

**DOCKET**

**09-AFC-10**

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November 3, 2010

California Energy Commission  
Dockets Unit  
1516 Ninth Street  
Sacramento, CA 95814-5512

**Subject: RICE SOLAR ENERGY, LLC'S SUPPLEMENTAL REBUTTAL TESTIMONY:  
WORKER SAFETY & FIRE PROTECTION  
RICE SOLAR ENERGY PROJECT  
DOCKET NO. (09-AFC-10)**

Enclosed for filing with the California Energy Commission is the original of **RICE SOLAR ENERGY LLC'S SUPPLEMENTAL REBUTTAL TESTIMONY: WORKER SAFETY & FIRE PROTECTION**, for the Rice Solar Energy Project (09-AFC-10).

Sincerely,



Marie Mills

**Rice Solar Energy LLC's Supplemental  
Rebuttal Testimony**

**(Worker Safety & Fire Protection)**

**Rice Solar Energy Project (09-AFC-10)**

**November 3, 2010**

STATE OF CALIFORNIA

Energy Resources  
Conservation and Development Commission

In the Matter of:

Application For Certification for the  
RICE SOLAR ENERGY PROJECT

**DOCKET NO. 09-AFC-10**

**DECLARATION OF  
JOHN SNELL**

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I, John Snell, declare as follows:

1. I am presently employed by Aurora Consulting, Inc., serving as president of the company.
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 Supplemental Rebuttal testimony relating to Worker Safety and Fire Protection for the Rice Solar Energy Project (California Energy Commission Docket Number 09-AFC-10).
4. It is my professional opinion that the attached prepared Supplemental Rebuttal 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 Supplemental Rebuttal 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 November 3, 2010.

- Original signed

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John Snell

STATE OF CALIFORNIA

Energy Resources  
Conservation and Development Commission

In the Matter of:

Application For Certification for the  
RICE SOLAR ENERGY PROJECT

**DOCKET NO. 09-AFC-10**

**DECLARATION OF  
WESLEY ALSTON**

I, Wesley Alston, declare as follows:

1. I am presently employed by Aurora Consulting, Inc., serving as president of the company.
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 Supplemental Rebuttal testimony relating to Worker Safety and Fire Protection for the Rice Solar Energy Project (California Energy Commission Docket Number 09-AFC-10).
4. It is my professional opinion that the attached prepared Supplemental Rebuttal 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 Supplemental Rebuttal 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 November 3, 2010.

- Original signed

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Wesley Alston

**RICE SOLAR ENERGY PROJECT  
SUPPLEMENTAL REBUTTAL TESTIMONY  
WORKER SAFETY AND FIRE PROTECTION  
RESPONSE TO RCFD OCTOBER 27, 2010 LETTER**

I. Name(s): John Snell and Wesley Alston

II. Purpose:

Our Supplemental Rebuttal testimony addresses the issues raised by the Riverside County Fire Department (RCFD) letter to the Commission dated October 27, 2010. The Committee received this letter into evidence on October 29, 2010 for the Rice Solar Energy Project (09-AFC-10) and allowed this Supplement Rebuttal Testimony in response.

III. Qualifications:

**John Snell:** I am presently employed at Aurora Consulting, Inc., and have been for the past 16 years and am presently the President of that organization. I am a Professional Engineer in Civil Engineering and I have over 15 years of experience in the field of Worker Safety and Fire Protection. I prepared or assisted in the preparation of the Fire Needs Assessment for the Rice Solar Energy Project. A detailed description of my qualifications is contained in the resume previously submitted with my Opening Testimony.

Mr. Snell, of Aurora Consulting, has over 30 years of professional consulting experience in Southern California real estate development including services related to project management, civil engineering, entitlement, and planning and design for a wide range of projects. These have ranged from small retail to large industrial projects as well as multi-family developments to large master planned communities. In addition, Mr. Snell has managed the preparation of extensive technical studies consisting of fire mitigation plans addressing wildland/development interface zones and fuel modification zones, traffic impact analyses, hydrology and water quality assessments, and water and sewer capacity studies.

Mr. Snell also currently serves by appointment as a Riverside County Planning Commissioner, a position he has held since 1994. Mr. Snell has provided leadership related to many County Planning decisions that have occurred within Riverside County. In his role as a Planning Commissioner, Mr. Snell has worked closely with all County agencies and has developed close working relationships with their executive management. In his capacity as a Planning Commissioner, Mr. Snell regularly negotiates for the benefit of the County with project applicants and their consultants and regularly interprets County Ordinances and policies. On occasion, he advocates for projects with the County in the event that circumstances have created a controversial or inequitable impact, but has only done so on projects outside his district.

**Wes Alston:** I am presently employed at Pacific Development Solutions Group, and have been for the past 8 years and am presently a principal consultant with that organization. I hold a Bachelor of Science Degree in Engineering and I have over 40 years of experience in the field of Worker Safety and Fire Protection. I prepared or assisted in the preparation of the Fire Needs Assessment for the Rice Solar Energy Project. A detailed description of my qualifications is contained in the resume attached to my Opening Testimony.

