

## DOCKETED

<b>Docket Number:</b>	08-AFC-08A
<b>Project Title:</b>	Hydrogen Energy Center Application for Certification Amendment
<b>TN #:</b>	200808
<b>Document Title:</b>	Letters Related to Section 106 Consultation Process that are Referenced in Applicant's Comments CUL 6 and 7 on the PSA/DEIS
<b>Description:</b>	N/A
<b>Filer:</b>	URS
<b>Organization:</b>	URS Corporation, Inc.
<b>Submitter Role:</b>	Applicant Consultant
<b>Submission Date:</b>	10/10/2013 9:42:30 AM
<b>Docketed Date:</b>	10/10/2013



October 10, 2013

Mr. John Heiser, Project Manager  
California Energy Commission  
1516 9th Street, MS-15  
Sacramento, CA 95814-5512

Mr. Fred Pozzuto  
U.S. Department of Energy  
National Energy Technology Laboratory  
3610 Collins Ferry Road  
P.O. Box 880  
Morgantown, WV 26507-0880

**Re: Hydrogen Energy California Project (08-AFC-8A): Attachments to  
Applicant's Comments on the Preliminary Staff Assessment / Draft  
Environmental Impact Statement**

Dear Mr. Heiser and Mr. Pozzuto:

Attached are the letters related to the Section 106 consultation process that are referenced in Applicant's Comments CUL-6 and CUL-7 on the PSA/DEIS that were docketed on October 7.

**URS Corporation**

A handwritten signature in blue ink, appearing to read "Dale Shileikis".

Dale Shileikis  
Project Manager  
URS Corporation



June 13, 2013

Ms. Katherine Montes-Morgan  
Tejon Indian Tribe  
2234 4<sup>th</sup> Street  
Wasco, CA 93280

Dear Ms. Katherine Montes-Morgan:

On May 10, 2012, the U.S. Department of Energy (DOE) submitted a letter to you requesting the initiation of formal government-to-government consultation with the Tejon Indian Tribe in compliance with Section 106 of the National Historic Preservation Act (NHPA). DOE is providing financial assistance to the Hydrogen Energy California (HECA) Project under the Clean Coal Power Initiative Round 3 via a cost-sharing agreement with HECA, LLC, covering project construction and a “Demonstration Period” for the first 2-years of project operations. DOE financial assistance for the construction and operation of the HECA Project during the Demonstration Period constitutes DOE undertaking for purposes of NHPA Section 106.

As detailed in our previous submittal, the 453-acre Project Site is located approximately 7-miles west of the outermost edge of the city of Bakersfield and 1.5-miles northwest of the unincorporated community of Tupman in western Kern County. The HECA Project includes facilities within the oil producing area known as the Elk Hills Oil Field (EHOF), specifically within lands owned by Occidental of Elk Hills, Inc. (OEHI). OEHI’s Enhanced Oil Recovery facility is a component of the Demonstration Period mentioned above; therefore, it is also subject to compliance with NHPA Section 106.

In the months since our last correspondence, additional project details, mostly related to the refinement of the Area of Potential Effects (APE), has been determined, this is summarized below.

### **Proposed Area of Potential Effects**

For purposes of the NHPA Section 106 consultation with the tribe, DOE has proposed to define the APE for archaeological resources as all areas where ground-disturbing activities will occur in relation to the HECA and OEHI Projects. More specifically, the APE includes all Project components as well as all areas within 200-feet from Project facilities and 50-feet from the construction right-of-way of all Project linears (i.e., process/potable water, natural gas, electrical transmission, rail spur, and carbon dioxide). Table 1 lists the Project components and the areas used to establish both the vertical and lateral extent of the APEs. In addition, attached to this letter is a figure depicting the proposed APE for archaeological resources.

### **Cultural Resource Inventory Results to Date**

As of the date of this letter, several efforts to inventory cultural resources within the APE proposed for the HECA and OEHI Project components have been conducted. Table 2 provides the archaeological resources currently identified within the HECA Project components and their physical relationship to

the proposed APE as defined for archaeological resources. The applicant's intent is to avoid all identified archaeological resources. DOE is actively working with the California Energy Commission (CEC) and the Applicant to develop appropriate avoidance measures. Cultural resources inventory efforts within the APE as defined for the OEHI Project components are on-going and the results of these investigations along with those completed for the HECA Project will be forwarded to you at your request.

DOE looks forward to continue working with you and the Tejon Indian Tribe as part of DOE's ongoing NHPA Section 106 consultation process. As part of our review process, DOE would like to set up a meeting or teleconference call, at your convenience, to talk about our ongoing consultation and anticipated next steps. If you have any questions, please contact me at (304) 285-5219 or by e-mail at [fred.pozzuto@netl.doe.gov](mailto:fred.pozzuto@netl.doe.gov). For any technical questions please contact HECA's National Environmental Policy Act (NEPA) contractor, Mr. Dale Shileikis at (415) 243-3826 or by e-mail at [dale.shileikis@urs.com](mailto:dale.shileikis@urs.com).

