



Public Utilities Department  
Administration

September 4, 2008

<b>DOCKET</b>	
08-SPPE-1	
DATE	SEP 04 2008
RECD.	SEP 05 2008

Felicia Miller  
Project Manager  
California Energy Commission  
Energy Facility Siting Division  
1516 9<sup>th</sup> Street, MS-15  
Sacramento, California 95814-5512

REF: ADMIN 08-052

Subject: Riverside Energy Resource Center Units 3 & 4 Power Plant Licensing Case; Docket Number 08-SPPE-1

Dear Ms. Miller:

As we have expressed previously and as outlined below, the operational date for RERC Units 3 & 4 is critical to the ability of the City of Riverside, through its Public Utilities Department (Riverside), to serve its customers with reliable energy. As understood during Riverside staff's August 27, 2008, conference call with you, the additional information included with this letter should close out requests for information required for transmission engineering and allow the draft Initial Study to be finalized by the CEC staff. Riverside is confident that we have responded to all of CEC staff's requests and now expect that the CEC shall be able to issue its Initial Study within the next two weeks. Please let us know if our understanding is incorrect. Riverside, if necessary, can answer any further questions regarding transmission engineering by filing testimony that describes the system and the upgrades RPU will make to the system.

The following facts illustrate why RERC Units 3 & 4 are so critical to Riverside. All power to serve Riverside customers comes from the state transmission grid through a single point of interconnection, via the Southern California Edison (SCE) Vista Substation. Not only is this connection at capacity, interruption to the delivery of energy through the one point of interconnection leaves the City wholly reliant on internal generation.

First, the capacity at Vista is 560 megawatts (MW). Energy can also be provided by the 96 MW RERC Units 1 & 2 and the 40 MW Springs Generating Station. Both facilities are peaking units and are licensed to run only a limited number of hours per year. Increased demand on Riverside's system has led to higher and more frequent peaks. Historically, Riverside's system expansion has been approximately 6-7% every five years, both in number of meter connections and customer energy usage. The most recent five-year period has seen a 31% increase in customer energy usage (5% per year), although the number of meter connections has increased at the historical rate of 1-2% per year. Riverside's 2007 system peak of 610 MW is already 50 MW above the 560 MW import capability of the Vista Substation. Rolling blackouts would have already occurred had Riverside not recently added internal generation capacity. Despite the recent economic downturn, Riverside has added 1,112 new meters (1% growth rate) with nearly 20 MW of customer capacity in fiscal year 2007-08, a one year capacity increase of 3.5%.

If the current load growth continues at historical levels, by summer 2010 Vista's import capacity, plus Riverside's internal generation at RERC and Springs (approximately 696 MW), will not meet our customer's energy needs. When peak energy demand exceeds 696 MW, Riverside will not have sufficient capacity to deliver energy requirements. This will result in rolling blackouts during peak usage - typically Monday through Friday between noon and 5 p.m. The additional power from RERC Units 3 & 4 by 2009 would fill this shortfall pending the construction of the second interconnection to the state grid. In addition, if RERC 3 & 4 is not available, any requirement to reduce load from the state grid in peak periods, which occurs most summers, would not be able to be made up with internal generation as adequate capacity will not exist.

Second, Riverside has long been concerned that having a single point of interconnection to import the bulk of the City's energy requirements was too tenuous and represented a risk to the provision of uninterrupted power to its citizens. To highlight Riverside's concern, the Vista substation lost five of its seven lines serving Riverside on October 26, 2007 due to one local SCE grid disturbance. The remaining two lines tripped on overload, leaving the City completely without power. Riverside was black for a short period of time, and solely reliant on its internal generation. The additional internal generation provided by RERC Units 3 & 4 will allow Riverside to restore power to essential services in a timelier manner.

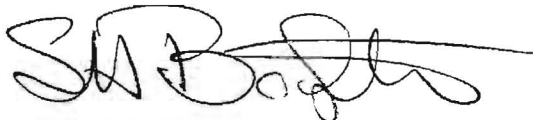
The unanticipated growth in peak demand, coupled with the tenuous nature of the single point of interconnection for the importation of power, makes it imperative that Riverside develop additional internal generation in a timely manner.

The only issue that appears to remain open is transmission engineering. Since approximately the third week of July, Riverside staff has been diligently responding to requests from CEC staff for information detailing Riverside's system planning and reliability criteria for its internal 69 kV transmission system. We continue to receive verbal requests for additional information related to the Riverside transmission system. Our concern is that these additional requests are not helping to clarify or bring the issue to closure and in fact are potentially diverting attention into areas that may be outside CEC jurisdiction, e.g., Riverside transmission system planning and operation. The original July 11<sup>th</sup> date for the issuance of the draft Initial Study has been delayed by this issue.

