

## DOCKETED

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<b>Project Title:</b>	01-AFC-7C Russell City Energy Company
<b>TN #:</b>	221692
<b>Document Title:</b>	Notice of Determination Petition to Amend to Install a New 6,667 Gallon Sodium Hydroxide Storage Tank at the Russell City EC
<b>Description:</b>	N/A
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<b>Docketed Date:</b>	11/7/2017

## CALIFORNIA ENERGY COMMISSION

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**NOTICE OF DETERMINATION  
PETITION TO AMEND  
TO INSTALL A NEW 6,667 GALLON SODIUM HYDROXIDE  
STORAGE TANK  
AT THE RUSSELL CITY ENERGY CENTER  
(01-AFC-07C)**

On April 28, 2017, Russell City Energy Company, LLC (project owner) docketed a petition to modify the Russell City Energy Center (01-AFC-07) (RCEC). The project owner proposes the permanent installation of a 6,667 gallon tank for storage of sodium hydroxide. As discussed below, staff intends to approve the petition and proposed facility change.

RCEC is located at the intersection of Enterprise and Whitesell streets in the industrial corridor of the city of Hayward in Alameda County, California. The facility license, issued in 2002, was for a 600-megawatt (MW), natural gas-fired, combined-cycle electric generating facility.

**DESCRIPTION OF PROPOSED MODIFICATION**

The project owner proposes installing a permanent 6,667 gallon tank for storage of sodium hydroxide to use in the project's zero liquid discharge (ZLD) system and for cooling tower pH control. The on-site tank would be installed adjacent to the project's ZLD facility and replace the temporary tanks and temporary secondary containment structures that are currently in use. The permanent tank would be double-walled for secondary containment purposes, and approximately 15 feet  $\frac{3}{4}$  inches high, and 10 feet 2 inches in diameter. It would be placed on a permanent concrete foundation that measures 16-feet by 16-feet with a 6-inch curb. The excavation for the project would be 4-feet deep in pre-existing fill.

The petition is available on the Energy Commission's Russell City Energy Center Project webpage at <http://www.energy.ca.gov/sitingcases/russellcity/index.html>. This Notice of Determination is being provided to interested parties and property owners adjacent to the facility site, is being mailed to the RCEC mail list, and sent electronically to the RCEC listserv.

**ENERGY COMMISSION STAFF REVIEW AND DETERMINATION**

Energy Commission technical staff reviewed the petition for potential environmental effects and consistency with applicable laws, ordinances, regulations, and standards (LORS). Staff has determined that the technical or environmental areas of Air Quality, Biological Resources, Efficiency, Public Health, Reliability, Transmission Line Safety and Nuisance, and Transmission System Engineering are not affected by the proposed changes.

For the technical areas of Cultural Resources, Facility Design, Geological and Paleontological Resources, Hazardous Materials Management, Land Use, Noise and Vibration, Socioeconomics, Soil and Water Resources, Traffic and Transportation, Visual Resources, Waste Management and Worker Safety and Fire Protection, staff has

determined that impacts on the environment are less than significant and no revised or new conditions of certification are needed to ensure the project remains in compliance with all applicable LORS. In addition, the project modification would not affect any population including the environmental justice population as shown in the Environmental Justice Population Table below.

Staff notes the following for each of these technical areas:

- **Cultural Resources.** The proposed modifications are not likely to create significant cultural resources impacts on the project site or in the vicinity of the project. In the event that cultural resources might be encountered during the construction of the sodium hydroxide tank and related facilities, implementation of Conditions of Certification **CUL-1** through **CUL-6** would mitigate any potentially adverse impacts during construction and ensure conformance with Hayward Municipal Code, Chapter 10, Article 11.150, regarding treatment of archaeological resources. Conditions of Certification **CUL-1** through **CUL-6**, applicable to this proposed amendment, were developed to ensure that if cultural resources are encountered during construction, adequate measures are in place to mitigate any project-level impacts to less than significant.
- **Facility Design.** Installation of the tank and construction of its foundation must comply with the 2016 California Building Code. Implementation of the existing **Facility Design** conditions of certification adopted in the Decision would ensure this.
- **Geologic and Paleontological Resources.** All work would occur on site within the boundaries of the originally analyzed and certified project. Therefore, the proposed changes will not have any additional environmental impacts compared to what was analyzed for the Final Staff Assessment (CEC 2000a).

