

Starwood Power-Midway, LLC Peaking Project (06-AFC-10) Amendment No. 3

SUBMITTED TO THE CALIFORNIA ENERGY COMMISSION FEBRUARY 2009

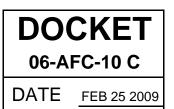


# SUBMITTED BY STARWOOD POWER-MIDWAY, LLC

#### WITH SUPPORT FROM

### URS

1615 MURRAY CANYON ROAD, SUITE 1000 San Diego, CA 92108 Tel: 619.294.9400 Fax: 619.293.7920



RECD. FEB 26 2009

February 25, 2009

Chris Davis Compliance Project Manager California Energy Commission 1516 Ninth Street Sacramento, CA 95814

Subject: Starwood Power-Midway, LLC Peaking Project Amendment (06-AFC-10), Amendment No. 3 URS Project No. 27656131.00900

Dear Mr. Davis:

On behalf of Starwood Power-Midway, LLC, URS Corporation Americas (URS) hereby submits Amendment No. 3 for the Starwood Power-Midway Project.

I certify under penalty of perjury that the foregoing is true, correct, and complete to the best of my knowledge.

Sincerely,

URS CORPORATION

augh Selh

Angela Leiba Project Manager

AL:ml

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# **EXECUTIVE SUMMARY**

Starwood Power-Midway, LLC hereby petitions for a modification to the California Energy Commission (CEC) NOISE-4 Condition of Certification contained in the CEC Final Commission Decision (CEC-800-2007-007-CMF) for the Starwood Power-Midway, LLC Peaking Project. Starwood Power-Midway, LLC is proposing a modification to the NOISE-4 Condition of Certification that includes an alteration to the community noise monitoring locations, and a reduction in the noise measurement duration of the Community Noise Survey.

The Starwood Power-Midway, LLC Peaking Project is a simple-cycle electric generating facility. The facility will utilize two (2) FT8-3 SwiftPac Combustion Turbine Generator (CTG) units installed in a simple-cycle power plant arrangement. The approved Midway Project is located on a 5.6 acre site within Fresno County, located adjacent to the Panoche Hills and east of the San Benito County line. It is approximately 50 miles west of the City of Fresno and approximately 2.0 miles east of Interstate 5 (I-5).

NOISE-4 Condition of Certification requires that the Project owner conduct a 25-hour continuous Community Noise Survey when the plant is operating at 90% or greater of rated capacity. NOISE-4 currently states that monitoring shall take place at two of the residential monitoring locations identified in the 2006 AFC; ML2 (located 1,600 feet west of the Project site), and ML3 (located 1,300 feet from the Project site), or an alternate location acceptable to the Compliance Project Manager.

The proposed modification to the NOISE-4 Condition of Certification includes monitoring at ML2 and an alternate monitoring location 400 feet from the site in lieu of monitoring at ML3. Additionally, it is proposed that the monitoring duration for the Community Noise Survey be reduced from 25 continuous hours to 4 continuous night-time hours during the night-time period.

The proposed modification to the NOISE-4 Condition of Certification is designed and structured to assure compliance with CEC Siting Regulations (California Code of Regulations [CCR] Title 20, Section 1769, Post Certification Amendments and Changes). This Amendment includes seven (7) sections that address specific requirements set forth by the CEC. Section 1 provides an overview of the proposed modification and review of the ownership of the Project, the necessity for the proposed modification, and the consistency of the modification with the Commission Decision certifying the facility. Section 2 provides a complete description of the proposed modification. Section 3 assesses the potential environmental effects of the proposed modification in terms of each environmental discipline area. This assessment indicates that the adoption of this Amendment will not result in any significant, unmitigated adverse environmental impacts. In addition, the Midway Project will continue to comply with all applicable laws, ordinances, regulations and standards (LORS). The findings contained in the Midway 2006 Application for Certification (AFC) and the CEC Conditions of Certifications contained in the January 2008 Final Commission Decision are still applicable to this Amendment. The proposed modification to the NOISE-4 Condition of Certification is located in Section 4.