Mr. Alston of PDSG has unique credentials related to the analysis of fire protection services in Riverside County, abundantly qualifying him to prepare the FNA for the Rice Solar Energy Project (RSEP). In addition to his current consulting practice which provides fire compliance and fire protection analysis services to the public and private sector, he has served in both an administrative capacity and at the Staff level for the Riverside County Fire Department (RCFD) as well as for the State of California Department of Forestry and Fire Protection (CAL FIRE). During his 31-year tenure with RCFD/CAL FIRE, he served in the following positions: RCFD Deputy Fire Chief for four years, during which he was assigned as City of Moreno Valley Fire Chief; City of Moreno Valley Battalion Chief/Fire Marshal for three years; and Fire Captain Specialist for 15 years. Mr. Alston was instrumental in the preparation of the *Riverside County Fire Protection and Emergency Medical Master Plan* adopted by the County Board of Supervisors in 1987 and the corresponding amendments to the *Riverside County Fire Ordinance*. These documents are still in effect today.

Mr. Alston has a working knowledge of the 2007 California Fire Code and the County Ordinances related to the 2007 California Fire Code, building codes, and the use, storage and disposal of hazardous materials. In addition, he has knowledge and expertise in the National Fire Protection Association (NFPA) Codes and Standards, including NFPA Code 30a, NFPA 1006 Standard for Technical Rescuer Professional Qualifications, and NFPA 1670 Standard on Operations and Training for Technical Search and Rescue Incidents.

#### IV. Opinion and Conclusions:

We have reviewed the letter from Captain Jason Neuman, Riverside County Fire Department dated October 27, 2010 and offer the following responses.

It is important to note that the RCFD has claimed that the RSEP will result in significant direct and cumulative impacts on its ability to provide service. Staff and RCFD have agreed that the RCFD has the current capability, equipment and training to respond to any foreseeable incident at the RSEP Site and therefore the impacts identified do not include those related to the capability or capacity to provide adequate response. Instead the RCFD claims that if the RCFD does provide a response, due to the remoteness of the RSEP site, such response would cause draw down that would require backfilling with other resources it currently does not have. This is the sole basis for the RCFD's request for mitigation funding. The Revised Fire Needs Assessment

(Revised FNA) demonstrates clearly that if the Committee adopts the Revised FNA recommendations during construction and ongoing operation of the RSEP workers would be protected more effectively than if the RCFD was required to produce a response. The recommendations of the Revised FNA would avoid any potential response by the RCFD for emergency medical services and technical rescue.

The California Environmental Quality Act (CEQA) and common sense dictate that, if possible, potential impacts be avoided rather than mitigated. The Revised FNA provides recommended on-site measures that accomplish that goal. By reducing the incidents that would otherwise require a RCFD response, draw down of their resources would be avoided. Regardless of whether or not the recommended on-site measures are implemented, the few calls anticipated when considered with the very low utilization of the workload capacity at the three RCFD fire stations closest to the RSEP site, clearly show that no significant direct or cumulative impacts would occur. The Committee should note that all parties to the proceeding and the RCFD agree that responding quicker to an injured employee would be better in all circumstances rather than responding later. Staff also agreed that having emergency response capabilities on site would better protect workers.

In general, the comments provided by the RCFD in their letter do not provide any analysis or facts that substantiate their dispute of the conclusions of the Revised Fire Needs Assessment (Revised FNA) regarding the potential impacts of the RSEP related to fire protection services, emergency medical services, and technical rescue. Similarly, there are no facts provided by the RCFD that would substantiate its allegations that the Revised FNA contains any bias. In addition, the RCFD's request that the CEC staff "reinstate the original cost figures reflected in the initial matrix docketed August 4<sup>th</sup> 2010" is not based on any factual evidence regarding the direct or cumulative impacts repeatedly stated in the letter. In fact, the requested fee amount seems to arbitrarily change without supporting data and analysis. Further, this request by the RCFD is in direct conflict with the analysis and conclusions provided by the California Energy Commission (CEC) Staff in the Worker Safety and Fire Protection Section of the October 11, 2010 Staff Assessment/Draft Environmental Impact Statement (SA/DEIS).

We are of the opinion that there is no justification for the payment of the requested RCFD capital costs or annual payment to the RCFD based on two facts:

- The analysis provided in the Revised FNA concludes that the RSEP would have a less than significant impact on the RCFD related to the provision of fire protection services, emergency medical services, and technical rescue; and
- Although no significant impact was identified, the payment of fees for capital costs or annual operational costs to the RCFD would not result in improvement in response time and, therefore, would not contribute to worker health and safety or result in any discernable public benefit as the RCFD has failed to identify any specific measure, capital projects, equipment, or staffing that would be constructed, purchased, hired, or trained as a result of the payment of fees.

