABILITY  
CENTER**

**DOCKET NO. 16-AFC-01**

**DECLARATION OF GARY  
FRANZEN**

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I, Gary Franzen, declare as follows:

1. I am presently employed as a Project Developer with Wellhead Services, Inc..
2. A copy of my professional qualifications and experience was included with my Opening Testimony and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to Project Description for the Application For Certification for the Stanton Energy Reliability Center (California Energy Commission Docket Number 16-AFC-01).
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 on June 27, 2018.

*Gary Franzen*

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Gary Franzen

**STANTON ENERGY RELIABILITY CENTER, LLC  
STANTON ENERGY RELIABILITY CENTER  
PROJECT DESCRIPTION  
OPENING TESTIMONY**

I. Name:

Kara Miles  
Paul Cummins  
Gary Franzen

II. Purpose:

Our testimony addresses the subject of Project Description associated with the construction and operation of the Stanton Energy Reliability Center (SERC) as described in the Application For Certification (16-AFC-01).

III. Qualifications:

**Kara Miles:** I am the President of WPower, LLC the principal for development of the SERC. I am a developer of utility scale energy projects with twenty years' experience in the utility industry. I have a BS in Accounting from the University of Florida.

**Paul Cummins:** I am currently employed by Wellhead as Vice President and am responsible for leading the development of the SERC. I am a developer of utility scale energy projects with thirty-five (35) years of experience in the utility industry. I have a Bachelor of Science Degree in Mechanical Engineering from the University of Delaware.

**Gary Franzen:** I am currently employed by Wellhead as Project Developer and am responsible for assisting in the development of the SERC. I am a developer of utility scale energy projects with twenty-eight years of experience in the utility industry. I have a BS in Business Administration with an emphasis in Finance from the University of Nebraska – Lincoln and an MBA from California State University – Fresno.

We have reviewed the Final Staff Assessment (FSA) Project Description section and assisted in the preparation of the Project Description section of the AFC including post filing documents.

Detailed descriptions of our qualifications are presented in the resumes which are 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 are sponsoring the exhibit labeled Project Description and contained on SERC, LLC's Proposed Exhibit List attached to its PreHearing Conference Statement.

V. Opinion and Conclusions

We have reviewed the Project Description section contained in the FSA and we agree that the section accurately describes the SERC.

STATE OF CALIFORNIA

Energy Resources  
Conservation and Development Commission

In the Matter of:

Application For Certification for the  
**STANTON ENERGY RELIABILITY  
CENTER**

**DOCKET NO. 16-AFC-01**

**DECLARATION OF GREGORY  
DARVIN**

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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 was included with my Opening Testimony and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to Air Quality for the Application For Certification for the Stanton Energy Reliability Center (California Energy Commission Docket Number 16-AFC-01).
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 June 25, 2018.



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Gregory Darvin



**STANTON ENERGY RELIABILITY CENTER, LLC  
STANTON ENERGY RELIABILITY CENTER  
AIR QUALITY  
OPENING TESTIMONY**

I. Name: Gregory Darvin

II. Purpose:

My testimony addresses the subject of Air Quality associated with the construction and operation of the Stanton Energy Reliability Center (SERC) as described in the Application For Certification (AFC) (16-AFC-1).

III. Qualifications:

I am presently employed at Atmospheric Dynamics and have been for the past 17 years. I have a Graduate Degree in Atmospheric Science and I have 29 years of experience in air quality meteorology, dispersion model development and application, and air quality consulting.

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

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

To the best of my 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 my own. I 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, I am sponsoring the exhibits labeled Air Quality and contained on SERC, LLC's Proposed Exhibit List attached to its PreHearing Conference Statement.

V. Opinion and Conclusions

I have reviewed the Air Quality section of the Final Staff Assessment and I agree with its findings, analysis and conclusions including the Proposed Conditions of Certification.

STATE OF CALIFORNIA

Energy Resources  
Conservation and Development Commission

In the Matter of:

Application For Certification for the  
**STANTON ENERGY RELIABILITY  
CENTER**

**DOCKET NO. 16-AFC-01**

**DECLARATION OF DOUG DAVY**

I, Douglas M. Davy, declare as follows:

1. I am presently employed as Program Manager with CH2M HILL Engineering, Inc., a subsidiary of Jacobs Engineering Group Inc.
2. A copy of my professional qualifications and experience was included with my Opening Testimony and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to Biological Resources for the Application For Certification for the Stanton Energy Reliability Center (California Energy Commission Docket Number 16-AFC-01).
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 Carmichael, California on June 26, 2018.



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Douglas M. Davy

**STANTON ENERGY RELIABILITY CENTER, LLC  
STANTON ENERGY RELIABILITY CENTER  
BIOLOGICAL RESOURCES  
OPENING TESTIMONY**

I. Name: Doug Davy

II. Purpose:

My testimony addresses the subject of Biological Resources associated with the construction and operation of the Stanton Energy Reliability Center (SERC) as described in the Application For Certification (AFC) (16-AFC-1).

III. Qualifications:

I am presently employed at Jacobs as a Program Manager and have been for the past year. Jacobs acquired CH2M, where I was employed as a Project Manager for 14 years. I have 32 years' experience in providing consulting and permitting services for the siting of electrical generating facilities in California. I have a Doctor of Philosophy degree in Anthropology from Southern Illinois University.

I supervised the preparation and provided management review of the Biological Resources section of the AFC, as well as the post-filing information, data responses, and supplemental filings.

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

To the best of my 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 my own. I 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, I am sponsoring the exhibits labeled Biological Resources and contained on SERC, LLC's Proposed Exhibit List attached to its PreHearing Conference Statement.

V. Opinion and Conclusions

I have reviewed the Biological Resources section of the Final Staff Assessment and I agree with its findings, analysis and conclusions including the Proposed Conditions of Certification.

STATE OF CALIFORNIA

Energy Resources  
Conservation and Development Commission

In the Matter of:

Application For Certification for the  
**STANTON ENERGY RELIABILITY  
CENTER**

**DOCKET NO. 16-AFC-01**

**DECLARATION OF DOUG DAVY**

I, Douglas M. Davy, declare as follows:

1. I am presently employed as Program Manager with CH2M HILL Engineering, Inc., a subsidiary of Jacobs Engineering Group Inc.
2. A copy of my professional qualifications and experience was included with my Opening Testimony and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to Cultural Resources for the Application For Certification for the Stanton Energy Reliability Center (California Energy Commission Docket Number 16-AFC-01).
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 Carmichael, California on June 26, 2018.



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Douglas M. Davy

**STANTON ENERGY RELIABILITY CENTER, LLC  
STANTON ENERGY RELIABILITY CENTER  
CULTURAL RESOURCES  
OPENING TESTIMONY**

I. Name: Doug Davy

II. Purpose:

My testimony addresses the subject of Cultural Resources associated with the construction and operation of the Stanton Energy Reliability Center (SERC) as described in the Application For Certification (AFC) (16-AFC-1).

III. Qualifications:

I am presently employed at Jacobs as a Program Manager and have been for the past year. Jacobs acquired CH2M, where I was employed as a Project Manager for 14 years. I have 32 years' experience in providing consulting and permitting services for the siting of electrical generating facilities in California. I have a Doctor of Philosophy degree in Anthropology from Southern Illinois University.

I supervised the preparation and provided management review of the Cultural Resources section of the AFC, as well as the post-filing information, data responses, and supplemental filings.