At this time, Riverside believes it has responded to all of CEC staff's requests and now expects that the CEC should be able to issue its Initial Study within the next two weeks.

Thank you for your attention to this very important matter. Riverside looks forward to the successful completion of the SPPE process.

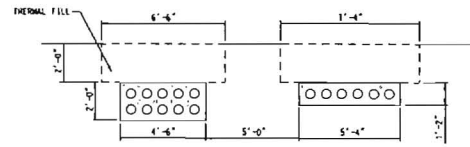
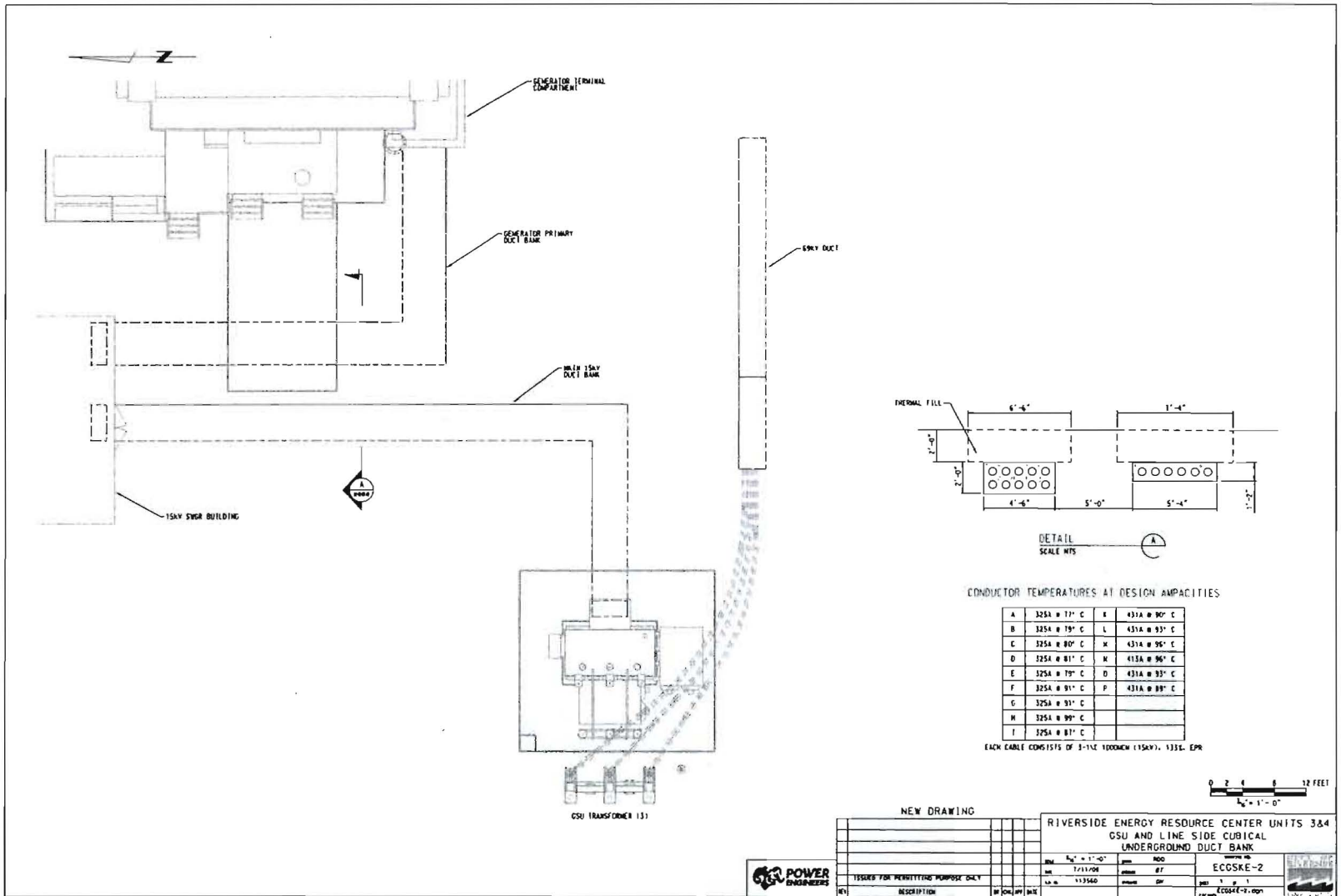
Sincerely,



Stephen H. Badgett  
Utilities Deputy General Manager/Energy Delivery

SHB:gsg

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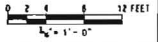


