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March 19, 2010

Iain Fisher Energy Division California Public Utilities 508 Van Ness Avenue San Francisco, California 94102

Subject: Energia Sierra Juarez Gen-tie Project – Data Request No. 1

Dear Mr. Fisher:

Following is a response to your questions for additional information in support of the Energia Sierra Juarez Gen-Tie, East County Substation and Tule Wind Projects EIR/EIS analysis.

## **Transmission Alternatives**

1. CPUC staff is assessing the merits of a project alternative that would eliminate the proposed ECO substation and replace it by connecting the generation that would have been connected to the ECO substation to the existing CFE 230 kV lines that run from the La Rosita and La Rumorosa area to the Tijuana area and into Miguel.

With respect to this alternative please provide the following information.

- a) How much wind capacity could the existing 230 kV CFE system deliver into the SDG&E system, assuming applicable system reliability requirements are maintained? Please fully explain the reliability criteria used to determine the system capability and any limiting contingencies.
- R. This question is best posed to CFE. Please note responses to question e).
- b) How much additional capacity could be incorporated into the existing CFE 230 kV system through a) reconductoring utilizing conventional conductor or b) through application of composite conductor technology.

- R. This question is best posed to CFE. Please note responses to question e).
- *c) Please address the feasibility of rebuilding the 230 kV existing lines in order to accomplish the interconnection of the anticipated wind capacity.*
- R. This question is best posed to CFE. Given that CFE has previously stated that their transmission system cannot be used to solve US related transmission deficiencies, it does not appear likely that interconnection with the CFE system for the suggested purpose is feasible. If for the sake of argument it is assumed that they would allow interconnection to their system and given statements by CFE that their system is currently overloaded, any such interconnection request would likely require very expensive improvements to their system. These costs would be assigned to the interconnecting entity, and would make such a project economically infeasible.
- *d)* What protocols and/or legal requirements would need to be addressed with *CFE* in order to accomplish such an alternative?
- R. The suggested alternative would place the interconnecting project outside of the CAISO control area, requiring a pseudo tie. Currently, the CAISO tariff does not contemplate pseudo ties (although a stakeholder process is underway). Even if the CAISO offered pseudo ties, granting a pseudo tie would require amending existing control area agreements with CFE, and would be entirely at the discretion of CFE.
- *e) Please identify any other concerns (other than issues related to the boulevard area and associated wind generation) that may limit or otherwise impede such an alternative.*
- R.
- i. As a threshold matter, FERC Order No. 888 requires transmission facility owners to offer transmission services to generators to enable their interconnection to the grid. Given that SDG&E is subject to FERC jurisdiction, the fundamental premise that a generator desiring to interconnect with the SDG&E system could be denied such open access runs contrary to FERC provisions. Further, CFE is under no obligation to provide transmission service, since it is not a FERC jurisdictional entity.
- CFE has indicated previously to Sempra Generation that CFE's La Rosita (ROA) to Tijuana (TJ) 230kV system is at capacity. Any flows from generation connected directly to CFE's 230kV lines will exacerbate existing overload conditions.

- iii. Although CFE has regulations pertaining to the wheeling and export of energy from their system, CFE has previously indicated that the CFE transmission system cannot be used to solve US related transmission deficiencies. This includes increasing dependence on Special Protection Schemes (SPS) that open one of the two lines connecting CFE to CAISO as a means of protecting CFE's system from overloads.
- iv. CFE only this week proposed transmission tariffs for renewable energy projects. Sempra Generation has not reviewed the proposed renewable energy tariffs, but current transmission service charges for the CFE system are very high. These charges would be passed onto the utilities that would purchase the energy, thusly increasing the cost of renewable energy to rate payers at the very least, and at worst, rendering the project economically infeasible. This cost assumes that no system upgrades are required.

### **Socioeconomic Analysis - Project Description Data Needs**

2. Please provide the following information:

#### **Construction Work Force**

- a) What is the anticipated work force **by month** during the duration of construction?
- R. Refer to Workforce by Month Table.
- b) If possible please provide the labor categories such as laborers, equipment operators, technicians, etc.
- R. Refer to Workforce by Month Table.
- c) *Estimate of percentage work force employed locally.*
- R. Refer to Workforce by Month Table.