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

To the best of my 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 my own. I 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, I am sponsoring the exhibits labeled Cultural Resources and contained on SERC, LLC's Proposed Exhibit List attached to its PreHearing Conference Statement.

V. Opinion and Conclusions

I have reviewed the Cultural Resources section of the Final Staff Assessment and I agree with its findings, analysis and conclusions including the Proposed Conditions of Certification.

STATE OF CALIFORNIA

Energy Resources  
Conservation and Development Commission

In the Matter of:

Application For Certification for the  
**STANTON ENERGY RELIABILITY  
CENTER**

**DOCKET NO. 16-AFC-01**

**DECLARATION OF DOUG DAVY**

I, Douglas M. Davy, declare as follows:

1. I am presently employed as Program Manager with CH2M HILL Engineering, Inc., a subsidiary of Jacobs Engineering Group Inc.
2. A copy of my professional qualifications and experience was included with my Opening Testimony and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to Environmental Justice for the Application For Certification for the Stanton Energy Reliability Center (California Energy Commission Docket Number 16-AFC-01).
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 Carmichael, California on June 26, 2018.



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Douglas M. Davy

**STANTON ENERGY RELIABILITY CENTER, LLC  
STANTON ENERGY RELIABILITY CENTER  
ENVIRONMENTAL JUSTICE  
OPENING TESTIMONY**

I. Name: Doug Davy

II. Purpose:

My testimony addresses the subject of Environmental Justice associated with the construction and operation of the Stanton Energy Reliability Center (SERC) as described in the Application For Certification (AFC) (16-AFC-1).

III. Qualifications:

I am presently employed at Jacobs as a Program Manager and have been for the past year. Jacobs acquired CH2M, where I was employed as a Project Manager for 14 years. I have 32 years' experience in providing consulting and permitting services for the siting of electrical generating facilities in California. I have a Doctor of Philosophy degree in Anthropology from Southern Illinois University.

I supervised the preparation and provided management review of the Environmental Justice section of the AFC, as well as the post-filing information, data responses, and supplemental filings.

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

To the best of my 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 my own. I 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, I am sponsoring the exhibits labeled Environmental Justice and contained on SERC, LLC's Proposed Exhibit List attached to its PreHearing Conference Statement.

V. Opinion and Conclusions

I have reviewed the Environmental Justice section of the Final Staff Assessment and I agree with its findings, analysis and conclusions.

STATE OF CALIFORNIA

Energy Resources  
Conservation and Development Commission

In the Matter of:

Application For Certification for the  
**STANTON ENERGY RELIABILITY  
CENTER**

**DOCKET NO. 16-AFC-01**

**DECLARATION OF DOUG DAVY**

I, Douglas M. Davy, declare as follows:

1. I am presently employed as Program Manager with CH2M HILL Engineering, Inc., a subsidiary of Jacobs Engineering Group Inc.
2. A copy of my professional qualifications and experience was included with my Opening Testimony and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to Hazardous Materials for the Application For Certification for the Stanton Energy Reliability Center (California Energy Commission Docket Number 16-AFC-01).
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 Carmichael, California on June 26, 2018.



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Douglas M. Davy



**STANTON ENERGY RELIABILITY CENTER, LLC  
STANTON ENERGY RELIABILITY CENTER  
HAZARDOUS MATERIALS  
OPENING TESTIMONY**

I. Name: Doug Davy

II. Purpose:

My testimony addresses the subject of Hazardous Materials associated with the construction and operation of the Stanton Energy Reliability Center (SERC) as described in the Application For Certification (AFC) (16-AFC-1).

III. Qualifications:

I am presently employed at Jacobs as a Program Manager and have been for the past year. Jacobs acquired CH2M, where I was employed as a Project Manager for 14 years. I have 32 years' experience in providing consulting and permitting services for the siting of electrical generating facilities in California. I have a Doctor of Philosophy degree in Anthropology from Southern Illinois University.

I supervised the preparation and provided management review of the Hazardous Materials section of the AFC, as well as the post-filing information, data responses, and supplemental filings.

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

To the best of my 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 my own. I 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, I am sponsoring the exhibits labeled Hazardous Materials and contained on SERC, LLC's Proposed Exhibit List attached to its PreHearing Conference Statement.

V. Opinion and Conclusions

I have reviewed the Hazardous Materials section of the Final Staff Assessment and I agree with its findings, analysis and conclusions including the Proposed Conditions of Certification.

STATE OF CALIFORNIA

Energy Resources  
Conservation and Development Commission

In the Matter of:

Application For Certification for the  
**STANTON ENERGY RELIABILITY  
CENTER**

**DOCKET NO. 16-AFC-01**

**DECLARATION OF DOUG DAVY**

I, Douglas M. Davy, declare as follows:

1. I am presently employed as Program Manager with CH2M HILL Engineering, Inc., a subsidiary of Jacobs Engineering Group Inc.
2. A copy of my professional qualifications and experience was included with my Opening Testimony and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to Land Use for the Application For Certification for the Stanton Energy Reliability Center (California Energy Commission Docket Number 16-AFC-01).
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 Carmichael, California on June 26, 2018.



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Douglas M. Davy

**STANTON ENERGY RELIABILITY CENTER, LLC  
STANTON ENERGY RELIABILITY CENTER  
LAND USE  
OPENING TESTIMONY**

I. Name: Doug Davy

II. Purpose:

My testimony addresses the subject of Land Use associated with the construction and operation of the Stanton Energy Reliability Center (SERC) as described in the Application For Certification (AFC) (16-AFC-1).

III. Qualifications:

I am presently employed at Jacobs as a Program Manager and have been for the past year. Jacobs acquired CH2M, where I was employed as a Project Manager for 14 years. I have 32 years' experience in providing consulting and permitting services for the siting of electrical generating facilities in California. I have a Doctor of Philosophy degree in Anthropology from Southern Illinois University.

I supervised the preparation and provided management review of the Land Use section of the AFC, as well as the post-filing information, data responses, and supplemental filings.

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

To the best of my 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 my own. I 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, I am sponsoring the exhibits labeled Land Use and contained on SERC, LLC's Proposed Exhibit List attached to its PreHearing Conference Statement.

V. Opinion and Conclusions

I have reviewed the Land Use section of the Final Staff Assessment and I agree with its findings, analysis and conclusions.

STATE OF CALIFORNIA

Energy Resources  
Conservation and Development Commission

In the Matter of:

Application For Certification for the  
**STANTON ENERGY RELIABILITY  
CENTER**

**DOCKET NO. 16-AFC-01**

**DECLARATION OF GARY  
FRANZEN**

I, Gary Franzen, declare as follows:

1. I am presently employed as a Project Developer with Wellhead Services, Inc..
2. A copy of my professional qualifications and experience was included with my Opening Testimony and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to Noise and Vibration for the Application For Certification for the Stanton Energy Reliability Center (California Energy Commission Docket Number 16-AFC-01).
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 on June, 27 2018.

*Gary Franzen*

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Gary Franzen

STATE OF CALIFORNIA

Energy Resources  
Conservation and Development Commission

In the Matter of:

Application For Certification for the  
**STANTON ENERGY RELIABILITY  
CENTER**

**DOCKET NO. 16-AFC-01**

**DECLARATION OF JIM MCLUCAS**

I, Jim McLucas, declare as follows:

1. I am presently employed as a consultant to Stanton Energy Reliability Center, LLC.
2. A copy of my professional qualifications and experience was included with my Opening Testimony and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to Noise and Vibration for the Application For Certification for the Stanton Energy Reliability Center (California Energy Commission Docket Number 16-AFC-01).
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 Sacramento, California on June 28, 2018.