# **SECTION**ONE

# SECTION 1 INTRODUCTION

#### 1.1 OVERVIEW OF AMENDMENT

Starwood Power-Midway, LLC hereby petitions for a modification to the NOISE-4 Condition of Certification for the Starwood Power-Midway, LLC Peaking Project. Starwood Power-Midway, LLC is proposing a modification to the NOISE-4 Condition of Certification that includes the removal of a community noise monitoring location, the use of an alternate monitoring location 400 feet from the site (in lieu of ML3) and a reduction in the noise measurement duration required for the Community Noise Survey. The Starwood Power-Midway, LLC Peaking Project certified by the CEC in January 2008 will be referred to in this document as "Midway" or the "Midway Project". The proposed modification to the NOISE-4 Condition of Certification for the Midway Project will be referred to in this document as the "proposed modification".

This Amendment contains all of the information that is required pursuant to the California Energy Commission's (CEC or Commission) Siting Regulations (California Code of Regulations [CCR] Title 20, Section 1769, Post Certification Amendments and Changes). The information necessary to fulfill the requirements of Section 1769 is contained in Sections 1.0 through 7.0 as summarized in Table 1-1.

Section 1769(a)(1) Requirement	Section(s) of Petition Fulfilling Requirement		
(A) A complete description of the proposed modifications, including new language for any conditions that will be affected.	Section 1.0 – Overview of Amendment; Explanation for Modifications; Section 2.0 – Description of Amendment; Section 4.0 – Proposed Modifications to the Conditions of Certification		
(B) A discussion of the necessity for the proposed modifications.	Section 1.3		
(C) If the modification is based on information that was known by the petitioner during the certification proceeding, an explanation why the issue was not raised at that time.	Section 1.3		
(D) If the modification is based on new information that changes or undermines the assumptions, rationale, findings, or other bases of the final decision, an explanation of why the change should be permitted.	Section 1.4		
(E) An analysis of the impacts the modification may have on the environment and proposed measures to mitigate any significant adverse impacts.	Section 3.0		
(F) A discussion of the impact of the modification on the facility's ability to comply with applicable laws, ordinances, regulations, and standards.	Section 3.0		
(G) A discussion of how the modification affects the public.	Section 5.0		

 Table 1-1

 Informational Requirements For Post-Certification Amendments And Changes



# Table 1-1 Informational Requirements For Post-Certification Amendments And Changes (Continued)

Section 1769(a)(1) Requirement	Section(s) of Petition Fulfilling Requirement
(H) A list of property owners potentially affected by the modification.	Section 6.0
(I) A discussion of the potential effect on nearby property owners, the public and the parties in the application proceedings.	Section 7.0

### 1.2 SUMMARY OF ENVIRONMENTAL IMPACTS

The CEC Siting Regulations require that an analysis be conducted to address the potential impact the proposed modification may have on the environment and proposed measures to mitigate any potentially significant adverse impacts (Title 20, CCR, Section 1769 [1][a][E]). The regulations also require a discussion of potential impacts the proposed modification may have on the facility's ability to comply with the applicable Laws, Ordinances, Regulations and Standards (LORS) (Section 1769 [1] [a][F]). Section 3.0 of this Amendment includes a discussion of potential environmental impacts associated with the proposed modification as well as a discussion of the proposed modification's consistency with applicable LORS. Section 3.0 concludes that there will be no significant environmental impacts associated with implementing the actions specified for the proposed modification and that the Midway Project will remain in compliance with all applicable LORS.

#### **1.3 EXPLANATION FOR MODIFICATION**

The CEC Siting Regulations require a discussion of whether the proposed modification to the Midway Project is based on information known by the Petitioner during the certification proceeding (Title 20, CCR, Sections 1769 [a][1][C]).