Sincerely,



Fred Pozzuto  
Environmental Manager  
NEPA Compliance Officer

Enclosures:

- (1) Area of Potential Effects –Archaeological Resources
- (2) Table 1 - APE by Project Component
- (3) Table 2 - Archaeological Resources Identified to Date

cc w/ enc:

Mr. Gabriel Roark  
California Energy Commission

Ms. Marisa Mascaro  
HECA-SCS Energy. LLC

Mr. Dale Shileikis  
URS Corporation

**Table 1: APE by Project Component**

<b>Project Component</b>	<b>Maximum Depth of Disturbance (feet)</b>	<b>Approximate Acres/Length</b>	<b>Archaeological Buffer per CEC Guidelines (feet)</b>
HECA Facility	50	453 acres	200
Rail Spur	3	5.3 miles	50
Electrical Transmission Line	35	2.1 miles	50
PG&E Switching Station	9	4 acres	200
Natural Gas Supply	7	13 miles	50
Process Water Pipeline	5	15 miles	50
Potable Water Pipeline	6	1 mile	50
CO <sub>2</sub> Pipeline	7 (trenching) 50 to 100 (HDD)	3.4 miles	50
CO <sub>2</sub> EOR Processing Facility	50	61 acres	200
Three Satellite Gathering Stations	10	1 acre each	50

**Table 2: Archaeological Resources Identified to Date**

<b>Primary # (P-15) or Temporary Designation</b>	<b>Site Type</b>	<b>Prehistoric /Historic</b>	<b>Associated Project Component</b>	<b>NRHP/ CRHR Status</b>	<b>Within APE per CEC Guidelines</b>	<b>Within Close Proximity to APE</b>
89	Lithic and Trash Scatter with Human Remains	Prehistoric/ Historic	Process Water Pipeline	Not Evaluated	No	Yes
124	Shell and Lithic Scatter	Prehistoric	CO <sub>2</sub> Pipeline	Not Evaluated	No	Yes
171	Occupation Site	Prehistoric	Process Water Pipeline	Not Evaluated	Yes	No
179	Burial Mound	Prehistoric	Process Water Pipeline	Not Evaluated	No	Yes
2485	Lithic Scatter	Prehistoric	Process Water Pipeline	Not Evaluated	No	Yes
3108	Lithic Scatter	Prehistoric	Natural Gas Pipeline and Rail Spur	Not Evaluated	Yes	No
HECA-2008-1	Lithic and Shell Scatter	Prehistoric	Process Water Pipeline	Not Evaluated	Yes	No
HECA-2009-2	Lithic Scatter	Prehistoric	CO <sub>2</sub> Pipeline	Not Evaluated	Yes	No
HECA-2009-9	Lithic Scatter	Prehistoric	Process Water, Well Field	Not Evaluated	Yes	No
HECA- 2009-10	Lithic Scatter	Prehistoric	Process Water, Well Field	Not Evaluated	Yes	No
HECA-2010-1	Lithic Scatter	Prehistoric	Electrical Transmission/	Not	Yes	No

<b>Primary # (P-15) or Temporary Designation</b>	<b>Site Type</b>	<b>Prehistoric /Historic</b>	<b>Associated Project Component</b>	<b>NRHP/ CRHR Status</b>	<b>Within APE per CEC Guidelines</b>	<b>Within Close Proximity to APE</b>
			Switching Station	Evaluated		
HECA-2010-2	Foundation and Trash Scatter	Historic	Natural Gas Pipeline and Rail Spur	Not Evaluated	Yes	No
HECA-2012-1	Lithic Scatter	Prehistoric	Natural Gas Pipeline and Rail Spur	Not Evaluated	No	Yes

Notes:

APE = Area of Potential Effects

CO<sub>2</sub> = Carbon Dioxide

CRHR = California Register of Historical Resources

HECA = Hydrogen Energy California

NRHP = National Register of Historic Places



June 13, 2013

Mr. Rueben Barrios  
Santa Rosa Rancheria  
P.O. Box 8  
Lemoore, CA 93245

Dear Mr. Rueben Barrios:

On May 10, 2012, the U.S. Department of Energy (DOE) submitted a letter to you requesting the initiation of formal government-to-government consultation with the Santa Rosa Rancheria tribe in compliance with Section 106 of the National Historic Preservation Act (NHPA). DOE is providing financial assistance to the Hydrogen Energy California (HECA) Project under the Clean Coal Power Initiative Round 3 via a cost-sharing agreement with HECA, LLC, covering project construction and a “Demonstration Period” for the first 2-years of project operations. DOE financial assistance for the construction and operation of the HECA Project during the Demonstration Period constitutes DOE undertaking for purposes of NHPA Section 106.

As detailed in our previous submittal, the 453-acre Project Site is located approximately 7-miles west of the outermost edge of the city of Bakersfield and 1.5-miles northwest of the unincorporated community of Tupman in western Kern County. The HECA Project includes facilities within the oil producing area known as the Elk Hills Oil Field (EHOF), specifically within lands owned by Occidental of Elk Hills, Inc. (OEHI). OEHI’s Enhanced Oil Recovery facility is a component of the Demonstration Period mentioned above; therefore, it is also subject to compliance with NHPA Section 106.

In the months since our last correspondence, additional project details, mostly related to the refinement of the Area of Potential Effects (APE), has been determined, this is summarized below.

### **Proposed Area of Potential Effects**

For purposes of the NHPA Section 106 consultation with the tribe, DOE has proposed to define the APE for archaeological resources as all areas where ground-disturbing activities will occur in relation to the HECA and OEHI Projects. More specifically, the APE includes all Project components as well as all areas within 200-feet from Project facilities and 50-feet from the construction right-of-way of all Project linears (i.e., process/potable water, natural gas, electrical transmission, rail spur, and carbon dioxide). Table 1 lists the Project components and the areas used to establish both the vertical and lateral extent of the APEs. In addition, attached to this letter is a figure depicting the proposed APE for archaeological resources.

### **Cultural Resource Inventory Results to Date**

As of the date of this letter, several efforts to inventory cultural resources within the APE proposed for the HECA and OEHI Project components have been conducted. Table 2 provides the archaeological resources currently identified within the HECA Project components and their physical relationship to

the proposed APE as defined for archaeological resources. The applicant's intent is to avoid all identified archaeological resources. DOE is actively working with the California Energy Commission (CEC) and the Applicant to develop appropriate avoidance measures. Cultural resources inventory efforts within the APE as defined for the OEHI Project components are on-going and the results of these investigations along with those completed for the HECA Project will be forwarded to you at your request.