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Jim McLucas

**STANTON ENERGY RELIABILITY CENTER, LLC  
STANTON ENERGY RELIABILITY CENTER  
NOISE AND VIBRATION  
OPENING TESTIMONY**

I. Name:

Jim McLucas  
Gary Franzen

II. Purpose:

Our testimony addresses the subject of Noise and Vibration associated with the construction and operation of the Stanton Energy Reliability Center (SERC) as described in the Application For Certification (16-AFC-01).

III. Qualifications:

**Jim McLucas:** I am currently a consultant to SERC, LLC and assisting with the development of the SERC and management of detailed design activities. I have worked as an engineer on energy generation projects for 36 years including the development of utility scale energy projects for the past 18 years. I have a BS in Mechanical Engineering from the University of California, Santa Barbara and I am a registered Mechanical Engineer in California.

**Gary Franzen:** I am currently employed by Wellhead Services, Inc. as a Project Developer and am responsible for assisting in the development of the SERC. I am a developer of utility scale energy projects with twenty-eight years' experience in the utility industry. I have a BS in Business Administration with an emphasis in Finance from the University of Nebraska – Lincoln and an MBA from California State University – Fresno.

We have reviewed the Final Staff Assessment (FSA) Noise and Vibration section and assisted in the preparation of the Noise and Vibration section of the AFC including post filing documents.

Detailed descriptions of our qualifications are presented in the resumes which are 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 are sponsoring the exhibits labeled Noise and Vibration and contained on SERC, LLC's Proposed Exhibit List attached to its PreHearing Conference Statement.

V. Opinion and Conclusions

We have reviewed the Noise and Vibration section contained in FSA and we agree with its findings, analysis and conclusions including the Proposed Conditions of Certification.

STATE OF CALIFORNIA

Energy Resources  
Conservation and Development Commission

In the Matter of:

Application For Certification for the  
**STANTON ENERGY RELIABILITY  
CENTER**

**DOCKET NO. 16-AFC-01**

**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 was included with my Opening Testimony and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to Public Health for the Application For Certification for the Stanton Energy Reliability Center (California Energy Commission Docket Number 16-AFC-01).
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 June 25, 2018.



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Gregory Darvin



**STANTON ENERGY RELIABILITY CENTER, LLC  
STANTON ENERGY RELIABILITY CENTER  
PUBLIC HEALTH  
OPENING TESTIMONY**

I. Name: Gregory Darwin

II. Purpose:

My testimony addresses the subject of Public Health associated with the construction and operation of the Stanton Energy Reliability Center (SERC) as described in the Application For Certification (AFC) (16-AFC-1).

III. Qualifications:

I am presently employed at Atmospheric Dynamics and have been for the past 17 years. I have a Graduate Degree in Atmospheric Science and I have 29 years of experience in air quality meteorology, dispersion model development and application, and air quality consulting.

I prepared the Public Health section of the AFC, as well as the post-filing information, data responses, and supplemental filings.

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

To the best of my 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 my own. I 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, I am sponsoring the exhibits labeled Public Health and contained on SERC, LLC's Proposed Exhibit List attached to its PreHearing Conference Statement.

V. Opinion and Conclusions

I have reviewed the Public Health section of the Final Staff Assessment and I agree with its findings, analysis and conclusions.

STATE OF CALIFORNIA

Energy Resources  
Conservation and Development Commission

In the Matter of:

Application For Certification for the  
**STANTON ENERGY RELIABILITY  
CENTER**

**DOCKET NO. 16-AFC-01**

**DECLARATION OF DOUG DAVY**

I, Douglas M. Davy, declare as follows:

1. I am presently employed as Program Manager with CH2M HILL Engineering, Inc., a subsidiary of Jacobs Engineering Group Inc.
2. A copy of my professional qualifications and experience was included with my Opening Testimony and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to Socioeconomics for the Application For Certification for the Stanton Energy Reliability Center (California Energy Commission Docket Number 16-AFC-01).
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 Carmichael, California on June 26, 2018.



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Douglas M. Davy

**STANTON ENERGY RELIABILITY CENTER, LLC  
STANTON ENERGY RELIABILITY CENTER  
SOCIOECONOMICS  
OPENING TESTIMONY**

I. Name: Doug Davy

II. Purpose:

My testimony addresses the subject of Socioeconomics associated with the construction and operation of the Stanton Energy Reliability Center (SERC) as described in the Application For Certification (AFC) (16-AFC-1).

III. Qualifications:

I am presently employed at Jacobs as a Program Manager and have been for the past year. Jacobs acquired CH2M, where I was employed as a Project Manager for 14 years. I have 32 years' experience in providing consulting and permitting services for the siting of electrical generating facilities in California. I have a Doctor of Philosophy degree in Anthropology from Southern Illinois University.

I supervised the preparation and provided management review of the Socioeconomics section of the AFC, as well as the post-filing information, data responses, and supplemental filings.

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

To the best of my 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 my own. I 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, I am sponsoring the exhibits labeled Socioeconomics and contained on SERC, LLC's Proposed Exhibit List attached to its PreHearing Conference Statement.

V. Opinion and Conclusions

I have reviewed the Socioeconomics section of the Final Staff Assessment and I agree with its findings, analysis and conclusions including the Proposed Condition of Certification.

STATE OF CALIFORNIA

Energy Resources  
Conservation and Development Commission

In the Matter of:

Application For Certification for the  
**STANTON ENERGY RELIABILITY  
CENTER**

**DOCKET NO. 16-AFC-01**

**DECLARATION OF GARY  
FRANZEN**

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I, Gary Franzen, declare as follows:

1. I am presently employed as a Project Developer with Wellhead Services, Inc..
2. A copy of my professional qualifications and experience was included with my Opening Testimony and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to Soil and Water Resources for the Application For Certification for the Stanton Energy Reliability Center (California Energy Commission Docket Number 16-AFC-01).
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 on June 29, 2018.

*Gary Franzen*

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Gary Franzen

STATE OF CALIFORNIA

Energy Resources  
Conservation and Development Commission

In the Matter of:

Application For Certification for the  
**STANTON ENERGY RELIABILITY  
CENTER**

**DOCKET NO. 16-AFC-01**

**DECLARATION OF JIM MCLUCAS**

I, Jim McLucas, declare as follows:

1. I am presently employed as a consultant to Stanton Energy Reliability Center, LLC.
2. A copy of my professional qualifications and experience was included with my Opening Testimony and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to Soil and Water Resources for the Application For Certification for the Stanton Energy Reliability Center (California Energy Commission Docket Number 16-AFC-01).
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 Sacramento, California on June 28, 2018.



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Jim McLucas

**STANTON ENERGY RELIABILITY CENTER, LLC  
STANTON ENERGY RELIABILITY CENTER  
SOIL AND WATER RESOURCES  
OPENING TESTIMONY**

I. Name:

Jim McLucas  
Gary Franzen

II. Purpose:

Our testimony addresses the subject of Soil and Water Resources associated with the construction and operation of the Stanton Energy Reliability Center (SERC) as described in the Application For Certification (16-AFC-01).

III. Qualifications:

**Jim McLucas:** I am currently a consultant to SERC, LLC assisting with the development of the SERC and management of detailed design activities. I have worked as an engineer on energy generation projects for 36 years including the development of utility scale energy projects for the past 18 years. I have a BS in Mechanical Engineering from the University of California, Santa Barbara and I am a registered Mechanical Engineer in the State of California.