The NOISE-4 Condition of Certification as written in the CEC 2008 Final Commission Decision was necessary during the certification process because there were residences located nearby the Project site. NOISE-4 requires that noise monitoring take place at two of these residential locations, ML3 (located 1,300 feet from the Project site) and ML2 (located 1,600 feet west of the Project site). Since the certification of the Midway Project, it has been determined that ML3 has no direct line of sight to the Project site due to the presence of a large barn acting as a barrier. As a result, ML3 would be exposed to less Project operation noise, and therefore noise measurements taken at that location may not accurately reflect noise from the Project site. Therefore, ML2, and an alternate location, 400 feet from the Project site, would be used as the two noise monitoring locations for the Community Noise Survey.

NOISE-4 requires that the Community Noise Survey be conducted over a continuous 25-hour period, which can depict Plant noise over an entire day and compare it to pre-construction ambient noise conditions. As the Midway Project is a peaking plant, it will only be in operation during peak energy usage, which is generally consistent with daytime and evening hours (between the hours of 7:00am to

# **SECTION**ONE

10:00pm). As discussed further in Section 3.1 below, a four-hour continuous night-time noise survey (during the hours of 10:00pm and 7:00am) would be sufficient to gather the data required to show Project compliance with the Fresno County Noise Code and describe the character of Plant noise. Therefore, this Amendment proposes to modify the NOISE-4 Condition of Certification to adopt the abbreviated survey period.

The petitioner was not aware of the necessary modification to the NOISE-4 Condition of Certification during the certification process.

### 1.4 CONSISTENCY OF AMENDMENT WITH LICENSE

The CEC Siting Regulations also require a discussion of whether the modifications are based upon new information that changes or undermines the assumptions, rationale, findings, or bases of the final decision (Title 14, CCR Section 1769 [a][1][D]). If the Midway Project is no longer consistent with the certification, the Project must provide an explanation why the modification should be permitted.

The proposed modification to the NOISE-4 Condition of Certification for the Midway Project does not undermine the assumptions, rationale, findings, or other bases of the 2008 Final Commission Decision (CEC-800-2007-007-CMF).

# **SECTION**TWO

# SECTION 2 DESCRIPTION OF PROPOSED AMENDMENT

#### 2.1 STARWOOD POWER-MIDWAY, LLC PEAKING PROJECT

This section includes a complete description of the proposed modification to the NOISE-4 Condition of Certification for the Midway Project.

#### 2.2 SETTING

The Midway Project is located approximately 50 miles west of the City of Fresno and approximately 2 miles east of Interstate 5 (I-5). It is located within Fresno County adjacent to the Panoche Hills and east of the San Benito County line. It is a simple-cycle electric generating facility that includes two (2) FT8-3 SwiftPac Combustion Turbine Generator (CTG) units installed in a simple-cycle power plant arrangement. The gas turbines are equipped with a water injection system to reduce production of nitrous oxides (NO<sub>x</sub>), a selective catalytic reduction system (SCR) with 19% aqueous ammonia to further reduce NO<sub>x</sub> emissions, and an oxidation catalyst to reduce carbon monoxide (CO) emissions. The nominal plant power rating is 120 megawatts (MW).

## 2.3 DESCRIPTION OF PROPOSED MODIFICATION

The proposed modification includes a revision to the NOISE-4 Condition of Certification contained in the CEC Final Commission Decision (CEC-800-2007-007-CMF). In summary, the proposed modification to the NOISE-4 Condition of Certification includes monitoring at ML2 and an alternate monitoring location 400 feet from the site in lieu of monitoring at ML3. Additionally, it is proposed that the monitoring duration for the Community Noise Survey be reduced from 25 continuous hours to 4 continuous night-time hours during the night-time period.

### 2.4 REVISIONS AND CHANGES TO PROJECT ELEMENTS

The proposed modification described in Section 2.3 does not involve any changes to the Midway 2006 AFC (06-AFC-10) Project elements.