#### **Operation Work Force**

- *d)* Labor categories of the operational work force required.
- R. Refer to Workforce by Month Table.

## Local Expenditures of Supplies and Equipment for Construction

e) Estimate of cost of equipment, materials, supplies and services that will be purchased locally (eg concrete, sand, gravel, asphalt, portable toilets).

R. Refer to Local Expenditures Table

f) Estimate of local contracts that will be given.

At this time there are several potential vendors for the ESJ Gen-tie project that consists of both United States firms and Mexican firms. Therefore, it is difficult to estimate the local contracts. For estimation purposes it could be assumed that 50% of the contracts would be local. The exact value will not be known until contractor selection.

## Local Expenditures of Supplies and Equipment for Operation

- g) Supplies and local contracts required for operations.
- R. Refer to Local Expenditures Table

If you have any questions regarding this response or need additional information, please contact me at the letterhead address above.

Sincerely,

Joan Heredia

Manager of Permitting and Compliance

cc. Alberto Abreu

Month	Labor	Operators	Engineers	Total	Locals	Locals %
Month 1	4		2	6	2	33%
Month 2	16	3	3	22	6	27%
Month 3	15	3	4	22	7	32%
Month 4	10	3	2	15	5	33%
Month 5	12	5	3	15	8	53%
Month 6	7	2	1	10	3	30%

Project Workforce by Month During Construction

The workforce distribution presented in the Table is approximate. The percent of local workers will be a function of the firm hired to complete the work.

#### Project Workforce by Month During Operations

1	5	Labor Operators Engineers Total Locals Locals					
		Labor	Operators	Engineers	Total	Locals	Locals %
	Continuous		1	1	2	1	50%

The workforce distribution presented in the Table is approximate. The percent of local workers will be a function of the firm hired to complete the work.

# ESJ Gen tie Project Location: Jacumba, CA

### Local Expeditures of Supplies and Equipment during Construction

Equipme	ent					
No	Item	Time (days)	hrs a day	Total Hrs	USD/hr Am	nount
	1 Bull dozer	12	8	96	500 \$	6,000.00
	2 Moto grader	6	8	48	450 \$	2,700.00
	3 Generators	144	10	1440	50 \$	7,200.00
	4 Dump trucks	12	10	120	35 \$	420.00
	5 Water trucks	144	4	576	200 \$	28,800.00
	6 Front Loader	48	5	240	400 \$	19,200.00
	7 Fork lift	48	5	240	225 \$	10,800.00
	8 Compaction Roller	12	8	96	150 \$	1,800.00
					<b>Total:</b> \$	76,920.00

Materi	als & Services				
No	Item	Unit	Qty times	s USI	D Amount
	1 Water supply	gals	780000		0.02 \$ 15,600.00
	2 Concrete supply	yd3	400		95 \$ 38,000.00
	3 Rebar (4 towers)	tons	14		1100 \$ 15,400.00
	4 Portable toilets	nr	5	6	400 \$ 12,000.00
	5 Trash containers with collection	nr	3	6	250 \$ 4,500.00
					Total: \$ 85,500.00

## Local Expeditures of Supplies and Equipment during Operations

# Yearly basis

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Equipm	Equipment						
No	Item	Time (days)	hrs a day	<b>Total Hrs</b>	USD/hr	Amount	
	1 Moto grader	3	8 8	24	500	\$ 1,500.00	
	2 Water trucks	Z	4 8	32	250	\$ 1,000.00	
					Total:	\$ 2,500.00	

Mate	Materials & Services								
No	Item	Unit	Qty times	ι	JSD/hr Ai	nount			
	1 Water supply	gals	8000		0.02 \$	160.00			
	2 Trash containers with collection	nr	1	6	150 \$	900.00			
	3 Fire protection area clearing	days	5		1500 \$	7,500.00			
					Total: \$	8,560.00			

Note: All values are approximated according the conceptual layout. Rates are approximated for budgeting purposes.