Construction of the 16-foot by 16-foot concrete pad would involve ground disturbance. The proposed maximum depth of disturbance would be 4-feet below existing grade (McBride 2017). Existing grade is level and the base of the excavation would be presumed level. The excavation would be entirely in fill (McBride 2017) and (TN 221118), therefore there is no potential for impact to geologic or paleontologic resources.

The effects of ground shaking on the sodium hydroxide storage tank would be mitigated, to the extent practical, through structural designs required by **GEN-1** (CEC 2002b), which would require the owner to address current design standards. Compliance with this condition would ensure protection of public health and safety.

- **Hazardous Materials Management.** During the installation and construction of the new sodium hydroxide tank, several hazardous materials would be used onsite. Similar to equipment maintenance activities, these materials would include solvents, gasoline, lubricants, and welding gases which are already included in the annual compliance report under the existing **HAZ-1** condition. No extremely hazardous or regulated hazardous materials would be used on site specifically for any of the construction activities listed above. Therefore, with the project owner's continued compliance with

existing Conditions of Certification, **HAZ-1** specifically, the proposed modifications would not have a significant effect on the environment and would continue to comply with all applicable LORS.

- **Land Use.** The replacement of the temporary tanks and secondary containment structures with a permanent tank for storage of sodium hydroxide would be within the licensed project boundaries and comply with the Industrial Zoning District (**LAND-1**), and would have no significant land use impacts
- **Noise.** Construction work associated with the installation of this tank would be temporary and would occur during the daytime hours. Any noise generated during these activities would result in a less-than-significant impact with implementation of the existing **Noise** conditions of certification in the Decision.
- **Socioeconomics.** From a socioeconomics standpoint, the proposed amendment would have insignificant workforce-related impacts on housing and community services. The proposed Amendment would have no significant socioeconomic impacts. It would not affect the September 2002 Energy Commission Decision Condition of Certification **SOCIO-2** (school impact fees). In addition, the project modifications would not affect any population including the Environmental Justice population as shown in the **Environmental Justice Population Figure and Table**.
- **Soil and Water.**

**Stormwater and Drainage:** Disturbance of soils at the site has the potential to cause water quality impacts but would not permanently change drainage at the site. Conditions of Certification **SOIL&WATER-3** and **SOIL&WATER-9** require the project owner to implement management measures and controls in accordance with an NPDES Industrial General Permit and a Hayward City Industrial Wastewater Discharge Permit, respectively. Compliance with these permits would ensure there would be no impacts from offsite stormwater runoff.

**Construction Wastewater:** There are no changes to the volumes or quality of sanitary wastewater from the proposed modifications. Staff anticipates the volume of wastewater from construction activities would be handled by existing on site controls and contractors disposing wastewater at appropriately licensed facilities, if needed. Discharge of uncontained wastewater would also have to comply with the requirements of Conditions of Certification **SOIL&WATER-3** and **SOIL&WATER-9**.

**Water Supply:** Limited amounts of water would be required for construction of the tanks. Staff expects the construction can be completed within the limits specified in Condition of Certification **SOIL&WATER-4**. The proposed modifications would not have any additional impacts in terms of volumes and sources of water supply to the project.

- **Traffic and Transportation.** Construction equipment and workers associated with the proposed modifications would generate approximately five daily one-way vehicle trips and six total truck trips over the course of approximately 6 weeks. This amount of construction traffic would have a less than significant impact on roadway level of service and intersection delay.
- **Visual Resources.** The proposed modifications would either not be visible from any offsite locations or would blend in with existing infrastructure at the project site. There would be no impacts to visual resources.
- **Waste Management.** All work would occur on site within the boundaries of the originally analyzed and certified project. During construction, the waste produced would include, but is not limited to: concrete and washdown waste, excess packing materials, basic building materials and empty containers, and demolition material from temporary tank and secondary containment structures. The hazardous materials generated during construction would include dried paint or tank coating materials and possibly trace amounts of hazardous waste in miscellaneous building materials. Approved Condition of Certification **WASTE- 5** would apply to the proposed petition. **WASTE- 5** requires that waste generated during construction is tracked and disposed at the proper facilities. The project owner would be required to comply with this condition of certification for the proposed construction activities, including submittal of a Construction Waste Management plan to the compliance project manager prior to the start of construction mobilization.