**Gary Franzen:** I am currently employed by Wellhead Services, inc. as a Project Developer and am responsible for assisting in the development of the SERC. I am a developer of utility scale energy projects with twenty-eight years' experience in the utility industry. I have a BS in Business Administration with an emphasis in Finance from the University of Nebraska – Lincoln and an MBA from California State University – Fresno.

We have reviewed the Final Staff Assessment (FSA) Soil and Water Resources section and assisted in the preparation of the Soil and Water Resources section of the AFC including post filing documents.

Detailed descriptions of our qualifications are presented in the resumes which are 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 are sponsoring the exhibits labeled Soil and Water Resources and contained on SERC, LLC's Proposed Exhibit List attached to its PreHearing Conference Statement.

V. Opinion and Conclusions

We have reviewed the Soil and Water Resources section contained in FSA and we agree with its findings, analysis and conclusions including the Proposed Conditions of Certification.

STATE OF CALIFORNIA

Energy Resources  
Conservation and Development Commission

In the Matter of:

Application For Certification for the  
**STANTON ENERGY RELIABILITY  
CENTER**

**DOCKET NO. 16-AFC-01**

**DECLARATION OF DOUG DAVY**

I, Douglas M. Davy, declare as follows:

1. I am presently employed as Program Manager with CH2M HILL Engineering, Inc., a subsidiary of Jacobs Engineering Group Inc.
2. A copy of my professional qualifications and experience was included with my Opening Testimony and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to Traffic and Transportation for the Application For Certification for the Stanton Energy Reliability Center (California Energy Commission Docket Number 16-AFC-01).
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 Carmichael, California on June 26, 2018.



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Douglas M. Davy



**STANTON ENERGY RELIABILITY CENTER, LLC  
STANTON ENERGY RELIABILITY CENTER  
TRAFFIC AND TRANSPORTATION  
OPENING TESTIMONY**

I. Name: Doug Davy

II. Purpose:

My testimony addresses the subject of Traffic and Transportation associated with the construction and operation of the Stanton Energy Reliability Center (SERC) as described in the Application For Certification (AFC) (16-AFC-1).

III. Qualifications:

I am presently employed at Jacobs as a Program Manager and have been for the past year. Jacobs acquired CH2M, where I was employed as a Project Manager for 14 years. I have 32 years' experience in providing consulting and permitting services for the siting of electrical generating facilities in California. I have a Doctor of Philosophy degree in Anthropology from Southern Illinois University.

I supervised the preparation and provided management review of the Traffic and Transportation section of the AFC, as well as the post-filing information, data responses, and supplemental filings.

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

To the best of my 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 my own. I 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, I am sponsoring the exhibits labeled Traffic and Transportation and contained on SERC, LLC's Proposed Exhibit List attached to its PreHearing Conference Statement.

V. Opinion and Conclusions

I have reviewed the Traffic and Transportation section of the Final Staff Assessment and I agree with its findings, analysis and conclusions including the Proposed Conditions of Certification.

STATE OF CALIFORNIA

Energy Resources  
Conservation and Development Commission

In the Matter of:

Application For Certification for the  
**STANTON ENERGY RELIABILITY  
CENTER**

**DOCKET NO. 16-AFC-01**

**DECLARATION OF DOUG DAVY**

I, Douglas M. Davy, declare as follows:

1. I am presently employed as Program Manager with CH2M HILL Engineering, Inc., a subsidiary of Jacobs Engineering Group Inc.
2. A copy of my professional qualifications and experience was included with my Opening Testimony and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to Transmission Line Safety and Nuisance for the Application For Certification for the Stanton Energy Reliability Center (California Energy Commission Docket Number 16-AFC-01).
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 Carmichael, California on June 26, 2018.



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Douglas M. Davy

**STANTON ENERGY RELIABILITY CENTER, LLC  
STANTON ENERGY RELIABILITY CENTER  
TRANSMISSION LINE SAFETY AND NUISANCE  
OPENING TESTIMONY**

I. Name: Doug Davy

II. Purpose:

My testimony addresses the subject of Transmission Line Safety and Nuisance associated with the construction and operation of the Stanton Energy Reliability Center (SERC) as described in the Application For Certification (AFC) (16-AFC-1).

III. Qualifications:

I am presently employed at Jacobs as a Program Manager and have been for the past year. Jacobs acquired CH2M, where I was employed as a Project Manager for 14 years. I have 32 years' experience in providing consulting and permitting services for the siting of electrical generating facilities in California. I have a Doctor of Philosophy degree in Anthropology from Southern Illinois University.

I supervised the preparation and provided management review of the Transmission Line Safety and Nuisance section of the AFC, as well as the post-filing information, data responses, and supplemental filings.

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

To the best of my 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 my own. I 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, I am sponsoring the exhibits labeled Transmission Line Safety and Nuisance and contained on SERC, LLC's Proposed Exhibit List attached to its PreHearing Conference Statement.

V. Opinion and Conclusions

I have reviewed the Transmission Line Safety and Nuisance section of the Final Staff Assessment and I agree with its findings, analysis and conclusions including the Proposed Conditions of Certification.

STATE OF CALIFORNIA

Energy Resources  
Conservation and Development Commission

In the Matter of:

Application For Certification for the  
**STANTON ENERGY RELIABILITY  
CENTER**

**DOCKET NO. 16-AFC-01**

**DECLARATION OF DOUG DAVY**

I, Douglas M. Davy, declare as follows:

1. I am presently employed as Program Manager with CH2M HILL Engineering, Inc., a subsidiary of Jacobs Engineering Group Inc.
2. A copy of my professional qualifications and experience was included with my Opening Testimony and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to Visual Resources for the Application For Certification for the Stanton Energy Reliability Center (California Energy Commission Docket Number 16-AFC-01).
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 Carmichael, California on June 26, 2018.



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Douglas M. Davy

**STANTON ENERGY RELIABILITY CENTER, LLC  
STANTON ENERGY RELIABILITY CENTER  
VISUAL RESOURCES  
OPENING TESTIMONY**

I. Name: Doug Davy

II. Purpose:

My testimony addresses the subject of Visual Resources associated with the construction and operation of the Stanton Energy Reliability Center (SERC) as described in the Application For Certification (AFC) (16-AFC-1).

III. Qualifications:

I am presently employed at Jacobs as a Program Manager and have been for the past year. Jacobs acquired CH2M, where I was employed as a Project Manager for 14 years. I have 32 years' experience in providing consulting and permitting services for the siting of electrical generating facilities in California. I have a Doctor of Philosophy degree in Anthropology from Southern Illinois University.

I supervised the preparation and provided management review of the Visual Resources section of the AFC, as well as the post-filing information, data responses, and supplemental filings.

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

To the best of my 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 my own. I 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, I am sponsoring the exhibits labeled Visual Resources and contained on SERC, LLC's Proposed Exhibit List attached to its PreHearing Conference Statement.

V. Opinion and Conclusions

I have reviewed the Visual Resources section of the Final Staff Assessment and I agree with its findings, analysis and conclusions including the Proposed Conditions of Certification.