The Revised FNA recommends that Rice Solar Energy, LLC (RSE) implement specific measures to address hazards, minimize risks to worker health and safety, and provide on-site resources for emergency medical services and technical rescue to ensure worker health and safety and reduce the need for these services by the RCFD. This would result in the provision of an immediate response by an on-site Riverside County Emergency Medical Service (RCEMS) County certified provider to an incident on the RSEP site that required advanced life support and immediate transport to a hospital, either by on-site ambulance or by requesting an air ambulance. In addition, on-site employees/construction and maintenance contractors with National Fire Protection Association (NFPA) 1670 and 2006 level of training would be located on-site to provide an immediate response in the event of a technical rescue situation during construction or maintenance activities that create such risks. The need for technical rescue personnel and resources is required only when the risk for rescue occurs. For instance, when performing maintenance in a confined space, or cleaning the solar receiver at the top of the tower, some of the rescue capability will be provided by on-site staff, such as confined space rescue, which is a skill for which power plant staff is commonly trained and certified. Other rescue needs, such as a high angle rescue team, will be provided by a third party contractor who is doing the work that creates the risk and only when such work is occurring. This will be the case during both construction and operations.

In contrast, a response only provided by the RCFD under a best-case scenario (available engine company and no traffic) would result in the potential for an hour response time for the arrival of an engine company and emergency medical services, at which time the incident commander would determine if transportation is required or if the patient can be treated on-site. This would result in an unacceptable level of risk to worker health and safety. In the event of a technical rescue situation, a RCFD technical rescue team, the closest of which would be located in Indio, would have a potential response time of more than 3 hours after the incident commander determines what type of rescue service would be needed. This would result in a potential minimum total response time of more than 4 hours, which far exceeds the NFPA standard of responding within 5 minutes. Based on this, it can only be concluded that the protection of the worker safety at the RSEP would best be served by the provision of on-site resources as defined in the specific measures recommended in the revised FNA.

The following provides the verbatim comments from the RCFD in their letter dated October 27, 2010 followed by a response prepared by PDSG and Aurora Consulting.

### **Comment 1**

*After reviewing the Fire Needs Assessment for the Rice Solar Plant Project, the Riverside County Fire Department (RCFD) does not support the proposal from the Pacific Development Solutions Group. There are a number of areas that require further evaluation to support the applicants justification for a "No Response" from the Riverside County Fire Department. In addition, there are a number of pre-and post-incident reporting procedures that are Federal/State mandated and shall be completed by the Authority Having Jurisdiction. The documentation and reporting process is*



*accomplished through a coordinated effort and is the responsibility of the Incident Commander.*

### **Response to Comment 1**

This comment does not provide any analysis or facts that support the RCFD's statement that "There are a number of areas that require further evaluation to support the applicants justification for a "No Response" from the Riverside County Fire Department." The scope and intent of the Revised FNA was to provide an analysis of the potential impacts related to the demand for fire protection or other emergency services provided by the RCFD. The conclusions provided in the Revised FNA were based on:

- research regarding the applicable federal, State, and local laws, ordinances, regulations, and standards (LORS) related to worker safety and fire protection services;
- an analysis of the fire protection systems and Safety and Health Programs identified by RSE as a part of the Application for Certification (AFC) and augmented by supplemental project description information provided during the course of the permitting process;
- the identification of potential risks and hazards during construction activities and the ongoing operation of the RSEP;
- an evaluation of RCFD resources utilizing information from the *Riverside County Fire Department Strategic Plan 2009-2029*, the *Riverside County Fire Department/CAL FIRE 2009 Yearly Emergency Incident Statistics* report, and the *Riverside County Fire Protection and Emergency Medical Master Plan*; and
- an analysis utilizing quantified data including the traffic data from the California Department of Transportation (Caltrans), accident data from the California Highway Patrol, and workload data from the RCFD including annual emergency incident statistics for 2009 (the most recent year documented) for the three RCFD fire stations closest to the project site.

The RCFD's comment implies an exaggerated role in the reporting procedures related to potential incidents at the RSEP. As discussed below, incidents that involve worker injury must be reported by the employer regardless of the role of the RCFD.

Related to pre- and post-incident reporting procedures, pages 2-1 through 2-4 in Section 2.0, Applicable Fire Protection Standards, of the Revised FNA identifies the federal and State laws, ordinances, regulations, and standards (LORS) related to safety and fire protection services, including Title 8 California Code of Regulations which incorporates the California Department of Occupational Safety and Health (CAL/OSHA) Regulations. Chapter 3.2. California Occupational Safety and Health Regulations, Subchapter 2. Regulations of the Division of Occupational Safety and Health, Article 3. Reporting Work-Connected Injuries, Section 342. Reporting Work-Connected Fatalities and Serious Injuries provides the following:

- (a) Every employer shall report immediately by telephone or telegraph to the nearest District Office of the Division of Occupational Safety and

Health any serious injury or illness, or death, of an employee occurring in a place of employment or in connection with any employment.

Immediately means as soon as practically possible but no longer than 8 hours after the employer knows or with diligent inquiry would have known of the death or serious injury or illness. If the employer can demonstrate that exigent circumstances exist, the time frame for the report may be made longer than 24 hours after the incident.