DETAIL  
SCALE NTS

CONDUCTOR TEMPERATURES AT DESIGN AMPACITIES

A	325A @ 11' C	K	431A @ 90' C
B	325A @ 79' C	L	431A @ 93' C
C	325A @ 80' C	M	431A @ 96' C
D	325A @ 81' C	N	431A @ 96' C
E	325A @ 79' C	D	431A @ 93' C
F	325A @ 91' C	P	431A @ 88' C
G	325A @ 91' C		
H	325A @ 99' C		
I	325A @ 81' C		

EACH CABLE CONSISTS OF 3-1/2 1000CMV (15KV), 133G, EPR



NEW DRAWING

RIVERSIDE ENERGY RESOURCE CENTER UNITS 3&4  
CSU AND LINE SIDE CUBICAL  
UNDERGROUND DUCT BANK



REV	DESCRIPTION	BY	CHK	APP	DATE

DATE	7/11/08	DESIGN	
PROJECT NO.	113540	DRAWING NO.	

PROJECT	ECOSKE-2
DATE	7/11/08

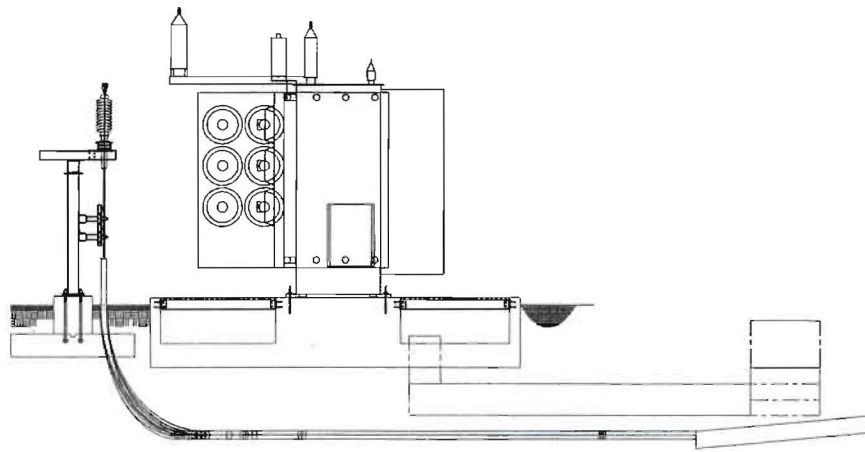


RERC 69KV UG T-LINE UNITS 3&4

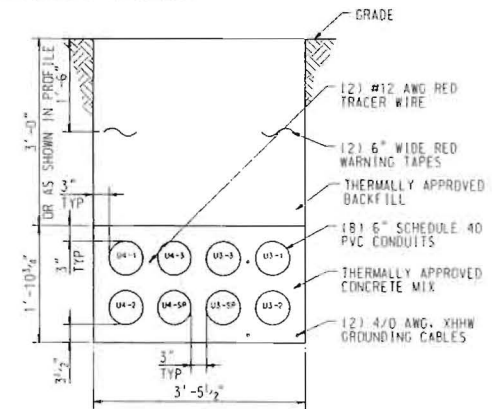
UNIT-PHASE	CONDUCTOR TEMPERATURES AT DESIGN AMPACITIES
U4-1	604A AT 86°C
U4-2	604A AT 87°C
U4-3	604A AT 89°C
U3-1	604A AT 86°C
U3-2	604A AT 87°C
U3-3	604A AT 89°C

EACH CABLE CONSISTS OF 1-1750CMIL AL (69KV), XLPE

TARGET AMPACITY - 604A (70MVA).. THIS AMPACITY, WITH THE 13.8 KV CROSS CONNECT BETWEEN THE UNITS, PROVIDES THE ABILITY TO OPERATE BOTH UNITS AT REDUCED CAPACITY OR ONE UNIT FULL CAPACITY AND ONE UNIT REDUCED CAPACITY IN THE EVENT THAT ONE OF THE GSUS IS NOT AVAILABLE.



GSU TRANSFORMER (3)



SECTION

SCALE: NTS  
1 AHEAD STATION VIEW



NEW DRAWING

RIVERSIDE ENERGY RESOURCE CENTER UNITS 3&4 GSU AND LINE SIDE CUBICAL UNDERGROUND DUCT BANK			
DATE	1/2" = 1'-0"	REV	RDD
DATE	7/14/08	ENGR	BT
DATE	11/26/10	PROJ	CH
DATE		ISSUE	1 OF 1
FILE	ECOSKE-3.dwg	PROJECT	ECOSKE-3