**SECTION**THREE

### SECTION 3 ENVIRONMENTAL ANALYSIS OF THE PROPOSED MODIFICATION

The proposed modification to the NOISE-4 Condition of Certification for the Midway Project would not involve changes to the findings and conclusions of the Midway 2006 AFC and all subsequent Project Amendments for the environmental disciplines listed below.

- Air Quality (AFC Section 5.2)
- Geologic Hazards and Resources (AFC Section 5.3)
- Agriculture and Soils (AFC Section 5.4)
- Water Resources (AFC Section 5.5)
- Biological Resources (AFC Section 5.6)
- Cultural Resources (AFC Section 5.7)
- Paleontological Resources (AFC Section 5.8)
- Land Use (AFC Section 5.9)

- Socioeconomics (AFC Section 5.10)
- Traffic and Transportation (AFC Section 5.11)
- Visual Resources (AFC Section 5.13)
- Waste Management (AFC Section 5.14)
- Hazardous Materials (AFC Section 5.15)
- Public Health and Safety (AFC Section 5.16)
- Worker Safety (AFC Section 5.17)

This Amendment contains all the information that is required pursuant to the CEC's Siting Regulations (CCR Title 20, Section 1769, Post Certification Amendments and Changes). Per Section 1769(a) (1) (E) the following section provides an environmental analysis for the potential noise impacts from the proposed modification to the NOISE-4 Condition of Certification.

#### 3.1 NOISE

The proposed modification, as described in Section 2, Description of Proposed Amendment, would not involve substantial changes to the findings and conclusions in Section 5.12, Noise, of the Midway 2006 AFC (06-AFC-10) and all subsequent Amendments.

#### 3.1.1 Environmental Baselines

The discussion on the environmental baseline in Section 5.12.1 (Affected Environment) of the Midway 2006 AFC (06-AFC-10) is adequate to describe the baseline conditions for purposes of this Amendment. The proposed locations of noise monitoring will remain exposed to the same ambient and background sources comprising the existing sound environment as listed in the Midway 2006 AFC (06-AFC-10) (Please refer to Figure 1, Noise Monitoring Locations).

# **SECTION**THREE

#### 3.1.2 Environmental Consequences

The proposed modification does not involve any changes to the noise-producing Project equipment. Monitoring at the proposed alternate monitoring location (400 feet from site) in lieu of monitoring at ML3, as described in Section 1.3, does not change the required compliance threshold with respect to noise generated by the Project. Therefore, no increased noise impacts would result from approval of the proposed change to the Midway Project.

The intent for the Community Noise Survey is to indicate that Plant noise plus ambient at the affected receptor sites does not exceed the Fresno County Noise Code of 45 dBA  $L_{50}$  during night-time hours, and 50 dBA  $L_{50}$  during day-time hours. As night-time criteria is more stringent (5 dBA less), it is anticipated that, should the Plant meet nighttime noise standards, day-time noise standards would also be met. As Plant noise is expected to be the dominant sound source when operating at 90% or greater of rated capacity, surveying Plant noise during four consecutive night-time hours would be sufficient to gather the data required to show Plant compliance with day-time and night-time Fresno County Noise Code standards and evaluate Plant noise character.

While the proposed modification is a change in the method of evaluating environmental consequences it does not alter the expected outcome (a determination of Project compliance with Fresno County Noise Code standards). Therefore, this proposed modification would not substantially change findings and conclusions discussed in the Midway 2006 AFC and all subsequent Amendments.

#### 3.1.3 Mitigation Measures

The proposed modification would not substantially change findings and conclusions discussed in the Midway 2006 AFC and all subsequent Amendments. No increased noise impacts would result from the approval of this Amendment. Therefore, no additional mitigation measures are recommended; consistent with the Final Commission Decision for the Midway 2006 AFC.