In the event contaminated soil is unearthed during excavation in preparation for construction of the concrete pad, the responsible Registered Professional Engineer or Geologist shall have the authority to temporarily suspend construction activity and perform tests to determine the nature and extent of contamination for the protection of workers and the public. Conditions of Certification **WASTE-2, WASTE-3, and WASTE-4** provide guidance for the mitigation of contaminated soil. Compliance with existing Waste Management Conditions of Certification **WASTE-1** through **WASTE-6** would mitigate these impacts to a less than significant level. Therefore, the proposed changes would not have any additional environmental impacts compared to what was analyzed for the Final Staff Assessment (CEC 2002a).

- **Worker Safety and Fire Protection.** By continuing to comply with the existing conditions of certification, the petitioner's proposed installation and construction of the new sodium hydroxide tank would not have a significant effect on the environment and would continue to comply with all applicable LORS. Activities to be performed during the construction required for the tank installation would comply with worker safety and fire safety requirements already contained in health and safety plans utilized for construction of the main facility per Condition of Certification **WORKER SAFETY-1**.

The **Environmental Justice (EJ) Population Figure** shows 2010 census blocks in the six-mile radius of Russell City Energy Center with a minority population greater than or equal to 50 percent. The population in these census blocks represents an EJ population based on race and ethnicity as defined in the US Environmental Protection Agency's (EPA) *Guidance on Considering Environmental Justice During the Development of Regulatory Actions*.

**Low Income**

Based on California Department of Education data in the **Environmental Justice Population Table**, staff concluded that the percentage of those living in the Hayward Unified School District, San Leandro Unified School District, and San Lorenzo Unified School District (all within a six mile radius of the project site) and receiving free or reduced price meals, are comparatively greater than those in the reference geography, and thus are considered an EJ population based on poverty as defined in EPA's *Guidance on Considering Environmental Justice During the Development of Regulatory Actions*.