Serious injury or illness is defined in section 330(h), Title 8, California Administrative Code.

(b) Whenever a state, county, or local fire or police agency is called to an accident involving an employee covered in this part in which a serious injury, or illness, or death occurs, the nearest office of the Division of Occupational Safety and Health shall be notified by telephone immediately by the responding agency.

(d) The reporting in (a) and (b) above, is in addition to any other reports required by law and may be made by any person authorized by the employers, state, county, or local agencies to make such reports.

Therefore, although the documentation and reporting process is accomplished through a coordinated effort with CAL/OSHA, the party responsible for the documentation and reporting process would depend on the incident and whether or not it is addressed by RSEP's on-site resources or a responding agency. In the event that the RSEP responds to an incident with on-site capabilities, the reporting responsibility for medical emergencies and incidents involving worker injuries would be the sole responsibility of the employer, RSE.

In the event of a fire or hazardous materials incident responded to by the RSEP on-site resources, the post-incident reporting procedures would occur by the RCFD on a non-urgency basis consistent with the provisions of County Ordinance No. 787 which allows for cost recovery per incident. Therefore, the use of any RCFD staff time for reporting procedures could be recovered from RSE consistent with the provisions of the Ordinance.

In either case, the RCFD has not substantiated how conducting such reporting would result in a significant impact. Unless the RCFD does not have the capacity or training to conduct such reporting or such post incident reporting would cause draw down of resources requiring backfill, there is simply no impact. The Staff Assessment clearly shows that the RCFD has such training and the analysis of the underutilization of Stations 43, 45, and 49 (See Response to Comment 6 below) indicates the RCFD has the capacity to conduct such post incident reporting.

## **Comment 2**

*The Fire Needs Assessment is inaccurate and incomplete and does not support the Applicant's proposal to eliminate the need for a response from the Riverside County Fire Department. There are numerous assumptions, proposals and no factual data to support the Fire Needs Assessment.*

## **Response to Comment 2**

This comment does not provide any analysis or facts that support this allegation. Response to Comment 1 above provides a discussion of the scope and intent of the Revised FNA and the analysis conducted based on extensive research, the project design features and Safety and Health Programs for the RSEP defined in the AFC, and the factual data from State and County resources, including the RCFD, that were used to determine the conclusions in the Revised FNA. It should be noted that the RCFD has produced no evidence or support for its own opinions. The Revised FNA is the only independent and statistically supported analysis of the specific impacts to the RCFD in the CEC evidentiary record.

## **Comment 3**

*The Strategic Planning Bureau has identified cumulative and potential impacts to the department's level of service and has established operational plans to deal with emergency incidents. The revised document does not address contingency plans in the event whether or not onsite or offsite resources are available for response. Therefore, a response would revert back the Authority Having Jurisdiction and the Riverside County Fire Department would be required to provide a response. The Fire Needs Assessment only touches the surface of the identified impacts. The document reviewed by the (RCFD), dated October 25, 2010 does not provide an accurate detailed analysis or conclusion to support their findings.*

## **Response to Comment 3**

This broad allegation is not supported by any facts, analysis, or supporting documentation. If the RCFD has performed an analysis of why the RSEP would contribute to a cumulative impact, such evidence has not been presented. We believe such an analysis has not been performed and instead, the RCFD has assumed impacts without attempting to quantify if any such impacts are attributable to the RSEP. Similarly, the RCFD has not produced any operational plan on how they would utilize any fee payments to mitigate these assumed impacts or otherwise address worker safety at the RSEP.

Additionally, the Riverside County Emergency Medical Services (RCEMS) Agency provided three emails to PDSG on October 27, 2010 regarding correspondence on their Policy 5130 discussed in a letter to the RCFD on October 27, 2010. The emails clarified comments made by RCEMS regarding the activation of the 9-1-1 system. The emails indicated that the 9-1-1 system would not need to be activated if an approved County certified emergency medical services provider with equipment and supplies is under contract to RSE and located on-site during construction activities and the available

during operation of the RSEP. This would eliminate the requirement for the response of an RCFD engine and ambulance that occurs with the activation of the 9-1-1 system. The Revised FNA recommended specific measures that reflected this direction provided by the RCEMS.

Response to Comment 1 above provides a discussion of the scope and intent of the Revised FNA and the analysis conducted to determine the conclusions provided. The Revised FNA is the only analysis of the specific potential direct and cumulative impacts of the RSEP to the RCFD in the CEC record. It is clear from the evidence presented in this response document, the Revised FNA, and our previous submitted and oral testimony that no direct or cumulative impacts would occur.

#### **Comment 4**

*In addition, the Fire Needs Assessment does not appear to follow the Laws, Ordinances, Regulations and Standards (LORS) of the County of Riverside or the Operational Policies of the Riverside County Fire Department. The Fire Needs Assessment references a limited number of (LORS). The Riverside County Fire Department has Local, State and Federal mandates for reporting that will initiate a response from the local Authority Having Jurisdiction.*

#### **Response to Comment 4**

Pages 2-1 through 2-4 in Section 2.0, Applicable Fire Protection Standards, of the Revised FNA identifies the federal, State, and local laws, ordinances, regulations, and standards (LORS) related to safety and fire protection services. The RCFD has not identified a single LORS that is missing from the Revised FNA and, without such support, the Committee should disregard this allegation.