DOE looks forward to continue working with you and the Santa Rose Rancheria tribe as part of DOE's ongoing NHPA Section 106 consultation process. As part of our review process, DOE would like to set up a meeting or teleconference call, at your convenience, to talk about our ongoing consultation and anticipated next steps. If you have any questions, please contact me at (304) 285-5219 or by e-mail at [fred.pozzuto@netl.doe.gov](mailto:fred.pozzuto@netl.doe.gov). For any technical questions please contact HECA's National Environmental Policy Act (NEPA) contractor, Mr. Dale Shileikis at (415) 243-3826 or by e-mail at [dale.shileikis@urs.com](mailto:dale.shileikis@urs.com).

Sincerely,



Fred Pozzuto  
Environmental Manager  
NEPA Compliance Officer

Enclosures:

- (1) Area of Potential Effects –Archaeological Resources
- (2) Table 1 - APE by Project Component
- (3) Table 2 - Archaeological Resources Identified to Date

cc w/ enc:

Mr. Gabriel Roark  
California Energy Commission

Ms. Marisa Mascaro  
HECA-SCS Energy. LLC

Mr. Dale Shileikis  
URS Corporation

**Table 1: APE by Project Component**

<b>Project Component</b>	<b>Maximum Depth of Disturbance (feet)</b>	<b>Approximate Acres/Length</b>	<b>Archaeological Buffer per CEC Guidelines (feet)</b>
HECA Facility	50	453 acres	200
Rail Spur	3	5.3 miles	50
Electrical Transmission Line	35	2.1 miles	50
PG&E Switching Station	9	4 acres	200
Natural Gas Supply	7	13 miles	50
Process Water Pipeline	5	15 miles	50
Potable Water Pipeline	6	1 mile	50
CO <sub>2</sub> Pipeline	7 (trenching) 50 to 100 (HDD)	3.4 miles	50
CO <sub>2</sub> EOR Processing Facility	50	61 acres	200
Three Satellite Gathering Stations	10	1 acre each	50

**Table 2: Archaeological Resources Identified to Date**

<b>Primary # (P-15) or Temporary Designation</b>	<b>Site Type</b>	<b>Prehistoric /Historic</b>	<b>Associated Project Component</b>	<b>NRHP/ CRHR Status</b>	<b>Within APE per CEC Guidelines</b>	<b>Within Close Proximity to APE</b>
89	Lithic and Trash Scatter with Human Remains	Prehistoric/ Historic	Process Water Pipeline	Not Evaluated	No	Yes
124	Shell and Lithic Scatter	Prehistoric	CO <sub>2</sub> Pipeline	Not Evaluated	No	Yes
171	Occupation Site	Prehistoric	Process Water Pipeline	Not Evaluated	Yes	No
179	Burial Mound	Prehistoric	Process Water Pipeline	Not Evaluated	No	Yes
2485	Lithic Scatter	Prehistoric	Process Water Pipeline	Not Evaluated	No	Yes
3108	Lithic Scatter	Prehistoric	Natural Gas Pipeline and Rail Spur	Not Evaluated	Yes	No
HECA-2008-1	Lithic and Shell Scatter	Prehistoric	Process Water Pipeline	Not Evaluated	Yes	No
HECA-2009-2	Lithic Scatter	Prehistoric	CO <sub>2</sub> Pipeline	Not Evaluated	Yes	No
HECA-2009-9	Lithic Scatter	Prehistoric	Process Water, Well Field	Not Evaluated	Yes	No
HECA- 2009-10	Lithic Scatter	Prehistoric	Process Water, Well Field	Not Evaluated	Yes	No
HECA-2010-1	Lithic Scatter	Prehistoric	Electrical Transmission/	Not	Yes	No

<b>Primary # (P-15) or Temporary Designation</b>	<b>Site Type</b>	<b>Prehistoric /Historic</b>	<b>Associated Project Component</b>	<b>NRHP/ CRHR Status</b>	<b>Within APE per CEC Guidelines</b>	<b>Within Close Proximity to APE</b>
			Switching Station	Evaluated		
HECA-2010-2	Foundation and Trash Scatter	Historic	Natural Gas Pipeline and Rail Spur	Not Evaluated	Yes	No
HECA-2012-1	Lithic Scatter	Prehistoric	Natural Gas Pipeline and Rail Spur	Not Evaluated	No	Yes

Notes:

APE = Area of Potential Effects

CO<sub>2</sub> = Carbon Dioxide

CRHR = California Register of Historical Resources

HECA = Hydrogen Energy California

NRHP = National Register of Historic Places



June 13, 2013

Mr. Neil Peyron  
Chairperson  
Tule River Indian Tribe  
P.O. Box 589  
Porterville, CA 93258

Dear Mr. Neil Peyron:

On May 10, 2012, the U.S. Department of Energy (DOE) submitted a letter to you requesting the initiation of formal government-to-government consultation with the Tule River Indian Tribe in compliance with Section 106 of the National Historic Preservation Act (NHPA). DOE is providing financial assistance to the Hydrogen Energy California (HECA) Project under the Clean Coal Power Initiative Round 3 via a cost-sharing agreement with HECA, LLC, covering project construction and a "Demonstration Period" for the first 2-years of project operations. DOE financial assistance for the construction and operation of the HECA Project during the Demonstration Period constitutes DOE undertaking for purposes of NHPA Section 106.

As detailed in our previous submittal, the 453-acre Project Site is located approximately 7-miles west of the outermost edge of the city of Bakersfield and 1.5-miles northwest of the unincorporated community of Tupman in western Kern County. The HECA Project includes facilities within the oil producing area known as the Elk Hills Oil Field (EHOF), specifically within lands owned by Occidental of Elk Hills, Inc. (OEHI). OEHI's Enhanced Oil Recovery facility is a component of the Demonstration Period mentioned above; therefore, it is also subject to compliance with NHPA Section 106.

In the months since our last correspondence, additional project details, mostly related to the refinement of the Area of Potential Effects (APE), has been determined, this is summarized below.

