

## DOCKETED

<b>Docket Number:</b>	01-AFC-07C
<b>Project Title:</b>	01-AFC-7C Russell City Energy Company
<b>TN #:</b>	211691
<b>Document Title:</b>	Response to Staff's Informational Request for Demineralized Water System
<b>Description:</b>	Project owner responses to staff structural information request for the proposed demineralized water system for Russell City
<b>Filer:</b>	Eric Veerkamp
<b>Organization:</b>	Russell City Energy Company, LLC
<b>Submitter Role:</b>	Applicant
<b>Submission Date:</b>	6/1/2016 11:23:50 AM
<b>Docketed Date:</b>	6/1/2016

# Russell City Energy Company, LLC

717 Texas Avenue  
Suite 1000  
Houston, TX 77002

May 24, 2016

Mr. Jonathan Fong  
California Energy Commission  
1516 Ninth Street (MS-2000)  
Sacramento, CA 95814

**Re: Project Owner's Response to Structural Staff Data Requests  
Russell City Energy Center Petition for Modification Amendment No. 6**

Mr. Fong,

CEC Staff has asked several questions with respect to Project Owner's Petition for Modification Amendment No. 6, wherein Project Owner has requested a Staff approved modification in order to install a demineralized water system for the Russell City Energy Center ("RCEC"). Below please find Project Owner's responses to Staff's data requests, particularly in regard to ground disturbance during installation of the proposed demineralized water system.

1. Please describe the "skid foundation". Will the petitioner provide a diagram or elevation drawing for the proposed skid foundation? Please indicate whether the skid foundation may have footings or other below-grade foundation elements.

**ANSWER: When vendor's equipment comes mounted on a steel frame (a 'skid') the foundation supporting same is typically a poured, reinforced concrete block embedded 12" below grade with an additional 6" protruding above grade as per code requirements. In plan view it likely extends approximately 6" beyond the steel skid frame on all sides. Detailed calculations proving the adequacy of all foundations, and construction drawings adequate for the proper installation of all foundations by a competent contractor, will be produced as a matter of course as engineering contract deliverables. As indicated above, all foundations will be embedded a minimum of 12". All are planned to have a thickened edge type footing or to have a poured slab of the same thickness to serve as both the footing and foundation, all compliant with code requirements.**

2. What will be the width and depth of the ground disturbance for the following proposed activities:
  - a. underground water and electrical piping

**ANSWER: The precise dimensions will not be established until detailed design commences. However, typical excavations are on the order of 24" deep by 18" wide.**

- b. skid foundation installation

**ANSWER: As discussed above, width/breadth will be dependent on the load and skid dimensions, however a depth of 12" is most typical (except where loads require more).**

- c. will the canopy or enclosure (p. 6) require ground disturbance? If so, please describe the structure, the method of installation and the depth and width of potential ground disturbance.

**ANSWER: Yes. The foundations supporting the canopy will need to be embedded. The structure will be a pre-engineered metal building type of structure. Like all metal buildings it will be assembled on site from prefabricated parts. The precise depth and width dimensions will not be established until detailed design commences, but should not vary significantly from the foundations supporting any similar sized metal building or supported roof structure.**

3. The schematic design in Figure 2 is illegible and does not indicate the project location within the larger existing plant site. Please provide a figure on an aerial map base or on the appropriate USGS topographic quadrangle(s) map base which clearly identifies the area in which the project would be located, including water and electrical pipeline locations and connections, locations of skid foundation(s) and other relevant physical elements that may help to describe more fully the project components. This will enable staff to compare the proposed work area to the original project facility locations and where previous work has occurred on site.

**ANSWER: Attached is a preliminary drawing of the proposed layout of the demineralized water system. Also attached is the Russell City Energy Center Site Plan showing the location of the project. More detailed drawings are not yet available as the detailed design process is not yet complete. Drawings will be provided to the CEC as made available. The proposed location of the system is all previously disturbed land, that is otherwise already part of the RCEC facility.**