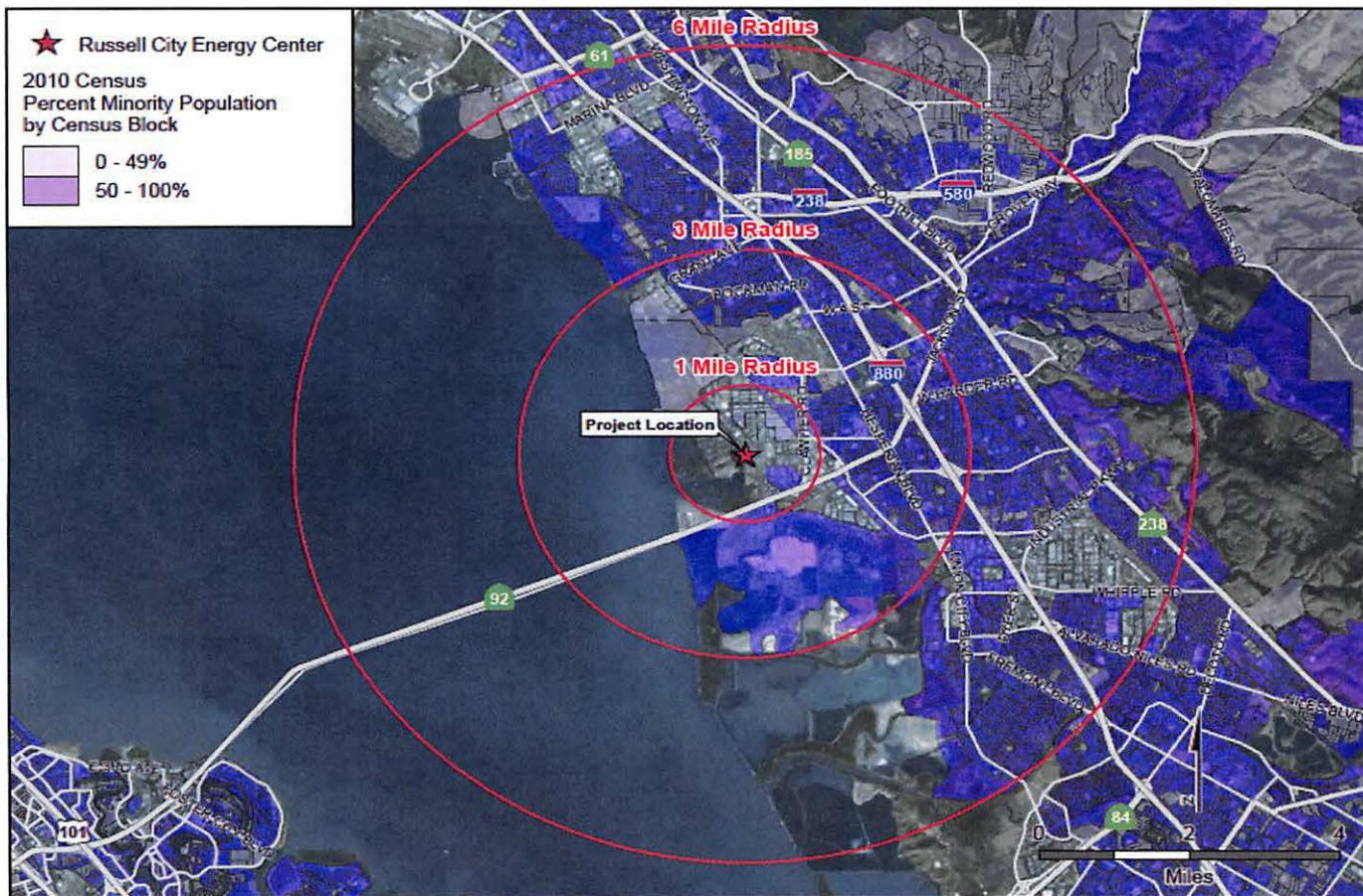
**Environmental Justice Population Table-  
 Low Income Data within the Project Area**

SCHOOL DISTRICTS IN SIX-MILE RADIUS	Enrollment Used for Meals	Free or Reduced Price Meals	
Hayward Unified School District	22,846	17,237	75.4%
San Leandro Unified School District	8,560	5,479	64.0%
San Lorenzo Unified School District	11,965	8,093	67.6%
New Haven Unified School District	12,171	5,414	44.5%
<b>REFERENCE GEOGRAPHY</b>			
Alameda County	225,940	99,875	44.2%
Source: CDE 2016. California Department of Education, DataQuest, Free or Reduced Price Meals, District level data for the year 2015-2016, < <a href="http://dq.cde.ca.gov/dataquest/">http://dq.cde.ca.gov/dataquest/</a> >.			

**Environmental Justice Conclusions**

Energy Commission staff identified less than significant impacts in each of the technical areas listed above. Therefore, impacts would be less than significant for any population in the project's six-mile radius, including the EJ population represented in **Environmental Justice Population Figure and Table**.

**ENVIRONMENTAL JUSTICE POPULATION FIGURE**  
Russell City Energy Center - Census 2010 Minority Population by Census Block



CALIFORNIA ENERGY COMMISSION - SITING, TRANSMISSION AND ENVIRONMENTAL PROTECTION DIVISION  
SOURCES: Census 2010 PL 94-171 Data

Staff's conclusions for each technical or environmental area are summarized in the table on the following page.

**Summary of Staff Responses to Petition**

TECHNICAL/ENVIRONMENTAL AREAS REVIEWED	STAFF RESPONSE			Revised Conditions of Certification Recommended
	Technical Area Not Affected	No Significant Environmental Impact or LORS Inconsistency*	Process As Amendment	
Air Quality	X			
Biological Resources	X			
Cultural Resources		X		
Efficiency	X			
Facility Design		X		
Geological and Paleontological Resources		X		
Hazardous Materials Management		X		
Land Use		X		
Noise		X		
Public Health	X			
Reliability	X			
Socioeconomics		X		
Soil & Water Resources		X		
Traffic & Transportation		X		
Transmission Line Safety & Nuisance	X			
Transmission System Engineering	X			
Visual Resources		X		
Waste Management		X		
Worker Safety & Fire Protection		X		

\*There is no possibility that the proposed modifications would have a significant effect on the environment, and the modifications would not result in a change in or deletion of a condition adopted by the Commission in the Final Decision, or make changes that would cause project noncompliance with any applicable laws, ordinances, regulations, or standards (Cal. Code Regs., tit. 20, § 1769 (a) (2)).