### **Proposed Area of Potential Effects**

For purposes of the NHPA Section 106 consultation with the tribe, DOE has proposed to define the APE for archaeological resources as all areas where ground-disturbing activities will occur in relation to the HECA and OEHI Projects. More specifically, the APE includes all Project components as well as all areas within 200-feet from Project facilities and 50-feet from the construction right-of-way of all Project linears (i.e., process/potable water, natural gas, electrical transmission, rail spur, and carbon dioxide). Table 1 lists the Project components and the areas used to establish both the vertical and lateral extent of the APEs. In addition, attached to this letter is a figure depicting the proposed APE for archaeological resources.

### **Cultural Resource Inventory Results to Date**

As of the date of this letter, several efforts to inventory cultural resources within the APE proposed for the HECA and OEHI Project components have been conducted. Table 2 provides the archaeological

resources currently identified within the HECA Project components and their physical relationship to the proposed APE as defined for archaeological resources. The applicant's intent is to avoid all identified archaeological resources. DOE is actively working with the California Energy Commission (CEC) and the Applicant to develop appropriate avoidance measures. Cultural resources inventory efforts within the APE as defined for the OEHI Project components are on-going and the results of these investigations along with those completed for the HECA Project will be forwarded to you at your request.

DOE looks forward to continue working with you and the Tule River Indian Tribe as part of DOE's ongoing NHPA Section 106 consultation process. As part of our review process, DOE would like to set up a meeting or teleconference call, at your convenience, to talk about our ongoing consultation and anticipated next steps. If you have any questions, please contact me at (304) 285-5219 or by e-mail at [fred.pozzuto@netl.doe.gov](mailto:fred.pozzuto@netl.doe.gov). For any technical questions please contact HECA's National Environmental Policy Act (NEPA) contractor, Mr. Dale Shileikis at (415) 243-3826 or by e-mail at [dale.shileikis@urs.com](mailto:dale.shileikis@urs.com).

Sincerely,



Fred Pozzuto  
Environmental Manager  
NEPA Compliance Officer

Enclosures:

- (1) Area of Potential Effects –Archaeological Resources
- (2) Table 1 - APE by Project Component
- (3) Table 2 - Archaeological Resources Identified to Date

cc w/ enc:

Mr. Gabriel Roark  
California Energy Commission

Ms. Marisa Mascaro  
HECA-SCS Energy. LLC

Mr. Dale Shileikis  
URS Corporation

**Table 1: APE by Project Component**

<b>Project Component</b>	<b>Maximum Depth of Disturbance (feet)</b>	<b>Approximate Acres/Length</b>	<b>Archaeological Buffer per CEC Guidelines (feet)</b>
HECA Facility	50	453 acres	200
Rail Spur	3	5.3 miles	50
Electrical Transmission Line	35	2.1 miles	50
PG&E Switching Station	9	4 acres	200
Natural Gas Supply	7	13 miles	50
Process Water Pipeline	5	15 miles	50
Potable Water Pipeline	6	1 mile	50
CO <sub>2</sub> Pipeline	7 (trenching) 50 to 100 (HDD)	3.4 miles	50
CO <sub>2</sub> EOR Processing Facility	50	61 acres	200
Three Satellite Gathering Stations	10	1 acre each	50

**Table 2: Archaeological Resources Identified to Date**

<b>Primary # (P-15) or Temporary Designation</b>	<b>Site Type</b>	<b>Prehistoric /Historic</b>	<b>Associated Project Component</b>	<b>NRHP/ CRHR Status</b>	<b>Within APE per CEC Guidelines</b>	<b>Within Close Proximity to APE</b>
89	Lithic and Trash Scatter with Human Remains	Prehistoric/ Historic	Process Water Pipeline	Not Evaluated	No	Yes
124	Shell and Lithic Scatter	Prehistoric	CO <sub>2</sub> Pipeline	Not Evaluated	No	Yes
171	Occupation Site	Prehistoric	Process Water Pipeline	Not Evaluated	Yes	No
179	Burial Mound	Prehistoric	Process Water Pipeline	Not Evaluated	No	Yes
2485	Lithic Scatter	Prehistoric	Process Water Pipeline	Not Evaluated	No	Yes
3108	Lithic Scatter	Prehistoric	Natural Gas Pipeline and Rail Spur	Not Evaluated	Yes	No
HECA-2008-1	Lithic and Shell Scatter	Prehistoric	Process Water Pipeline	Not Evaluated	Yes	No
HECA-2009-2	Lithic Scatter	Prehistoric	CO <sub>2</sub> Pipeline	Not Evaluated	Yes	No
HECA-2009-9	Lithic Scatter	Prehistoric	Process Water, Well Field	Not Evaluated	Yes	No
HECA- 2009-10	Lithic Scatter	Prehistoric	Process Water, Well Field	Not Evaluated	Yes	No
HECA-2010-1	Lithic Scatter	Prehistoric	Electrical Transmission/	Not	Yes	No

<b>Primary # (P-15) or Temporary Designation</b>	<b>Site Type</b>	<b>Prehistoric /Historic</b>	<b>Associated Project Component</b>	<b>NRHP/ CRHR Status</b>	<b>Within APE per CEC Guidelines</b>	<b>Within Close Proximity to APE</b>
			Switching Station	Evaluated		
HECA-2010-2	Foundation and Trash Scatter	Historic	Natural Gas Pipeline and Rail Spur	Not Evaluated	Yes	No
HECA-2012-1	Lithic Scatter	Prehistoric	Natural Gas Pipeline and Rail Spur	Not Evaluated	No	Yes

Notes:

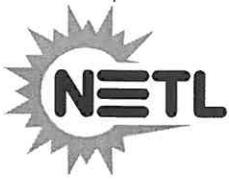
APE = Area of Potential Effects

CO<sub>2</sub> = Carbon Dioxide

CRHR = California Register of Historical Resources

HECA = Hydrogen Energy California

NRHP = National Register of Historic Places



September 10, 2013

Mr. Neil Peyron  
Tule River Indian Tribe  
P.O. Box 589  
Porterville, CA 93258

SUBJECT: Proposed Hydrogen Energy California Project in Kern County, California

Dear Mr. Peyron:

As an update to our ongoing consultation, U.S. Department of Energy (DOE) would like to inform the Tule River Indian Tribe that on September 4, 2013, we received concurrence for the Area of Potential Effects (APE) delineated for the Hydrogen Energy California (HECA) project from State Historic Preservation Officer (SHPO), Dr. Carol Roland-Nawi, in compliance with Section 106 of the National Historic Preservation Act of 1966 (16 U.S.C. 470f), as amended, and its implementing regulation found at 36 CFR Part 800. I have attached the SHPO concurrence letter for your perusal. Please note these APEs may be over-inclusive in the sense that they include the sites of the Enhanced Oil Recovery (EOR) to be undertaken by Occidental of Elk Hills, which is not a recipient of federal funding in connection with its EOR activities. DOE thanks you for your continued participation in our Section 106 consultation process.

As noted in the attached announcement from the California Energy Commission (CEC), a Preliminary Staff Assessment/Draft Environmental Impacts Statement (PSA/DEIS) Workshop will be held September 17 through September 19, 2013, in Buttonwillow, California. This workshop is a joint effort of DOE and CEC, and is an important component of the National Environmental Policy Act and California Environmental Quality Act. The process is open to the public and interested parties and your attendance is certainly welcome.

The workshop is being held at the Buttonwillow Recreation and Park District Multi-Purpose Facility at 556 Milo Avenue with the discussion of issues related to cultural resources scheduled to occur on September 19 at 9:00 a.m. DOE encourages members of the Tule River Indian Tribe to attend the workshop to ask questions or provide comments. Please let me know if you have any questions about the workshop agenda or schedule. Further, if you have any questions or comments about our ongoing Section 106 consultation, DOE would be happy to discuss them with you.

For any overall environmental project questions please contact me at 304-285-5219. Should you have

any technical questions please contact the NEPA contractor, Mr. Dale Shileikis with URS Corporation at 415-243-3708, or by email @ [dale.shileikis@urs.com](mailto:dale.shileikis@urs.com).

Sincerely,



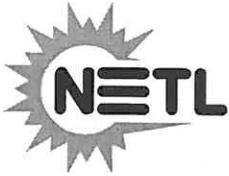
Fred Pozzuto  
Environmental Manager / NEPA Compliance  
Officer

Enclosures:

CASHPO letter dated September 4, 2013  
CEC Workshop information

cc (w/o Encl.):

M. Mascaro - HECA-SCS Energy  
D. Shileikis - URS  
G. Roark - CEC



September 10, 2013

Ms. Katherine Montes-Morgan  
Tejon Indian Tribe  
2234 4<sup>th</sup> Street  
Wasco, CA 93280

SUBJECT: Proposed Hydrogen Energy California Project in Kern County, California

Dear Ms. Montes-Morgan:

As an update to our ongoing consultation, U.S. Department of Energy (DOE) would like to inform the Tejon Indian Tribe that on September 4, 2013, we received concurrence for the Area of Potential Effects (APE) delineated for the Hydrogen Energy California (HECA) project from State Historic Preservation Officer (SHPO), Dr. Carol Roland-Nawi, in compliance with Section 106 of the National Historic Preservation Act of 1966 (16 U.S.C. 470f), as amended, and its implementing regulation found at 36 CFR Part 800. I have attached the SHPO concurrence letter for your perusal. Please note these APEs may be over-inclusive in the sense that they include the sites of the Enhanced Oil Recovery (EOR) to be undertaken by Occidental of Elk Hills, which is not a recipient of federal funding in connection with its EOR activities. DOE thanks you for your continued participation in our Section 106 consultation process.

As noted in the attached announcement from the California Energy Commission (CEC), a Preliminary Staff Assessment/Draft Environmental Impacts Statement (PSA/DEIS) Workshop will be held September 17 through September 19, 2013, in Buttonwillow, California. This workshop is a joint effort of DOE and CEC, and is an important component of the National Environmental Policy Act and California Environmental Quality Act. The process is open to the public and interested parties and your attendance is certainly welcome.

The workshop is being held at the Buttonwillow Recreation and Park District Multi-Purpose Facility, at 556 Milo Avenue, with the discussion of issues related to cultural resources scheduled to occur on September 19 at 9:00 a.m. DOE encourages members of the Tejon Indian Tribe to attend the workshop to ask questions or provide comments. Please let me know if you have any questions about the workshop agenda or schedule. Further, if you have any questions or comments about our ongoing Section 106 consultation, DOE would be happy to discuss them with you.

For any overall environmental project questions please contact me at 304-285-5219. Should you have

any technical questions please contact the NEPA contractor, Mr. Dale Shileikis with URS Corporation at 415-243-3708, or by email @ [dale.shileikis@urs.com](mailto:dale.shileikis@urs.com).

Sincerely,



Fred Pozzuto  
Environmental Manager / NEPA Compliance  
Officer

Enclosures:

CA SHPO letter dated September 4, 2013  
CEC Workshop information

cc (w/o Encl.):

M. Mascaro - HECA-SCS Energy  
D. Shileikis - URS  
G. Roark - CEC



September 10, 2013

Ruben Barrios, Chairperson  
Santa Rosa Rancheria  
P.O. Box 8  
Lemoore, CA 93245

SUBJECT: Proposed Hydrogen Energy California Project in Kern County, California

Dear Mr. Barrios:

As an update to our ongoing consultation, U.S. Department of Energy (DOE) would like to inform the Santa Rosa Rancheria that on September 4, 2013, we received concurrence for the Area of Potential Effects (APE) delineated for the Hydrogen Energy California (HECA) project from State Historic Preservation Officer (SHPO), Dr. Carol Roland-Nawi, in compliance with Section 106 of the National Historic Preservation Act of 1966 (16 U.S.C. 470f), as amended, and its implementing regulation found at 36 CFR Part 800. I have attached the SHPO concurrence letter for your perusal. Please note these APEs may be over-inclusive in the sense that they include the sites of the Enhanced Oil Recovery (EOR) to be undertaken by Occidental of Elk Hills, which is not a recipient of federal funding in connection with its EOR activities. DOE thanks you for your continued participation in our Section 106 consultation process.