Refer to Response to Comment 1 for a discussion of the role of the RCFD related to reporting procedures at the RSEP.

#### **Comment 5**

*The Riverside County Fire Department is requesting staff to reinstate the original cost figures reflected in the initial matrix docketed August 4<sup>th</sup>, 2010.*

OR

*The Riverside County Fire Department is requesting a third party review to analyze the impacts and provide a complete, detailed comprehensive Fire Needs Assessment.*

#### **Response to Comment 5**

As discussed above, the RCFD's request that the CEC Staff "reinstate the original cost figures reflected in the initial matrix docketed August 4<sup>th</sup> 2010" is not based on any factual evidence regarding the project-specific or cumulative impacts of the RSEP. If this recommendation is followed, the Committee would impose the same fees for the RSEP as for all of the I-10 solar projects that use millions of gallons of hazardous and

flammable HTF in the solar fields. The requested fee amount does not reflect the conclusions of the analysis of the Revised FNA and the California Energy Commission (CEC) Staff in the Worker Safety and Fire Protection Section of the October 11, 2010 Staff Assessment/Draft Environmental Impact Statement (SA/DEIS). There is no justification for the payment of the requested RCFD capital costs or annual payment to the RCFD based on two facts: 1) the analysis provided in the Revised FNA concludes that the RSEP would have a less than significant impact on the RCFD related to the provision of fire protection services, emergency medical services, and technical rescue; and 2) although no significant impact was identified, the payment of fees for capital costs or annual operational costs to the RCFD would not result in improvement in response time and, therefore, would not contribute to worker health and safety or result in any discernable public benefit as the RCFD has failed to identify any specific measure, capital projects, equipment, or staffing that would be constructed, purchased, hired, or trained as a result of the payment of fees.

There has been no evidence by the RCFD or any other party that the Revised FNA is not an adequate, unbiased third party review of the potential impacts of the RSEP on the provision of fire protection services by the RCFD.

#### **Comment 6**

*The proposed project will have a cumulative adverse impact on the Fire Department's ability to provide an acceptable level of service. These impacts include an increased number of emergency and public service calls due to the increased presence of structures, traffic and population.*

#### **Response to Comment 6**

The Revised FNA evaluated whether the addition of the RSEP to the RCFD service area would result in an increase in responses from the RCFD service area due to vehicle accidents on the roadways that may occur as a result of the additional daily trips generated by RSEP construction workers. Table 3-5 on page 3-22 in Section 3.0, Hazards and Risks of the Project, of the Revised FNA concluded there would be the potential for two additional vehicle accidents with injuries to occur per year on the surrounding roadways in Riverside County. An accident with injuries may require a response from the RCFD. In addition, during the ongoing operation of the RSEP, there simply is no evidence that the increased number of permanent workers will result in an increase in the number of vehicle accidents on the surrounding roadways in Riverside County. The addition of the RSEP to the RCFD service area would result in an insignificant increase in responses from the RCFD due to vehicle accidents on the roadways in the project vicinity. Therefore, no significant direct or cumulative impacts would occur.

The Federal Occupational Safety and Health Administration (OSHA) records injury rates for job classifications throughout the United States. The most recent data of California injury rates is for the year 2008. Using the peak number of equivalent full time staff for the RSEP, we can apply the incident rate for minor injuries, injuries that result in missed days of work (IMD), and injuries that result in job transfer or restrictions (IMR) and arrive



at the estimated number of injuries based on industry rates of incidents. The RESP would have a peak construction work force of 438 equivalent full time staff and would average 47 equivalent full time staff for operations. For the construction industry in California, other recordable injuries (minor injuries) occur at a rate of 1.7 injuries per year per 100 equivalent full time staff. For IMD, the incident rate is 2.0 injuries per year per 100 equivalent full time staff. For IMR, the incident rate is 1.2 injuries per year per 100 equivalent full time staff. During construction activities for the RSEP, the expected minor injuries per year is seven, the expected number of IMD per year is nine, and the expected number of IMR per year is five. The minor injuries would be treated on-site by the advance life support service provider, with the IMD and IMR cases expected to require stabilization on-site by the advance life support service provider and then transported by private vehicle, ambulance, or air ambulance to the hospital.

As indicated in Table 5-2 on page 5-3 in Section 5.0, Riverside County Fire Department Resources, of the Revised FNA, the three RCFD fire stations closest to the RSEP site responded to 615 medical incidents during 2009 (Stations 43, 45 and 49). In addition, they responded to a total of 86 residential fires, other fires, commercial fires, and wildland fires in 2009. The potential of fires at the RSEP could be estimated using the ratio of medical incidents to fire incidents for these stations and apply that to the estimated IMD added to the estimated IMR for the RSEP. The IMR and IMD injuries are expected to be an injury of such degree that the RCFD would normally be required to respond and, therefore, would be appropriate to use in this estimation. When the 86 fire responses are divided by the 615 medical responses and that result is multiplied by the 14 injuries that the RCFD would normally respond to, the resultant estimated number of fires would be two during construction. Using this same methodology which is conservative, the RSEP would not be expected to have fires during operation.