STATE OF CALIFORNIA

Energy Resources  
Conservation and Development Commission

In the Matter of:

Application For Certification for the  
**STANTON ENERGY RELIABILITY  
CENTER**

**DOCKET NO. 16-AFC-01**

**DECLARATION OF DOUG DAVY**

I, Douglas M. Davy, declare as follows:

1. I am presently employed as Program Manager with CH2M HILL Engineering, Inc., a subsidiary of Jacobs Engineering Group Inc.
2. A copy of my professional qualifications and experience was included with my Opening Testimony and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to Waste Management for the Application For Certification for the Stanton Energy Reliability Center (California Energy Commission Docket Number 16-AFC-01).
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 Carmichael, California on June 26, 2018.



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Douglas M. Davy

**STANTON ENERGY RELIABILITY CENTER, LLC  
STANTON ENERGY RELIABILITY CENTER  
WASTE MANAGEMENT  
OPENING TESTIMONY**

I. Name: Doug Davy

II. Purpose:

My testimony addresses the subject of Waste Management associated with the construction and operation of the Stanton Energy Reliability Center (SERC) as described in the Application For Certification (AFC) (16-AFC-1).

III. Qualifications:

I am presently employed at Jacobs as a Program Manager and have been for the past year. Jacobs acquired CH2M, where I was employed as a Project Manager for 14 years. I have 32 years' experience in providing consulting and permitting services for the siting of electrical generating facilities in California. I have a Doctor of Philosophy degree in Anthropology from Southern Illinois University.

I supervised the preparation and provided management review of the Waste Management section of the AFC, as well as the post-filing information, data responses, and supplemental filings.

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

To the best of my 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 my own. I 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, I am sponsoring the exhibits labeled Waste Management and contained on SERC, LLC's Proposed Exhibit List attached to its PreHearing Conference Statement.

V. Opinion and Conclusions

I have reviewed the Waste Management section of the Final Staff Assessment and I agree with its findings, analysis and conclusions including the Proposed Conditions of Certification.





STATE OF CALIFORNIA

Energy Resources  
Conservation and Development Commission

In the Matter of:

Application For Certification for the  
**STANTON ENERGY RELIABILITY  
CENTER**

**DOCKET NO. 16-AFC-01**

**DECLARATION OF GARY  
FRANZEN**

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I, Gary Franzen, declare as follows:

1. I am presently employed as a Project Developer with Wellhead Services, Inc..
2. A copy of my professional qualifications and experience was included with my Opening Testimony and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to Worker Safety and Fire Protection for the Application For Certification for the Stanton Energy Reliability Center (California Energy Commission Docket Number 16-AFC-01).
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 on June 27, 2018.

*Gary Franzen*

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Gary Franzen

**STANTON ENERGY EFFICIENCY CENTER, LLC  
STANTON ENERGY EFFICIENCY CENTER  
WORKER SAFETY AND FIRE PROTECTION  
OPENING TESTIMONY**

I. Name: Gary Franzen

II. Purpose:

My testimony addresses the subject of Worker Safety and Fire Protection associated with the construction and operation of the Stanton Energy Efficiency Center (SERC) as described in the Application For Certification (AFC) (16-AFC-1).

III. Qualifications:

I am currently employed by Wellhead Services, inc. as a Project Developer and am responsible for assisting in the development of the SERC. I am a developer of utility scale energy projects with twenty-eight years' experience in the utility industry. I have a BS in Business Administration with an emphasis in Finance from the University of Nebraska – Lincoln and an MBA from California State University – Fresno.

I prepared the Worker Safety and Fire Protection section of the AFC, as well as the post-filing information, data responses, and supplemental filings.

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

To the best of my 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 my own. I 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, I am sponsoring the exhibits labeled Worker Safety and Fire Protection and contained on SERC, LLC's Proposed Exhibit List attached to its PreHearing Conference Statement.

V. Opinion and Conclusions

I have reviewed the Worker Safety and Fire Protection section of the Final Staff Assessment and I agree with its findings, analysis and conclusions including the Proposed Conditions of Certification.

STATE OF CALIFORNIA

Energy Resources  
Conservation and Development Commission

In the Matter of:

Application For Certification for the  
**STANTON ENERGY RELIABILITY  
CENTER**

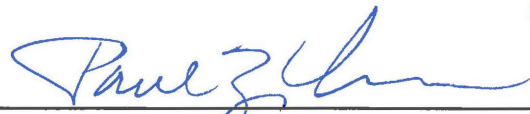
**DOCKET NO. 16-AFC-01**

**DECLARATION OF PAUL  
CUMMINS**

I, Paul Cummins, declare as follows:

1. I am presently employed as Vice President with Wellhead Electric.
2. A copy of my professional qualifications and experience was included with my Opening Testimony and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to Facility Design for the Application For Certification for the Stanton Energy Reliability Center (California Energy Commission Docket Number 16-AFC-01).
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 Sacramento, California on June 27, 2018.



Paul Cummins

STATE OF CALIFORNIA

Energy Resources  
Conservation and Development Commission

In the Matter of:

Application For Certification for the  
**STANTON ENERGY RELIABILITY  
CENTER**

**DOCKET NO. 16-AFC-01**

**DECLARATION OF JIM MCLUCAS**

I, Jim McLucas, declare as follows:

1. I am presently employed as a consultant to Stanton Energy Reliability Center, LCC.
2. A copy of my professional qualifications and experience was included with my Opening Testimony and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to Facility Design for the Application For Certification for the Stanton Energy Reliability Center (California Energy Commission Docket Number 16-AFC-01).
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 Sacramento, California on June 28, 2018.



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Jim McLucas

**STANTON ENERGY RELIABILITY CENTER, LLC  
STANTON ENERGY RELIABILITY CENTER  
FACILITY DESIGN  
OPENING TESTIMONY**

I. Name:

Paul Cummins  
Jim McLucas

II. Purpose:

Our testimony addresses the subject of Facility Design associated with the construction and operation of the Stanton Energy Reliability Center (SERC) as described in the Application For Certification (16-AFC-01).

III. Qualifications:

**Paul Cummins:** I am currently employed by Wellhead as Vice President and am responsible for leading the development of the SERC. I am a developer of utility scale energy projects with thirty-five (35) years' experience in the utility industry. I have a Bachelor of Science in Mechanical Engineering from the University of Delaware.

**Jim McLucas:** I am currently a consultant to SERC, LLC and assisted with the development of the SERC and management of detailed design activities. I have worked as an engineer on energy generation projects for 36 years including the development of utility scale energy projects for the past 18 years. I have a BS in Mechanical Engineering from the University of California, Santa Barbara and I am a registered Mechanical Engineer in the State of California.

We have reviewed the Final Staff Assessment (FSA) Facility Design section and assisted in the preparation of the Facility Design section of the AFC including post filing documents.

Detailed descriptions of our qualifications are presented in the resumes which are 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 are sponsoring the exhibits labeled Facility Design and contained on SERC, LLC's Proposed Exhibit List attached to its PreHearing Conference Statement.

V. Opinion and Conclusions

We have reviewed the Facility Design section contained in FSA and we agree with its findings, analysis and conclusions including the Proposed Conditions of Certification.

STATE OF CALIFORNIA

Energy Resources  
Conservation and Development Commission

In the Matter of:

Application For Certification for the  
**STANTON ENERGY RELIABILITY  
CENTER**

**DOCKET NO. 16-AFC-01**

**DECLARATION OF PAUL  
CUMMINS**

---

I, Paul Cummins, declare as follows:

1. I am presently employed as Vice President with Wellhead Electric.
2. A copy of my professional qualifications and experience was included with my Opening Testimony and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to Geology and Paleontology for the Application For Certification for the Stanton Energy Reliability Center (California Energy Commission Docket Number 16-AFC-01).
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 Sacramento, California on June 27, 2018.