As noted in the attached announcement from the California Energy Commission (CEC), a Preliminary Staff Assessment/Draft Environmental Impacts Statement (PSA/DEIS) Workshop will be held September 17 through September 19, 2013, in Buttonwillow, California. This workshop is a joint effort of DOE and CEC, and is an important component of the National Environmental Policy Act and California Environmental Quality Act. The process is open to the public and interested parties and your attendance is certainly welcome.

The workshop is being held at the Buttonwillow Recreation and Park District Multi-Purpose Facility, at 556 Milo Avenue, with the discussion of issues related to cultural resources scheduled to occur on September 19th at 9:00 a.m. DOE encourages members of the Santa Rosa Rancheria to attend the workshop to ask questions or provide comments. Please let me know if you have any questions about the workshop agenda or schedule. Further, if you have any questions or comments about our ongoing Section 106 consultation, DOE would be happy to discuss them with you.

For any overall environmental project questions please contact me at 304-285-5219. Should you have

any technical questions please contact the NEPA contractor, Mr. Dale Shileikis with URS Corporation at 415-243-3708, or by email @ [dale.shileikis@urs.com](mailto:dale.shileikis@urs.com).

Sincerely,



Fred Pozzuto  
Environmental Manager / NEPA Compliance  
Officer

Enclosures:

CA SHPO letter dated September 4, 2013  
CEC Workshop information

cc (w/o Encl.):

M. Mascaro - HECA-SCS Energy  
D. Shileikis - URS  
G. Roark - CEC



May 10, 2012

Ruben Barrios, Chairperson  
Santa Rosa Rancheria  
P.O. Box 8  
Lemoore, CA 93245

SUBJECT: Proposed Hydrogen Energy California Project in Kern County, California

Dear Mr. Barrios:

The purpose of this letter is to inform you of the proposed Hydrogen Energy California Project (HECA or the Project) in Kern County, California that is under consideration for approval and potential future funding by the U.S. Department of Energy (DOE). HECA is proposed by Hydrogen Energy California LLC. The Project is part of DOE's Clean Coal Power Initiative, a cost-shared collaboration between the federal government and private industry to increase investment in low-emission coal technology by demonstrating advanced coal-based power generation technologies at commercial scale. DOE has determined that the Project is a federal undertaking as defined in 36 Code of Federal Regulations § 800.16(y). The HECA is supported in part by DOE with a \$408 million grant in a cost-shared arrangement. Total project costs are estimated to be approximately \$4 billion. In compliance with Section 106 of the *National Historic Preservation Act of 1966* (NHPA), DOE would like to initiate informal government-to-government consultation with the Santa Rosa Rancheria.

The Project consists of an Integrated Gasification Combined Cycle power facility, with an integrated manufacturing complex, which will produce low-carbon nitrogen-based products, such as fertilizer. The Project will utilize a blend of coal and petroleum coke as a feedstock in order to produce hydrogen-rich syngas fuel through a gasification process. This fuel will be used in a combustion turbine to produce a nominal 300 megawatts (MW) of electricity, and in the manufacturing complex to produce low-carbon nitrogen-based products such as fertilizers. The production of electricity, low-carbon nitrogen-based products, and carbon dioxide (CO<sub>2</sub>) for enhanced oil recovery (EOR) enables the operational flexibility to meet market demand. Because it produces several products, HECA is sometimes referred to as a "polygeneration" project.

The electricity and other products produced by the Project will have a smaller carbon footprint than similar products produced from traditional fossil fuel sources. This is accomplished primarily by capturing approximately 90 percent of the CO<sub>2</sub> from the gasification process. Captured CO<sub>2</sub> will be transported (via a pipeline) for use in EOR, which results in sequestration of the CO<sub>2</sub> in secure geologic formations, at the nearby Elk Hills Oil Field (EHOF). EHOF is owned and operated by Occidental of Elk Hills, Inc. (OEHI) which will obtain necessary permits for the EOR operations.

The 453-acre Project site is located approximately 7-miles west of the outermost edge of the city of Bakersfield and 1.5-miles northwest of the unincorporated community of Tupman in western Kern County, California. The majority of the Project site is presently used for agricultural purposes, including

cultivation of cotton, alfalfa, and onions. Temporary construction activities, including equipment storage, construction laydown, parking and offices, will be located on the Project site and within an adjacent 91-acre construction laydown area.

The Project also includes the following off-site facilities:

- Rail Spur – A new rail spur will be constructed to the Project site in order to facilitate feedstock and equipment delivery, as well as product and by-product off-take. The rail spur will extend approximately 4.6-miles from the existing San Joaquin Valley Railroad to the Project site.
- Electrical Transmission Line – An electrical transmission line will interconnect the Project to a future Pacific Gas & Electric (PG&E) switching station to the east of the Project site (adjacent to the existing Midway-Wheeler Ridge transmission lines). The electrical transmission line is approximately 3.5-miles long, of which 1.5-miles will be located within the Project site.
- Natural Gas Supply Line – A natural gas interconnection will be made with an existing PG&E natural gas pipeline that is located north of the Project site. The natural gas pipeline is approximately 11.1-miles in length.
- Water Supply Pipelines – The Project will utilize brackish groundwater supplied from the Buena Vista Water Storage District located northwest of the Project site. The raw water supply pipeline will be approximately 14.4-miles in length. Potable water for construction, drinking, and sanitary use will be delivered from a new West Kern Water District potable water production site approximately 1.3-miles east of the Project site.
- CO<sub>2</sub> Pipeline – The CO<sub>2</sub> pipeline will transfer the CO<sub>2</sub> captured during gasification from the Project site south to the EHOFF for EOR and sequestration (storage). The CO<sub>2</sub> pipeline is approximately 3.4-miles in length.