With the implementation of the recommendations in the Revised FNA, the RCFD can anticipate responding to two additional off-site vehicle accidents and two on-site fires during construction, for a total number of four emergency responses per year during the construction activities for the RSEP. The three RCFD fire stations closest to the RSEP site currently respond to 1,092 calls per year, with a capacity to respond to 6,570 calls per year, leaving an available capacity of 5,478. The additional need to respond to four calls per year during construction would have a less than significant impact on the RCFD. During the ongoing operation of the RSEP, the staffing will be reduced from a peak during construction of 438 equivalent full time staff to 47 equivalent full time staff. This reduction would result in fewer responses from the RCFD, which would result in an impact that is less than significant.

To address cumulative impacts, the existing call volume for the three responding stations and the anticipated increase in response volume needs to be estimated. These increases would come from the RSEP and the three solar projects along Interstate 10 (I-10) freeway in Eastern Riverside County, the Blythe, Palen, and Genesis projects. The emergency responses for these projects would consist of increases in off-site vehicle accidents, emergency medical responses, fire fighting, and rescue.

The other solar projects would rely on access roads that currently have very low traffic levels and no accident data is available. For the purposes of this analysis, the cumulative accident rate for the RSEP would be applied to the average daily traffic (ADT) generated by the solar projects to obtain an expected number of vehicle accidents that would have injuries which the RCFD would have to respond to. The cumulative accident rate for the RSEP is 0.00358 accidents per year per ADT. The construction ADT for Blythe is 1,220 (Source: Blythe AFC Section 5.13 Traffic, page 5.13-13, August 2009) and the expected number of accidents with injuries is four per year during construction. The construction ADT for Genesis is 1,324 (Source: Genesis AFC Section 5.11 Traffic and Transportation, page 5.11-6, August 2009) and the expected number of accidents with injuries is five per year during construction. The ADT during construction for Palen is 1,162 (Source: Palen AFC Section 5.13 Traffic and Transportation, page 5.13-12, August 2009) and the number of accidents with injuries is four per year during construction.

The other projects would also have a need for response from RCFD for injuries that cannot be addressed with simple first aid. Using the same methodology as earlier described, the number of IMD and IMR for each of the projects can be calculated. Blythe is anticipated to have an average of 604 workers during construction (Source: Blythe AFC Section 2.0 Project Description, Section 2.5.7 Construction of Generating Facilities) and can anticipate 12 IMD and 7 IMR accidents per year, for a total of 19 injuries per year that would require a response from the RCFD. Genesis is anticipating having an average of 650 workers (Source: Genesis AFC Section 3.7 Project Description, Section 3.7.1) during construction and can anticipate 13 IMD per year and 8 IMR per year during construction, for a total of 21 injuries per year during construction that would require an emergency response from the RCFD. Palen is anticipating having an average of 566 workers during construction (Source: Palen AFC Section 2.5 Project Description, Section 2.5.7) and can anticipate 11 IMD per year and 7 IMR per year during construction, for a total of 18 injuries per year during construction that would require an emergency response from the RCFD.

The other solar projects would also require a response from RCFD in the event of a fire. This can be calculated using the same methodology outlined above and the total number of injuries on all three projects that would require RCFD response and multiply that by the ratio of 86 fire responses to 615 medical responses. The three projects would have an estimated annual total of 58 construction related injuries requiring a response from the RCFD, which would result in eight estimated expected fire incidents per year during construction.

Rescue responses would be expected to be some number much smaller than the number of fires, and for this calculation that number is considered insignificant.

The total number of responses by the RCFD that are anticipated during construction are comprised of the off-site vehicle accidents with injuries, on-site injuries, and on-site fires. Adding these up, there would be an estimated total of 79 responses required by

the RCFD on an emergency basis. Combining that with the number of responses from the RSEP, there would be an estimated total of 83 emergency responses.