---

Paul Cummins

STATE OF CALIFORNIA

Energy Resources  
Conservation and Development Commission

In the Matter of:

Application For Certification for the  
**STANTON ENERGY RELIABILITY  
CENTER**

**DOCKET NO. 16-AFC-01**

**DECLARATION OF DOUG DAVY**

I, Douglas M. Davy, declare as follows:

1. I am presently employed as Program Manager with CH2M HILL Engineering, Inc., a subsidiary of Jacobs Engineering Group Inc.
2. A copy of my professional qualifications and experience was included with my Opening Testimony and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to Geology and Paleontology for the Application For Certification for the Stanton Energy Reliability Center (California Energy Commission Docket Number 16-AFC-01).
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 Carmichael, California on June 26, 2018.



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Douglas M. Davy



**STANTON ENERGY RELIABILITY CENTER, LLC  
STANTON ENERGY RELIABILITY CENTER  
GEOLOGY AND PALEONTOLOGY  
OPENING TESTIMONY**

I. Name:

Paul Cummins  
Doug Davy

II. Purpose:

Our testimony addresses the subject of Geology and Paleontology associated with the construction and operation of the Stanton Energy Reliability Center (SERC) as described in the Application For Certification (16-AFC-01).

III. Qualifications:

**Paul Cummins:** I am currently employed by Wellhead as Vice President and am responsible for leading the development of the SERC. I am a developer of utility scale energy projects with thirty-five (35) years' experience in the utility industry. I have a Bachelor of Science in Mechanical Engineering from the University of Delaware.

**Doug Davy:** I am presently employed at Jacobs as a Program Manager and have been for the past year. Jacobs acquired CH2M, where I was employed as a Project Manager for 14 years. I have 32 years' experience in providing consulting and permitting services for the siting of electrical generating facilities in California. I have a Doctor of Philosophy degree in Anthropology from Southern Illinois University.

We have reviewed the Final Staff Assessment (FSA) Geology and Paleontology section and assisted in the preparation of the Geology and Paleontology section of the AFC including post filing documents.

Detailed descriptions of our qualifications are presented in the resumes which are 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 are sponsoring the exhibits labeled Geology and Paleontology and contained on SERC, LLC's Proposed Exhibit List attached to its PreHearing Conference Statement.

V. Opinion and Conclusions

We have reviewed the Geology and Paleontology section contained in FSA and we agree with its findings, analysis and conclusions including the Proposed Conditions of Certification.

STATE OF CALIFORNIA

Energy Resources  
Conservation and Development Commission

In the Matter of:

Application For Certification for the  
**STANTON ENERGY RELIABILITY  
CENTER**

**DOCKET NO. 16-AFC-01**


**DECLARATION OF PAUL  
CUMMINS**

---

I, Paul Cummins, declare as follows:

1. I am presently employed as Vice President with Wellhead Electric.
2. A copy of my professional qualifications and experience was included with my Opening Testimony and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to Power Plant Efficiency for the Application For Certification for the Stanton Energy Reliability Center (California Energy Commission Docket Number 16-AFC-01).
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 Sacramento, California on June 27, 2018.



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Paul Cummins

**STANTON ENERGY EFFICIENCY CENTER, LLC  
STANTON ENERGY EFFICIENCY CENTER  
POWER PLANT EFFICIENCY  
OPENING TESTIMONY**

I. Name: Paul Cummins

II. Purpose:

My testimony addresses the subject of Power Plant Efficiency associated with the construction and operation of the Stanton Energy Efficiency Center (SERC) as described in the Application For Certification (AFC) (16-AFC-1).

III. Qualifications:

I am currently employed by Wellhead as Vice President and am responsible for leading the development of the SERC. I am a developer of utility scale energy projects with thirty-five (35) years' experience in the utility industry. I have a Bachelor of Science in Mechanical Engineering from the University of Delaware.

I prepared the Power Plant Efficiency section of the AFC, as well as the post-filing information, data responses, and supplemental filings.

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

To the best of my 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 my own. I 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, I am sponsoring the exhibits labeled Power Plant Efficiency and contained on SERC, LLC's Proposed Exhibit List attached to its PreHearing Conference Statement.

V. Opinion and Conclusions

I have reviewed the Power Plant Efficiency section of the Final Staff Assessment and I agree with its findings, analysis and conclusions.

STATE OF CALIFORNIA

Energy Resources  
Conservation and Development Commission

In the Matter of:

Application For Certification for the  
**STANTON ENERGY RELIABILITY  
CENTER**

**DOCKET NO. 16-AFC-01**

**DECLARATION OF PAUL  
CUMMINS**

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I, Paul Cummins, declare as follows:

1. I am presently employed as Vice President with Wellhead Electric.
2. A copy of my professional qualifications and experience was included with my Opening Testimony and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to Power Plant Reliability for the Application For Certification for the Stanton Energy Reliability Center (California Energy Commission Docket Number 16-AFC-01).
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 Sacramento, California on June 27, 2018.



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Paul Cummins

**STANTON ENERGY RELIABILITY CENTER, LLC  
STANTON ENERGY RELIABILITY CENTER  
POWER PLANT RELIABILITY  
OPENING TESTIMONY**

I. Name: Paul Cummins

II. Purpose:

My testimony addresses the subject of Power Plant Reliability associated with the construction and operation of the Stanton Energy Reliability Center (SERC) as described in the Application For Certification (AFC) (16-AFC-1).

III. Qualifications:

I am currently employed by Wellhead as Vice President and am responsible for leading the development of the SERC. I am a developer of utility scale energy projects with thirty-five (35) years' experience in the utility industry. I have a Bachelor of Science in Mechanical Engineering from the University of Delaware.

I prepared the Power Plant Reliability section of the AFC, as well as the post-filing information, data responses, and supplemental filings.

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

To the best of my 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 my own. I 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, I am sponsoring the exhibits labeled Power Plant Reliability and contained on SERC, LLC's Proposed Exhibit List attached to its PreHearing Conference Statement.

V. Opinion and Conclusions

I have reviewed the Power Plant Reliability section of the Final Staff Assessment and I agree with its findings, analysis and conclusions.

**STANTON ENERGY EFFICIENCY CENTER, LLC  
STANTON ENERGY EFFICIENCY CENTER  
TRANSMISSION SYSTEM ENGINEERING  
OPENING TESTIMONY**

I. Name: Paul Cummins

II. Purpose:

My testimony addresses the subject of Transmission System Engineering associated with the construction and operation of the Stanton Energy Efficiency Center (SERC) as described in the Application For Certification (AFC) (16-AFC-1).

III. Qualifications:

I am currently employed by Wellhead as Vice President and am responsible for leading the development of the SERC. I am a developer of utility scale energy projects with thirty-five (35) years' experience in the utility industry. I have a Bachelor of Science in Mechanical Engineering from the University of Delaware.

I prepared the Transmission System Engineering section of the AFC, as well as the post-filing information, data responses, and supplemental filings.

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

To the best of my 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 my own. I 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, I am sponsoring the exhibits labeled Transmission System Engineering and contained on SERC, LLC's Proposed Exhibit List attached to its PreHearing Conference Statement.

V. Opinion and Conclusions

I have reviewed the Transmission System Engineering section of the Final Staff Assessment and I agree with its findings, analysis and conclusions.