As indicated above, DOE wishes to initiate informal consultation with the Santa Rosa Rancheria in compliance with Section 106 of the NHPA. For your additional information, for the purposes of initiating informal consultation with the California Office of Historic Preservation on the delineation of the area of potential effects (APE), DOE is defining the APE for archaeological resources as all areas where ground-disturbing activities will occur in relation to the Project. More specifically, 200-feet from the Project site and Construction Laydown Area, and 50-feet from the right of way of all Project linears. The APE for historic architecture is defined as 0.5-miles around the Project site and 0.5-miles from the electric transmission and rail spur right of ways to account for potential indirect effects. Attached are copies of the proposed APEs for both archaeological and historic architectural resources.<sup>1</sup> The APEs for archaeological and historic architectural resources are consistent with the requirements of the California Energy Commission (CEC), which has exclusive authority for licensing thermal power plants in California with a generating capacity of 50-MW or more.

DOE's Section 106 consultation under the NHPA for the undertaking with the California State Historic Preservation Office is to further seek concurrence on the delineation of APEs for both archaeological

---

<sup>1</sup> Note that the identified APEs may be over-inclusive in the sense that they include the sites of the EOR to be undertaken by OEHI, which is not a recipient of federal funding in connection with its EOR activities.

and historic architectural resources. A joint CEC/DOE environmental impact statement (EIS) is currently being prepared for the project, and the draft version will be made available to you at a later date where you may again respond to any specific concerns you may have. DOE will include correspondence with your office in an appendix to the EIS. HECA's full application to the CEC can also be viewed at:

[http://www.energy.ca.gov/sitingcases/hydrogen\\_energy/documents/index.html#applicant](http://www.energy.ca.gov/sitingcases/hydrogen_energy/documents/index.html#applicant)

For any overall environmental project questions please contact me at 304-285-5219. Should you have any technical questions please contact the Office of National Environmental Policy Act (NEPA) contractor, Mr. Dale Shileikis at 415-243-3708, or by email @ [dale.shileikis@urs.com](mailto:dale.shileikis@urs.com).

Sincerely,

A handwritten signature in black ink, appearing to read 'Fred Pozzuto', with a horizontal line extending to the right.

Fred Pozzuto  
Environmental Manager / NEPA Compliance  
Officer

Enclosures:

cc:

M. Mascaro - HECA-SCS Energy

D. Shileikis - URS



May 10, 2012

Mr. Neil Peyron, Chairperson  
Tule River Indian Tribe  
P.O. Box 589  
Porterville, CA 93258

SUBJECT: Proposed Hydrogen Energy California Project in Kern County, California

Dear Mr. Peyron:

The purpose of this letter is to inform you of the proposed Hydrogen Energy California Project (HECA or the Project) in Kern County, California that is under consideration for approval and potential future funding by the U.S. Department of Energy (DOE). HECA is proposed by Hydrogen Energy California LLC. The Project is part of DOE's Clean Coal Power Initiative, a cost-shared collaboration between the federal government and private industry to increase investment in low-emission coal technology by demonstrating advanced coal-based power generation technologies at commercial scale. DOE has determined that the Project is a federal undertaking as defined in 36 Code of Federal Regulations § 800.16(y). The HECA is supported in part by DOE with a \$408 million grant in a cost-shared arrangement. Total project costs are estimated to be approximately \$4 billion. In compliance with Section 106 of the *National Historic Preservation Act of 1966* (NHPA), DOE would like to initiate informal government-to-government consultation with the Tule River Indian Tribe.

The Project consists of an Integrated Gasification Combined Cycle power facility, with an integrated manufacturing complex which will produce low-carbon nitrogen-based products, such as fertilizer. The Project will utilize a blend of coal and petroleum coke as a feedstock in order to produce hydrogen-rich syngas fuel through a gasification process. This fuel will be used in a combustion turbine to produce a nominal 300 megawatts (MW) of electricity, and in the manufacturing complex to produce low-carbon nitrogen-based products such as fertilizers. The production of electricity, low-carbon nitrogen-based products, and carbon dioxide (CO<sub>2</sub>) for enhanced oil recovery (EOR) enables the operational flexibility to meet market demand. Because it produces several products, HECA is sometimes referred to as a "polygeneration" project.

The electricity and other products produced by the Project will have a smaller carbon footprint than similar products produced from traditional fossil fuel sources. This is accomplished primarily by capturing approximately 90 percent of the CO<sub>2</sub> from the gasification process. Captured CO<sub>2</sub> will be transported (via a pipeline) for use in EOR, which results in sequestration of the CO<sub>2</sub> in secure geologic formations, at the nearby Elk Hills Oil Field (EHOF). EHOF is owned and operated by Occidental of Elk Hills, Inc. (OEHI) which will obtain necessary permits for the EOR operations.

The 453-acre Project site is located approximately 7-miles west of the outermost edge of the city of Bakersfield and 1.5-miles northwest of the unincorporated community of Tupman in western Kern County, California. The majority of the Project site is presently used for agricultural purposes, including

cultivation of cotton, alfalfa, and onions. Temporary construction activities, including equipment storage, construction laydown, parking and offices, will be located on the Project site and within an adjacent 91-acre construction laydown area.