Section 1769(a)(2), Title 20, California Code of Regulations states, “(w)here staff determines that there is no possibility that the modifications may have a significant effect on the environment, and if the modifications will not result in a change or deletion of a condition adopted by the commission in the final decision or make changes that would cause the project not to comply with any applicable laws, ordinances, regulations, or standards, no commission approval is required...”

Energy Commission staff has determined for this petition that:

- The modification would not have any significant effect on the environment;
- Existing conditions of certification are sufficient to cover the proposed modification without changes to, or deletions of, any conditions of certification; and
- The project as modified would maintain full compliance with applicable LORS.

Pursuant to section 1769(a)(2) and based on staff's determinations, approval by the full Commission at a noticed Business Meeting is not required.

## REFERENCES

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**HAYWARD 2017** – City of Hayward Municipal Code, Article 11, Section 10-11.150- Conditions of Approval for Development Projects Located within Archaeologically Sensitive Areas, and /or within or adjacent to Known Archaeological Sites. Updated August 9, 2017.

**McBride 2017**, Email from Barbara McBride (Calpine) to John Heiser (Energy Commission) sent: Monday, May 8, 2017 1:51 PM, Subject: Russell City Energy Center (01-AFC-070C) PTA – Sodium Hydroxide tank.

**CEC 2002a**, California Energy Commission Final Staff Assessment for Russell City Energy Center (01-AFC-07), 10 June 2002 (TN #: 26086)

**CEC 2002b**, California Energy Commission, Commission Decision on Application for Certification of Russell City Energy Center (01-AFC-07), 11 September 2002 (TN #: 26635)

**RCEC 2017**, Response to California Energy Commission's data requests, Set 1, A1 through A16 (TN#: 221118), September 11, 2017.

## WRITTEN COMMENTS

Any person may file an objection to staff's determination within 14 days of the date of this notice on the grounds that the project modification does not meet the criteria set forth in section 1769(a)(2). Absent any relevant objections, this petition will be approved 14 days after this notice is docketed. An objection to staff's determination may be submitted using the Energy Commission's e-Commenting feature, as follows: Go to the Energy Commission's Russell City webpage and click on the "Submit e-Comment" link. Provide contact information—a full name, email address, comment title, and either a comment or attached document. The comment title should be "[Your Name]'s Comments re Russell City Determination." Type your comments into the "Comment Text" field, or upload a document with your comments. The maximum upload file size is 10MB, and only .doc, .docx, or .pdf attachments will be accepted. Enter the CAPTCHA that is used to prevent spamming. Then click on the "Agree and Submit your Comments" button to file your comments. When your comments are docketed, you will receive an email with a link to them on the facility webpage.

Written comments or objections may also be mailed or hand-delivered to:

California Energy Commission  
Dockets Unit, MS-4  
Docket No. 01-AFC-07C  
1516 Ninth Street  
Sacramento, CA 95814-5512

All comments and materials filed with and accepted by the Dockets Unit will be added to the facility Docket Log and be publically accessible on the Energy Commission's webpage for the facility.

If you have questions about this Notice, please contact John Heiser, Project Manager, at (916) 653-8236 or via email at [John.Heiser@energy.ca.gov](mailto:John.Heiser@energy.ca.gov).

For information on participating in the Energy Commission's review of the Russell City Energy Center petition, please contact the Energy Commission's Public Adviser at (916) 654-4489, or at (800) 822-6228 (toll-free in California). The Public Adviser's Office can also be contacted via e-mail at [publicadviser@energy.ca.gov](mailto:publicadviser@energy.ca.gov). News media inquiries should be directed to the Energy Commission Media Office at (916) 654-4989, or by e-mail at [mediaoffice@energy.ca.gov](mailto:mediaoffice@energy.ca.gov).

Date: 11.6.17

  
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