STATE OF CALIFORNIA

Energy Resources  
Conservation and Development Commission

In the Matter of:

Application For Certification for the  
**STANTON ENERGY RELIABILITY  
CENTER**

**DOCKET NO. 16-AFC-01**

**DECLARATION OF DOUG DAVY**

I, Douglas M. Davy, declare as follows:

1. I am presently employed as Program Manager with CH2M HILL Engineering, Inc., a subsidiary of Jacobs Engineering Group Inc.
2. A copy of my professional qualifications and experience was included with my Opening Testimony and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to Alternatives for the Application For Certification for the Stanton Energy Reliability Center (California Energy Commission Docket Number 16-AFC-01).
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 Carmichael, California on June 26, 2018.



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Douglas M. Davy



STATE OF CALIFORNIA

Energy Resources  
Conservation and Development Commission

In the Matter of:

Application For Certification for the  
**STANTON ENERGY RELIABILITY  
CENTER**

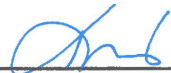
**DOCKET NO. 16-AFC-01**

**DECLARATION OF KARA MILES**

I, Kara Miles, declare as follows:

1. I am presently the President of W Power, LLC.
2. A copy of my professional qualifications and experience was included with my Opening Testimony and is incorporated by reference in this Declaration.
3. I prepared the attached testimony relating to Alternatives for the Application For Certification for the Stanton Energy Reliability Center (California Energy Commission Docket Number 16-AFC-01).
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 Sacramento, CA on June 29, 2018.



Kara Miles

**STANTON ENERGY RELIABILITY CENTER, LLC  
STANTON ENERGY RELIABILITY CENTER  
ALTERNATIVES  
OPENING TESTIMONY**

I. Name:

Kara Miles  
Paul Cummins  
Doug Davy

II. Purpose:

Our testimony addresses the subject of Alternatives associated with the construction and operation of the Stanton Energy Reliability Center (SERC) as described in the Application For Certification (16-AFC-01).

III. Qualifications:

**Kara Miles:** I am the President of WPower, LLC the principal for development of the SERC. I am a developer of utility scale energy projects with twenty years' experience in the utility industry. I have a BS in Accounting from the University of Florida.

**Paul Cummins:** I am currently employed by Wellhead as Vice President and am responsible for leading the development of the SERC. I am a developer of utility scale energy projects with thirty-five (35) years' experience in the utility industry. I have a Bachelor of Science in Mechanical Engineering from the University of Delaware.

**Doug Davy:** I am presently employed at Jacobs as a Program Manager and have been for the past year. Jacobs acquired CH2M, where I was employed as a Project Manager for 14 years. I have 32 years' experience in providing consulting and permitting services for the siting of electrical generating facilities in California. I have a Doctor of Philosophy degree in Anthropology from Southern Illinois University.

We have reviewed the Final Staff Assessment (FSA) Alternatives section and assisted in the preparation of the Alternatives section of the AFC including post filing documents.

Detailed descriptions of our qualifications are presented in the resumes which are 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 are sponsoring the exhibits labeled Alternatives and contained on SERC, LLC's Proposed Exhibit List attached to its PreHearing Conference Statement.

V. Opinion and Conclusions

We have reviewed the Alternatives section contained in FSA and we agree that the section accurately describes a reasonable range of feasible alternatives and appropriately concluded that there are no feasible alternatives which would reduce significant environmental impacts from SERC nor would cure any potential violation of applicable laws, ordinances, regulations or standards (LORS) by SERC. The SERC's potential impacts have all been reduced to less than significant levels through feasible mitigation and the Proposed Conditions of Certification, with which we agree, will ensure the SERC complies with all applicable LORS.

**ATTACHMENT A**  
**RESUMES**

## **GARY A. FRANZEN**

### **EDUCATION**

University of Nebraska - Lincoln	BS, Business Administration - Finance, 1985
California State University – Fresno	Master of Business Administration, 1996

### **WORK HISTORY**

Wellhead & Affiliates: Project Developer. 1994 – Current. The primary business of Wellhead and its affiliates is to develop, construct, own and operate independent power generation facilities and to invest in related businesses. Responsible for a wide range of development activities including: use, environmental, and air permits; natural gas, electric, water, sewer and telecommunications interconnections; project planning; development engineering support; real property rights; project management; and project financial models. Broad experience includes roles in management, accounting, operations, administration, and finance.

Fresno Cogen Facility (under prior ownership). 1989 – 1994. Accounting Manager. Responsible for payroll, human resources administration, operations accounting and analysis, accounts payable, accounts receivable, general ledger, and financial statements.

## **KARA J. MILES**

### **EDUCATION**

University of Florida

BS, Accounting, 1984

### **WORK HISTORY**

W Power, LLC: Owner, President and Chief Executive Officer. 2012. W Power, LLC is involved in the development, construction, ownership and operations of power generation facilities.

Wellhead & Affiliates: Vice President & Chief Financial Officer. 1997- April 27, 2012. The primary business of Wellhead and its affiliates is to develop, construct, own and operate independent power generation plants and to invest in related businesses. Responsible for overall corporate direction and management of all finance, accounting, human resources, administration, and information technology with key involvement in development and mergers and acquisition.

City of Mission Viejo: Senior Accountant. 1995-96. Primary work was in the areas of investment policy, cash flow analysis, management of insurance claims.

VyStar Credit Union (formerly Jax Navy Federal Credit Union): Vice President Accounting, 1988-92. Senior manager in charge of finance, accounting, investments, insurance, titles, IRAs, and signatory record keeping. Acted as on-call branch manager and interfaced directly with board of directors on financial matters.

Florida Community College: Instructor. 1990. Instructed Introduction to Accounting at community college.

Torrey Pines Bank: Accounting Supervisor, 1985-88. Responsible for all accounting activities of this privately held financial institution.

### **OTHER**

Active with the following organizations: Vistage, an international organization of CEO's; the Hoover Institution; National Association of Women Business Owners; U.S. Women's Chamber of Commerce; Independent Energy Human Resource Association; Construction Finance Management Association; Sacramento Employers Advisory Council; Society for Human Resources Management; Sacramento Area Human Resources Administration; and the Alpha Xi Delta sorority alumnae association.

# PAUL Z. CUMMINS, PE M30034

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## EXPERIENCE

**Wellhead Electric Co. Inc.** 2006 – 2018  
**Vice President**

Mr. Cummins presently provides key strategic input for overall corporate direction and management of plant operations and maintenance (O&M), new project development and engineering. During his tenure as Vice President, Mr. Cummins has had direct management of the installation of four LM6000 projects.

**Wellhead Electric Co. Inc.** 2000 – 2006  
**Project Developer**

As a Project Developer Mr. Cummins played a key role in the successful development, construction and commercial operation of three peakers in 2001. Also, Mr. Cummins performed the role of Project Manager for the successful repowering of the Fresno Cogen Facility in 2004. The facility was repowered with an LM6000.

**Wellhead Services, Inc.** 1994 – 2000  
**Plant Manager**

As the Plant Manager of Fresno Cogen Facility (a Pratt and Whitney FT4-based combined cycle power plant), Mr. Cummins was responsible for the day-to-day business operations. He managed compliance and reporting with the local Air and Water Districts, and ensured that the plant is compliant with all California rules and regulations. Mr. Cummins had direct profit and loss responsibility for this facility.