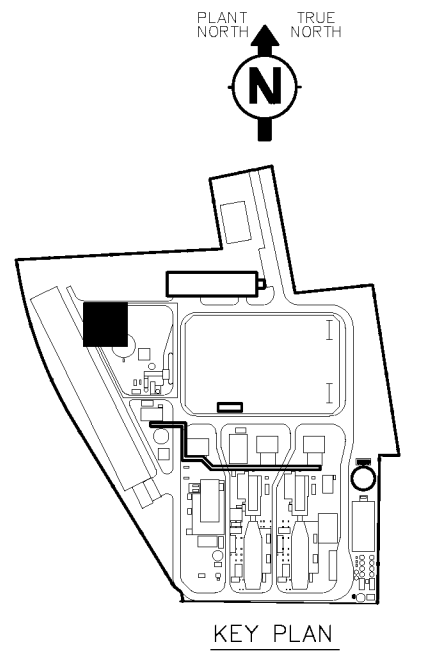
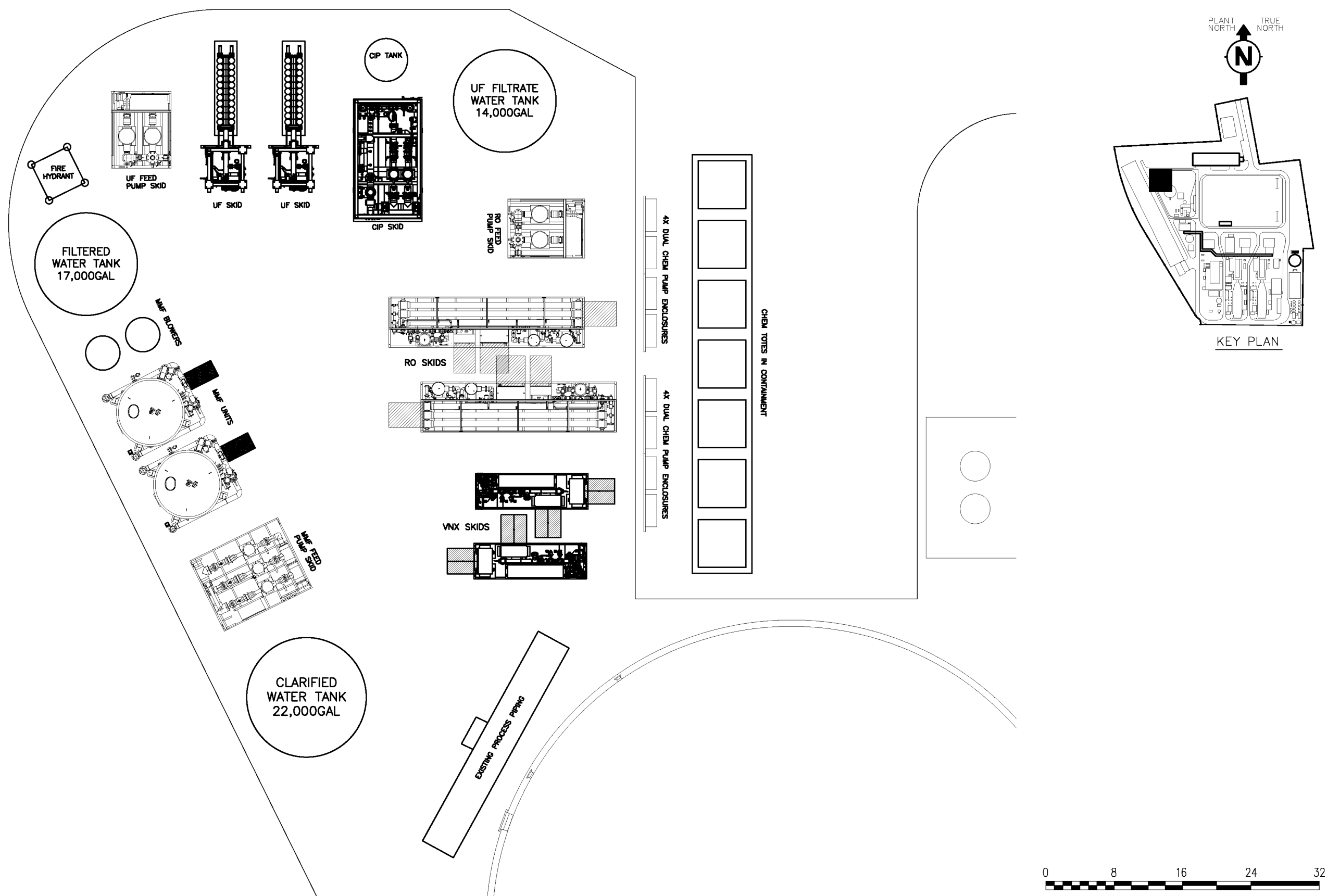
Sincerely,



Lauren Bresnahan  
Authorized Signatory and EH&S Specialist  
Russell City Energy Company, LLC

enclosure(s)

8 7 6 5 4 3 2 1



NOTES:  
1. ALL DIMENSIONS ARE IN FEET AND INCHES.  
COORDINATES ARE IN FEET.

STD: BORDER-0108-24X3801

INTL REF:

BAR = 1" AT PLOT SCALE

REV	DESCRIPTION	DATE	DWN	CHKD	APVD	EDN
A	INITIAL RELEASE FOR INFORMATION	05/20/18	SCS	JMP	JMP	

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SCS	05/03/18	
ENGINEER	DATE	
SCS	05/03/18	
MANAGER	DATE	
TG	05/03/18	
FILE:		
SCALE:	1:50	

CLIENT	CALPINE CORPORATION - RUSSELL CITY ENERGY CENTER HAYWARD, CA
PROJECT	2034/000623
CODE	
DRAWING	9105
SHEET	1 OF 1
REV	A