The Project also includes the following off-site facilities:

- Rail Spur – A new rail spur will be constructed to the Project site in order to facilitate feedstock and equipment delivery, as well as product and by-product off-take. The rail spur will extend approximately 4.6-miles from the existing San Joaquin Valley Railroad to the Project site.
- Electrical Transmission Line – An electrical transmission line will interconnect the Project to a future Pacific Gas & Electric (PG&E) switching station to the east of the Project site (adjacent to the existing Midway-Wheeler Ridge transmission lines). The electrical transmission line is approximately 3.5-miles long, of which 1.5-miles will be located within the Project site.
- Natural Gas Supply Line – A natural gas interconnection will be made with an existing PG&E natural gas pipeline that is located north of the Project site. The natural gas pipeline is approximately 11.1-miles in length.
- Water Supply Pipelines – The Project will utilize brackish groundwater supplied from the Buena Vista Water Storage District located northwest of the Project site. The raw water supply pipeline will be approximately 14.4-miles in length. Potable water for construction, drinking, and sanitary use will be delivered from a new West Kern Water District potable water production site approximately 1.3-miles east of the Project site.
- CO<sub>2</sub> Pipeline – The CO<sub>2</sub> pipeline will transfer the CO<sub>2</sub> captured during gasification from the Project site south to the EHOFF for EOR and sequestration (storage). The CO<sub>2</sub> pipeline is approximately 3.4-miles in length.

As indicated above, DOE wishes to initiate informal consultation with the Tule River Indian Tribe in compliance with Section 106 of the NHPA. For your additional information, for the purposes of initiating informal consultation with the California Office of Historic Preservation on the delineation of the area of potential effects (APE), DOE is defining the APE for archaeological resources as all areas where ground-disturbing activities will occur in relation to the Project. More specifically, 200-feet from the Project site and Construction Laydown Area, and 50-feet from the right of way of all Project linears. The APE for historic architecture is defined as 0.5-miles around the Project site and 0.5-miles from the electric transmission and rail spur right of ways to account for potential indirect effects. Attached are copies of the proposed APEs for both archaeological and historic architectural resources.<sup>1</sup> The APEs for archaeological and historic architectural resources are consistent with the requirements of the California Energy Commission (CEC), which has exclusive authority for licensing thermal power plants in California with a generating capacity of 50-MW or more.

DOE's Section 106 consultation under the NHPA for the undertaking with the California State Historic Preservation Office is to further seek concurrence on the delineation of APEs for both archaeological

---

<sup>1</sup> Note that the identified APEs may be over-inclusive in the sense that they include the sites of the EOR to be undertaken by OEHI, which is not a recipient of federal funding in connection with its EOR activities.

and historic architectural resources. A joint CEC/DOE environmental impact statement (EIS) is currently being prepared for the project, and the draft version will be made available to you at a later date where you may again respond to any specific concerns you may have. DOE will include correspondence with your office in an appendix to the EIS. HECA's full application to the CEC can also be viewed at:

[http://www.energy.ca.gov/sitingcases/hydrogen\\_energy/documents/index.html#applicant](http://www.energy.ca.gov/sitingcases/hydrogen_energy/documents/index.html#applicant)

For any overall environmental project questions please contact me at 304-285-5219. Should you have any technical questions please contact the Office of National Environmental Policy Act (NEPA) contractor, Mr. Dale Shileikis at 415-243-3708, or by email @ [dale.shileikis@urs.com](mailto:dale.shileikis@urs.com).

Sincerely,

A handwritten signature in black ink, appearing to read 'Fred Pozzuto', with a horizontal line extending to the right.

Fred Pozzuto  
Environmental Manager / NEPA Compliance  
Officer

Enclosures:

cc:

M. Mascaro - HECA-SCS Energy

D. Shileikis - URS

**OFFICE OF HISTORIC PRESERVATION  
DEPARTMENT OF PARKS AND RECREATION**

1725 23<sup>rd</sup> Street, Suite 100  
SACRAMENTO, CA 95816-7100  
(916) 445-7000 Fax: (916) 445-7053  
calshpo@parks.ca.gov  
www.ohp.parks.ca.gov



September 04, 2013

Reply in Reference To: DOE120514A

Fred Pozzuto  
Environmental Manager  
US Dept. of Energy  
National Energy Technology Laboratory  
3610 Collins Ferry Road  
PO Box 880  
Morgantown, WV 26507-0880

Re: Continuing Section 106 Consultation for Hydrogen Energy California Project, Kern County, CA

Dear Mr. Pozzuto:

Thank you for continuing consultation regarding the Department of Energy's (DOE) efforts to comply with Section 106 of the National Historic Preservation Act of 1966 (16 U.S.C. 470f), as amended, and its implementing regulation found at 36 CFR Part 800.

In response to a 14 June 2013 telephone conference between our agencies the DOE has provided additional information regarding their Area of Potential Effects (APE) delineation for the proposed construction of an Integrated Gasification Combined Cycle power facility in Kern County. The DOE is seeking my concurrence and comments on their APE determination and it is my understanding the DOE intend to submit the results of their historic property identification efforts pursuant to 36 CFR Part 800.4 for my review and concurrence in addition to an effect determination. After reviewing the most recent documentation, including information attesting to the DOE's outreach to Native American tribes and a table of proposed heights for structures and buildings associated with this undertaking, I have the following comments:

- 1) Pursuant to 36 CFR Part 800.4(a)(4), please continue consultation with the interested Native American tribes to address their concerns regarding this undertaking.
- 2) Pursuant to 36 CFR 800.4 (a)(1), I have no objection to the APE as delineated by the DOE for the proposed undertaking.

Thank you for seeking my comments and considering historic properties as part of your project planning. I look forward to continuing this consultation with the DOE. If you have any questions or concerns, please contact Ed Carroll of my staff at (916) 445-7006 or [Ed.Carroll@parks.ca.gov](mailto:Ed.Carroll@parks.ca.gov).

Sincerely,

A handwritten signature in black ink that reads "Carol Roland-Nawi, Ph.D.".

Carol Roland-Nawi, PhD  
State Historic Preservation Officer