The cumulative impacts of the RSEP and the other three solar projects would be based on the emergency response needs of these projects and the available capacity of the responding stations. As described above, the three responding stations have an available capacity to respond to 5,478 calls per year. The total response needs of the three plants, as a worst case assuming construction for all four projects is concurrent, would be 83 calls, which would leave a total of 5,395 calls as unused capacity. Therefore, no significant cumulative impacts would occur. It should be noted that the Palen Solar Power Project's conditions require the payment to the RCFD an upfront amount of \$850,000 and annual payments of \$375,000 (Source: Palen Solar Power Project Revised Staff Assessment, Worker Safety and Fire Protection, page C.14-41). The Blythe Solar Power Project will pay an upfront amount of \$850,000 and annual payments of \$375,000 as mitigation for impacts to the RCFD (Source: Blythe Solar Power Project Final Decision page 187), which is contemplated to be for the construction, equipping, and staffing of a new fire station. The Genesis Solar Energy Project will pay an upfront amount of \$850,000 and annual payments of \$375,000 to the RCFD (Source: Genesis Final Decision,, pages Worker Safety and Fire Protection 13 and 14). None of these projects will pay the County Development Impact Fee (DIF) because they are on BLM land and the funding is contemplated to be used for the construction, equipping, and staffing of a new fire station near these projects. It should be noted that these three solar projects are in relatively close proximity to each other and they would directly benefit from any construction, equipping, or staffing of fire stations along the I-10 freeway corridor. However, due to its remote location, the RSEP would not benefit from these measures and would still have the need for on-site measures to address worker health and safety.

Since the completion of the Staff Assessments for these three solar projects, it has been brought to our attention that the RCFD has no plans for the construction of a new station and has not disclosed any plans for the use of the fees to be paid by the three solar projects along the I-10 corridor.

### **Comment 7**

*With any additional construction within a response area, a "cumulative" increase in requests for service will add to the Fire Department's ability to provide adequate service. The proposed project identifies approximately 1, 410 acres of land, the construction of 17,500 tracking heliostats, and a receiving tower with an overall height of 653 feet. The proposed commercial development at build out, will have a significant impact on the fire department's ability to provide an adequate level of service.*

### **Response to Comment 7**

Refer to Response to Comment 6 above.

As evidenced by correspondence from the Riverside County Planning Department, the RSEP is considered to be an industrial project not a commercial project. The Planning



Staff use the industrial standards when evaluating the RSEP parking requirements and the use as industrial when evaluating the compatibility with the Riverside County General Plan and Zoning Ordinance (Source: Riverside County Letter to John Kessler, dated August 31, 2010).

The RSEP is located on private property within the jurisdictional boundaries of Riverside County. As such, the RSEP would be required to pay property taxes, currently estimated to be \$209,000 annually. A portion of this property tax, the exact amount of which is not yet determined, would be dedicated to the RCFD and collected as Structure Fire Protection Tax. In addition, if the RSEP were not under the jurisdiction of the CEC, the RSEP would be subject to the Riverside County Development Impact Fee (DIF) Program. If the CEC conditions the RSEP to comply with the County DIF Program, the project would be subject to a fee of \$25,931 per acre, of which \$7,307 would be dedicated for use by the RCFD. This fee would be applied to between 10 and 20 acres, for a total assessment of between \$259,310 and \$518,620. The RCFD would receive a direct benefit of between \$73,070 and \$146,140 from a DIF payment. The Riverside County DIF Program was created to collect fees to mitigate all anticipated impacts from new development in Riverside County.

#### **Comment 8**

*Based on the adopted Riverside County Fire Protection Master Plan, the Category IV - Outlying, specifies that a full alarm assignment be operating on the fire ground within 30 minutes and the fire station to be located within 8 miles. The primary station serving this area would not be within the 8 mile objective. These times are approximate based on conditions and currently do not meet the Outlying Land Use protection goals.*

#### **Response to Comment 8**

Page 5-4 in Section 5.0, Riverside County Fire Department Resources, and pages 6-5 and 6-6 in Section 6.0, Fire Protection Services Impact Analysis, of the Revised FNA provides an analysis of the consistency of the RSEP with the Master Plan goals and objectives for the “Category IV – Outlying” land use category.

The *Riverside County Fire Protection and Emergency Medical Master Plan* (Master Plan) and NFPA 1710 are a benchmark for most common responses and a platform for developing the appropriate plan for the deployment of resources for fires in higher hazard occupancies or more complex incidents. While both provide standards seek to achieve a 90 percent performance standard for response time and the Master Plan tries to have a full alarm at an incident 80 percent of the time, it is recognized that, considering the size of Riverside County, this cannot be accomplished. In addition, in order for the RCFD to meet the 8-mile objective of the Master Plan, the fire stations throughout the County would need to be provided 16 miles from each other. The three fire stations closest to the RSEP site, Station No. 49 (Lake Tamarisk), Station No. 43 (Blythe), and Station No. 45 (Blythe Air Base), not located consistent with the 8-mile objective. Exceeding this guideline does not, in itself, create a direct or cumulative impact. In fact, a single new fire station along the I-10 corridor could not satisfy this requirement for all three of the I-10 solar projects either as they are geographically

located such that more than one fire station would be required to maintain the 8 mile goal. Yet the RCFD is not requiring these projects to fund the construction of these additional stations.

Neither the Master Plan or NFPA 1710 prohibit the use of systems, methods, or approaches of equivalent or superior performance to those prescribed by the Master Plan or NFPA 1710 provided that technical documentation is submitted to demonstrate equivalency. The final detailed technical documentation of the equivalency of the RSEP's on-site resources would be provided to the Designated Building Official prior to the start of building construction.