**Agrico Cogeneration Corporation** 1991 – 1994  
**Plant Engineer**

As the Plant Engineer of this Pratt and Whitney FT4-based combined cycle power plant, Mr. Cummins was responsible for the day-to-day plant operations and maintenance with strong emphasis on the implementation of best maintenance practice on the FT4 unit. He managed compliance and reporting with the local Air and Water Districts, and ensured that the plant was compliant with all California rules and regulations.

**Delmarva Operating Services Company** 1988 – 1991  
**Plant Engineer**

Mr. Cummins was responsible for daily supervision of the Maintenance Department for a 25 MW Waste Wood Fired Facility in Redding, California. Supervised six employees. Managed the budget for the department, resulting in a \$200K savings under budget for 1989 and 1990. Designed and installed a flyash re-injection system for the facility.

**Delmarva Power and Light** 1983 – 1988  
**Plant Engineer**

Mr. Cummins was a Plant Engineer for a 700MW Pulverized Coal Fired Power Plant in Dagsboro, Delaware. He managed the maintenance of a large steam turbine and generator. He was responsible for the design and installation of plant improvements and project management.

## EDUCATION

B.S. Mechanical Engineering, University of Delaware 1983  
B.A. Concentration in Economics, University of Delaware 1983

## PROFESSIONAL DATA

Registered Professional Engineer, State of California – Mechanical M30034

**GREGORY S. DARVIN**  
**Meteorologist**

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***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**

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### ***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 PM<sub>10</sub> nonattainment area. Air quality modeling was used to demonstrate compliance with PM<sub>10</sub> 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.



# Douglas M. Davy, Ph.D.

## Program Manager

### Relevant Experience

Dr. Davy has 32 years of experience providing regulatory compliance and project management support for the siting, licensing, and permitting of infrastructure development projects, including new power generation, electrical transmission lines, fiber optic communication lines, transportation, and natural gas pipeline projects. He has served as project manager for numerous environmental licensing and permitting projects, directing multidisciplinary teams of planners, engineers, and scientists in helping to resolve complex environmental regulatory issues.

### Distinguishing Qualifications

- Project manager for 14 Applications for Certification (AFC) before the California Energy Commission (CEC) for natural-gas fired power plants and 1 concentrating solar power plant, plus 3 emergency peaker AFCs and several license amendment petitions
- Project manager for permitting of natural gas-fired, concentrating solar, photovoltaic, wind, and marine hydrokinetic (wave energy) power plants as well as battery and compressed air energy storage plants
- Authored portions of the Federal Energy Regulatory Commission Relicensing Handbook
- Governor's Award for Historic Preservation for project management role in overview and assessment of historic properties at all active military bases in California

### Representative Projects

- **Stanton Energy Reliability Project AFC, Wellhead Electric Company, Stanton, California.** Project manager for AFC before the CEC for a 98-MW natural gas-fired power plant with 10 MW of storage, using GE Energy/Wellhead EGT integrated battery storage technology. Directed a multidisciplinary team of scientists and engineers in providing project development support and preparing application documents; responding to regulatory agency data requests; and analyzing direct, indirect, and cumulative effects of the project. Represented the project in workshops and participated in consultations with CEC staff.
- **Humboldt Bay Repowering Project/Humboldt Bay Generating Station AFC, Pacific Gas and Electric Company, Eureka, California.** Project manager for Application for Certification before the CEC for a 163-MW natural gas-fired power plant using 10 Wärtsilä 18V50DF dual-fuel turbine-generators. Directed a multidisciplinary team of scientists and engineers in providing project development support and preparing application documents; responding to regulatory agency data requests; and analyzing direct, indirect, and cumulative effects of the project. Represented the project in workshops and provided expert witness at licensing hearings and participated in consultations with CEC staff and other regulatory agencies including the USACE, USFWS, CCC, and CDFW. Developed a coastal wetlands mitigation program in consultation with the CCC and USACE.
- **California Wave Energy Test Center (CalWave), California Polytechnic State University (Cal Poly) at San Luis Obispo Institute of Advanced Technology and Public Policy, Santa Barbara County, California.** Permitting project manager for siting and planning studies for a national wave energy test center in central California. This work was conducted under financial support from the U.S. Department of

## Douglas M. Davy, Ph.D.

Energy's (DOE's) National Energy Technology Laboratory (NETL) as a feasibility study for a wave energy test center that would be capable of supporting Technology Readiness Level-9 testing of marine hydrokinetic energy devices (full-scale, grid-connected, with multiple devices deployed in array) and continues in a second phase through conceptual design. Prepared regulatory roadmap for licensing the facility and draft Federal Energy Regulatory Commission Preliminary Application Document that included literature review and summary reports for biological, cultural, and visual resources, recreation, land use, geological hazards and resources, and socioeconomics. Consulted with members of the public and held several meetings with regulatory agencies (CCC, CSLC, Bureau of Ocean Energy Management, NMFS, USFWS, CDFW, USACE, RWQCB, U.S. Coast Guard) to discuss permitting approaches.

- **Rice Solar Energy Project Application for Certification, SolarReserve, LLC, Riverside County, CA.** Project Manager for 150 MW concentrating solar energy project featuring a mirror field of 17,500 heliostats, solar receiver tower, and integral thermal storage using a liquefied salt mixture. The project design includes a 1,410-acre project site, air-cooled condenser, steam turbine generator, hot and warm salt storage tanks, and 9.2-mile-long 230 kV transmission line. Directed multidisciplinary team of scientists and engineers in preparing study plans for and conducting field surveys including cultural resources, desert tortoise, avian, and rare plant surveys. Prepared the license application and permitting documents for the California Energy Commission, Bureau of Land Management, Western Area Power Administration, US Fish and Wildlife Service, California Department of Fish and Game, and other agencies. Worked with Western Area Power Administration and BLM to prepare National Environmental Policy Act (NEPA) Environmental Impact Statement compliance documents. Obtained federal permits to begin construction and prepared construction compliance plans. Reviewed third-party Environmental Impact Statement and provided comments. Attended public and regulatory agency meetings and negotiated permit terms with agencies.
- **Morgan Hills Wind Energy Project, TerraGen Power, LLC, Kern County, California.** Project Manager for permitting for a 230 MW wind power project located on 3,808 acres in southern California. Coordinated project team preparing study plans for and conducting avian, bat, desert tortoise, Mohave ground squirrel, rare plants, general wildlife, and vegetation mapping. Prepared the Kern County Conditional Use Permit Application and application for wind overlay zoning designation for wind energy corridors. Prepared California Department of Fish and Game Section 2081 Incidental Take Authorization application and Biological Assessment for submittal to the US Fish and Wildlife Service. Conducted detailed delineations of streams and wetlands and prepared and submitted a request for approved jurisdictional determination to the U.S. Army Corps of Engineers. Prepared Streambed Alteration Agreement for submittal to the California Department Fish and Game. Reviewed third-party Environmental Impact Statement and provided comments. Attended public and regulatory agency meetings and negotiated permit terms with agencies.
- **Compressed Air Energy Storage Design and Compression Testing Phases, Pacific Gas and Electric Company, San Joaquin County, California.** Project manager for preparation of a NEPA Environmental Assessment for the compression testing phase of a project to develop an innovative new technology for storing electricity. Compressed air energy storage involves pumping compressed air underground to an air-tight geological formation (depleted natural gas well), then releasing the air to generate power during peak hours when it is most needed. This project is partly funded by the U.S. Department of Energy as a test project for this innovative energy storage technology.

Ph.D., Archaeology

M.A., Anthropology

B.A., Anthropology