#### 3.2 CUMULATIVE IMPACTS

The NOISE-4 Condition of Certification, as amended, will not induce any cumulative impacts.

### 3.3 COMPLIANCE WITH LORS

The NOISE-4 Condition of Certification, as amended, will conform to all applicable LORS previously identified in the Midway 2006 AFC and all subsequent Amendments.

### 3.4 CONCLUSION

The proposed modification to the NOISE-4 Condition of Certification for the Midway Project would not involve substantial changes to the findings and conclusions of the Midway 2006 AFC and all subsequent Project Amendments. None of the environmental disciplines would be significantly impacted by the proposed modification to the NOISE-4 Condition of Certification.

# **SECTION**FOUR Proposed Modifications to the Conditions of Certification

### SECTION 4 PROPOSED MODIFICATIONS TO THE CONDITIONS OF CERTIFICATION

#### NOISE-4

The project design and implementation shall include appropriate noise mitigation measures adequate to ensure that operation of the project will not cause noise levels due to plant operation plus ambient, during the four quietest consecutive hours of the nighttime, to exceed an average of 45 dBA  $L_{50}$  as measured near monitoring locations ML2 (approximately 1,600 feet west of the center of the project site) and a location 400 feet from the project site. and ML3 (43405 West Panoche Road).

No new pure-tone components may be caused by the project. No single piece of equipment shall be allowed to stand out as a source of noise that draws legitimate complaints.

• When the project first achieves a sustained output of 90 percent or greater of rated capacity, the project owner shall conduct a 25 4-hour community noise survey at monitoring location ML2 or at a closer location acceptable to the CPM. This survey during power plant operation shall also include measurement of one-third octave band sound pressure levels to ensure that no new puretone noise components have been caused by the project.

During the period of this survey, the project owner shall conduct a short term survey of noise at monitoring location ML3, or at a closer location acceptable to the CPM. The short term noise measurements for the 4-hour community noise survey shall be conducted during four consecutive hours within the every hour of the nighttime hours, period from 10 p.m. to 7 a.m., during the period of the survey.

- The measurement of power plant noise for the purposes of demonstrating compliance with this condition of certification may alternatively be made at a location, acceptable to the CPM, closer to the plant (*e.g.*, 400 feet from the plant boundary) and this measured level then mathematically extrapolated to determine the plant noise contribution at the affected residence. The character of the plant noise shall be evaluated at the affected receptor locations to determine the presence of pure tones or other dominant sources of plant noise.
- If the results from the above noise survey indicate that the power plant noise level plus ambient  $(L_{50})$  at the affected receptor sites exceeds the above value during the above specified time periods, mitigation measures shall be implemented to reduce noise to a level of compliance with this limit.
- If the results from the noise survey indicate that pure tones are present, mitigation measures shall be implemented to eliminate the pure tones.

**Verification:** The survey shall take place within 30 60 days of the project first achieving a sustained output of 90 percent or greater of rated capacity. Within 15 days after completing the survey, the project owner shall submit a summary report of the survey to the CPM. Included in the survey report shall be a description of any additional mitigation measures necessary to achieve compliance with the above-listed noise limit, and a schedule, subject to CPM approval, for implementing these measures. When these measures are in place, the project owner shall repeat the noise survey. Within 15 days of completion of

the new survey, the project owner shall submit to the CPM a summary report of this new noise survey, performed as described above and showing compliance with this condition.

# **SECTION**FIVE

# SECTION 5 POTENTIAL EFFECTS ON THE PUBLIC

This section addresses potential effects on the public from the proposed modification to the NOISE-4 Condition of Certification for the Midway Project, pursuant to the CEC's Siting Regulations (Title 1769[a][1][H]). Fresno County is a rapidly developing area and shortages of electricity can impose the risk of serious adverse impacts on the public.