### **Comment 9**

*The California Fire Code outlines fire protection standards for the safety, health, and welfare of the public, the citizens and Firefighters of Riverside County. These standards will be enforced by the Fire Chief.*

### **Response to Comment 9**

We are in agreement that the California Fire Code outlines the safety, health, and welfare of the public, citizens, and firefighters of Riverside County. Page 2-2 in Section 2.0, Applicable Fire Protection Standards, of the Revised FNA identifies the applicable Riverside County Ordinance that adopts the 2007 edition of the California Fire Code. The standards defined in the California Fire Code, with county-specific modifications as adopted by Riverside County Ordinance No. 787, should be enforced by the Fire Chief related to the provision of services by the RCFD.

### **Conclusions and Recommendations**

The Revised FNA recommends the following measures to address worker health and safety and fire protection services during construction and operation of the RSEP:

#### **Recommended Measures During Construction of the RSEP**

- Due to the remote location of the RSEP site, the applicant shall provide the following on-site: 1) during any construction activities, the applicant shall have a contract with a Riverside County Emergency Medical Service (RCEMS) certified company to provide Advance Life Support with equipment and supplies; and 2) during any construction activities, the applicant shall have on-site a Basic Life Support Ambulance with a California certified driver for use during medical emergency events.
- Due to the remote location of the RSEP site, during construction of the RSEP, the applicant shall contract with an air medical service to respond to a service request from an on-site responder which would be a RCEMS certified company. Since the RSEP is located on private property and the on-site responder would

be certified by Riverside County, the request for air medical service can be called directly without going through the County's dispatch system.

- During construction activities that require the type of situations addressed by California Department of Safety and Health (Cal/OSHA) Standards Part 1910, Occupational Safety and Health Administration Safety and Health Regulations, the contractor shall be required to provide evidence that a rescue team with NFPA 1670 level of training (Standard on Operations and Training for Technical Search and Rescue Incidents) will be available on-site for the extent of the construction activity.

#### Recommended Measures During Operation of the RSEP

- Due to the remote location of the RSEP site, the applicant shall provide the following on-site: during ongoing operation, the applicant shall have a contract with a RCEMS certified company to provide an Advance Life Support system with equipment and supplies.
- Due to the remote location of the RSEP site, during operation of the RSEP, the applicant shall contract with an air medical service to respond to a service request from an on-site responder which would be a RCEMS certified company. Since the RSEP is located on private property and the on-site responder would be certified by Riverside County, the request for air medical service can be called directly without going through the County's dispatch system.
- During operation, the daily on-site operational and maintenance personnel for the Central Receiver Tower shall be required to have NFPA 1006 level of training (Standard for Technical Rescuer Professional Qualifications).
- During operation, the contractor to perform the annual maintenance for the Central Receiver Tower and other areas that require work in confined space shall be required to provide evidence that their on-site personnel have NFPA 1670 level of training (Standard on Operations and Training for Technical Search and Rescue Incidents).
- The water trucks used to spray ionized water for the maintenance of the solar array of heliostats shall be available for use on wildland fires occurring within the RSEP site boundaries.



BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT  
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**APPLICATION FOR CERTIFICATION  
FOR THE *RICE SOLAR ENERGY POWER  
PLANT PROJECT***

**Docket No. 09-AFC-10**

***PROOF OF SERVICE***  
**(Revised 8/5/2010)**

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### DECLARATION OF SERVICE

I, Marie Mills, declare that on November 3, 2010, I served and filed copies of the attached **RICE SOLAR ENERGY LLC'S SUPPLEMENTAL REBUTTAL TESTIMONY: WORKER SAFETY & FIRE PROTECTION**, dated November 3, 2010. The original document, filed with the Docket Unit, is accompanied by a copy of the most recent Proof of Service list, located on the web page for this project at:  
[<http://www.energy.ca.gov/sitingcases/ricesolar>].

The documents have been sent to both the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission's Docket Unit, in the following manner:

*(Check all that Apply)*

#### FOR SERVICE TO ALL OTHER PARTIES:

☒ sent electronically to all email addresses on the Proof of Service list;

☐ by personal delivery;

☒ by delivering on this date, for mailing with the United States Postal Service with first-class postage thereon fully prepaid, to the name and address of the person served, for mailing that same day in the ordinary course of business; that the envelope was sealed and placed for collection and mailing on that date to those addresses **NOT** marked "email preferred."

**AND**

#### FOR FILING WITH THE ENERGY COMMISSION:

☒ sending an original paper copy and one electronic copy, mailed and emailed respectively, to the address below (*preferred method*);

**OR**

☐ depositing in the mail an original and 12 paper copies, as follows:

#### **CALIFORNIA ENERGY COMMISSION**

Attn: Docket No. **09-AFC-10**

1516 Ninth Street, MS-4

Sacramento, CA 95814-5512

[docket@energy.state.ca.us](mailto:docket@energy.state.ca.us)

I declare under penalty of perjury that the foregoing is true and correct, that I am employed in the county where this mailing occurred, and that I am over the age of 18 years and not a party to the proceeding.



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Marie Mills