Table 1 - OVERLOADED LINE SUMMARY

Outage Case	Overloaded Line	Nominal Rating	Pre-Loading Amperes	% of Nominal	Post-Loading Amperes	% of Nominal	Mitigation Measure
Base Case	--	--	--	--	--	--	--
All N-1 Cases at 50% Loading	--	--	--	--	--	--	--
Alumax - Hunter - Vista	Vista - Hunter	850	1115	131%	870	102%	Loading < 110% w/ RERC 3 and 4
Casa Blanca - Freeman	--	--	--	--	--	--	--
Casa Blanca - Magnolia	--	--	--	--	--	--	--
Freeman - Vista	Mt. View - RERC	1000	1116	112%	917	92%	Loading < 100% w/ RERC 3 and 4
	Plaza - Riverside	850	785	92%	999	118%	Line loading <110% w/ reduction of RERC generation and <100% w/ RTRP.
Freeman - Orangecrest	--	--	--	--	--	--	--
Freeman - Kaiser	Mt. View - Harvey Lynn	850	977	115%	949	112%	Loading < 110 % w/ Standard Procedure 120,000. Loading is <100% w/ RTRP.
Freeman - Mt. View	--	--	--	--	--	--	--
Hunter - University	La Colina - Vista	850	1174	138%	1136	134%	Loading < 100 % w/ Standard Procedure 120,000. Loading < 110% w/ STP.
Hunter - Riverside	--	--	--	--	--	--	--
Hunter - Vista	Alumax - Hunter - Vista	1000	1200	120%	993	99%	Loading < 100% w/ RERC 3 and 4
Kaiser - Harvey Lynn	--	--	--	--	--	--	--
La Colina - Orangecrest	--	--	--	--	--	--	--
La Colina - University	La Colina - Vista	850	965	113%	927	109%	Loading < 110% w/ RERC 3 and 4
La Colina - Springs	--	--	--	--	--	--	--
La Colina - Vista	Hunter - University	850	1224	144%	1208	142%	Loading < 100 % w/ Standard Procedure 120,000. Loading < 110% w/ STP.
Harvey Lynn - Mt. View	Mt. View - Freeman	850	975	115%	986	116%	Loading < 110 % w/ Standard Procedure 120,000. Loading is <100% w/ RTRP.
	Harvey Lynn - Kaiser	850	947	111%	925	109%	Loading < 110 % w/ Standard Procedure 120,000. Loading is <100% w/ RTRP.
	Freeman - Kaiser	850	988	116%	965	113%	Loading < 110 % w/ Standard Procedure 120,000. Loading is <100% w/ RTRP.
Magnolia - Riverside	--	--	--	--	--	--	--
Mt. View - RERC	Plaza - Riverside	850	1147	135%	1147	135%	Loading < 110 % w/ Standard Procedure 120,000. Loading is <100% w/ RTRP.
Mt. View - Plaza	Mt. View - RERC	1000	1107	111%	906	91%	Loading < 100% w/ RERC 3 and 4
Mt. View - Vista	Mt. View - RERC	1000	1148	115%	910	91%	Loading < 100% w/ RERC 3 and 4
	Plaza - Riverside	850	851	100%	1086	128%	Line loading <110% w/ reduction of RERC generation and <100% w/ RTRP.
Orangecrest - Springs	--	--	--	--	--	--	--
Plaza - Riverside	Mt. View - RERC	1000	1250	125%	918	92%	Loading < 100% w/ RERC 3 and 4
RERC - Riverside	--	--	--	--	--	--	--
Riverside - Vista #1	--	--	--	--	--	--	--
Riverside - Vista #2	--	--	--	--	--	--	--

NOTES - -

Standard Procedure 120.000 - Refers to Riverside Public Utilities (RPU) Standard Procedure 120,000, an operating procedure (RPU) used by the dispatch office.

RERC 3 and 4 - the proposed addition of two new units at Riverside Energy Resource Center

STP - Sub-Transmission Project - the proposed project to re-inforce the existing RPU 69 kV subtransmission network.

RTRP - Riverside Transmission Reliability Project - the proposed project to add a new transmission interconnection to the RPU 69 kV network, and further re-inforce the network with 69 kV line additions.

**August 29, 2008**  
**Riverside Energy Resource Center**  
**Units 3 & 4 Switchyard Design Information**

<b>69 kV Switchyard Bus Ratings:            (Continuous)</b>	<b>North</b>	3348 Amps
	<b>South</b>	3348 Amps
<b>69 kV breaker Ratings:            (From Manufacturer Bid)</b>	<b>Continuous</b>	2000 Amp
	<b>Short Circuit</b>	44,000 Amps
<b>69 kV Disconnect Switch ratings:</b>	<b>Continuous</b>	2000 Amp
	<b>Short Circuit</b>	100,000 Amps