The proposed modification to NOISE-4 Condition of Certification will benefit the public by allowing the Project to provide power during periods of high demand to meet increasing electricity requirements associated with the growth of this region. The proposed modification would not require a change to the Project area, and would not situate the Project site closer to nearby property owners. The entire Project site was previously examined in the Midway 2006 AFC. No increased impacts on the public relating to any of the environmental disciplines will be caused by the proposed modification to the Midway Project.

# SECTION 6 LIST OF PROPERTY OWNERS

Consistent with the CEC Siting Regulations Section 1769(a)(1)(H), this section lists the property owners affected by the proposed modification to the NOISE-4 Condition of Certification for the Midway Project. The proposed change does not alter the list of affected property owners previously submitted in the Midway 2006 AFC (06-AFC-10). The list of property owners is presented below.

# Table 6-1List of Property Owners

Ownership Information	Inst #	Date Rec.
02706053S		
Narr - SUR RTS 17.88 ACS IN N1/2 SEC 5 T15R13		
Loc - 043405 PANOCHE RD FIREBAUGH		
VAQUERO FARMS INC	112227	19831201
2800 W MARCH LM #330 STOCKTON CA 95219		
02706054S		
Narr - SUR RTS 163.53 AC IN N1/2 SEC 5 T15R13		
Site -		
PRUETT GREGORY R ASOPERATION TRUSTEE	179790	19991217
HYCKE CINDY PREUTT DISPOSITION TRUSTEE	179790	19991217
PRUETT GREGORY R DISPOSITION TRUSTEE -	179790	19991217
OF C P HUCKE IRREVOC TR DTD 2-18-97	179790	19991217
(CR 3179790 12-17-99)	064309	19970519
2800 W MARCH LM #330 STOCKTON CA 95219		
02706056S		
Narr - SUR RTS 120.32 AC IN SECS 5 & 6 T15R13		
Loc - 043946 W PANOCHE RD FIREBAUGH		
FARMERS INERNATIONAL INC	016911	20040123
1260 MUIR AVE CHICO CA 95973		
02706061SU		
02706077S		
Narr - SUR RT 64.24 AC IN NE1/4 SEC 5 T15R13		
Site -		
HANSEN ROBERT TRUSTEE -	118104	19900928
HANSEN ROBERT TRUSTEE -	000000	19900928
OF SMARLA BAKER U/T/D 6-13-78	118104	19900928
% PANOCHE FARMS PO BOX 867		

# SECTIONSIX

# List of Property Owners

#### Table 6-1 List of Property Owners (Continued)

Ownership Information	Inst #	Date Rec.
FIREBAUGH CA 93622		
02706078S		
Narr - SUR RTS 128.49 AC IN W1/2 SEC 5 T15R13		
Loc - 043649 W PANOCHE RD FIREBAUGH		
PAO INVESTMENTS LLC	061258	19060324
45499 W PANOCHE RD FIREBAUGH CA 93622		
02706079S		
Narr - SUR RT 160 AC SE1/4 SEC 5 T15R13		
Site -		
BAKER BARRY S TRUSTEE	159044	20001228
MC DOUGAL JUDITH M TRUSTEE -	159044	20001228
OF J R BAKER 1/U/D DTD 11-1-00	159044	20001228
PO BOX 867 FIREBAUGH CA 93622		

## SECTION 7 POTENTIAL EFFECTS ON PROPERTY OWNERS

This section addresses potential effects of the proposed modification to the NOISE-4 Condition of Certification for the Midway Project on nearby property owners, the public, and parties in the application proceeding, per CEC Siting Regulations ((Title 1769[a][1][H]).

The proposed modification to the NOISE-4 Condition of Certification would not require a change to Project area or situate the Project site closer to property owners. The Midway Project is contained in a 5.6-acre site within a 128-acre parcel of land. This entire parcel was previously examined in the Midway 2006 AFC (06-AFC-10). The proposed modification to the NOISE-4 Condition of Certification would not involve substantial changes; therefore, new significant impacts from the proposed modification are not anticipated.

**Figures** 

