



CALIFORNIA ENERGY COMMISSION

REPORT OF CONVERSATION Page 1 of 3

Siting, Transmission, and Environmental Protection Division	File: 11-AFC-04	
Conversation Method: Telephone, E-Mail, and Meeting	Project Title: Rio Mesa Solar Electric Generating Facility	
Name(s): Casey Weaver	Date: Varies	Time: Varies
With: Joe Stewart (URS), Angela Leiba (URS), Arlene Garcia-Herbst (URS), and Todd Stewart (BrightSource)		
Subject: Discussions with Applicant Representatives Regarding Delineation of Paleontological Resources		
<p>Rio Mesa Solar Electric Generating Facility – Paleontological Excavation Discussion Chronology.</p> <p><u>Background</u></p> <p>On February 27, 2012, Energy Commission staff filed Data Requests Set 1B (Nos. 85-154). Data Requests 126 through 130 requested information from the project applicant relating to delineation of areas of the project where a previously unknown paleontological resource was discovered.</p> <p>On March 19, 2012, the applicant filed a notice objecting to the requests suggesting that the information requested was not reasonably available to the applicant without significant excavations, which would be time consuming and expensive. The applicant further suggested that since the installation of the heliostat field was to be minimally invasive, there would be no significant impact on paleontological resources.</p> <p>On March 28, 2012, the applicant filed responses to data requests 126 through 130. In general, for data request 126, which asked that the applicant provide a plan for review and approval that will be used to adequately delineate the recently discovered resource, the applicant referenced the March 19 objection, but indicated that they provided a map under confidential filing adequately delineating known exposures within the project area of the recently discovered paleontological resource. The map delineated the general surficial extent of the resource. For data request 128, which asked for a map that shows the thickness of the recently discovered resource, the applicant again referenced the March 19 objection, but indicated they would do additional paleontological testing in several areas throughout the site and further analyze the exposed erosional or surficial cut areas where thickness could potentially be determined. Furthermore, the applicant indicated that they would prepare a map showing these areas within 30 days along with a letter report summarizing testing results 30 days after testing results were complete.</p> <p><u>Ongoing Discussions</u></p> <p>Since the formal correspondence noted above, staff has been in continued discussions with the applicant concerning delineation of areas of the project site likely to contain paleontological resources that could be susceptible to disturbance during project construction. As of the writing of this Report of Conversation, staff is not aware of the status of the additional testing or report referenced by the applicant above. A summary of these discussions, and the dates on which they occurred, are provided below.</p> <p>May 24, 2012 – Joe Stewart (URS Paleontological Resources Specialist) sent me a revised site layout plan that showed the elimination of the northern 1/3 of the original project. The project boundaries were changed on the map but there was no indication of excavation locations provided. The email requested</p>		



providing additional questions if something was unclear.

Due to Joe's request, I returned an email on May 24, 2012 requesting the applicant provide:

- 1) Revised excavation map. I assumed the lower section will remain the same, but a revised map showing all of the currently proposed excavation locations as well as the previous geotech excavations locations would be helpful (required).
- 2) Sequence of proposed exploration. South to north, east to west?
- 3) Excavation methodology. Will geoarch pits be excavated in 6 inch layers? Will borings be continuous core, will back hoe pits be utilized?
- 4) Excavation equipment. Shovels, type of backhoe (Case 580 with extendahoe?), type of drill rig (track mounted all terrain, Mobile B-53, CME 75?), type of drilling (hollow stem?), diameter of bore hole, etc.
- 5) Final proposed depth of excavations. Contingencies.
- 6) Sampling collection and curation methodologies and sample depth intervals.
- 7) Method of recording subsurface conditions. Photos, logs, etc.
- 8) Sample analyses. Dry sieve, wet sieve, geotech tests, archeo recovery techniques.
- 9) Sample analyses results.
- 10) Content of Report.
- 11) Schedule.

I stated that this list is not exhaustive, but it provides an example of some of the elements typically needed in a sampling and analysis plan.

Later on May 24, 2012, a Data Response workshop was held. Webex of the workshop was recorded and can be accessed here: https://energy.webex.com/energy/playback.php?FileName=http://www.energy.ca.gov/sitingcases/riomesa/documents/20120524_data_response_workshop.wrf.

During the workshop, I indicated that I would take a look at the soon-to-be docketed Geoarcheology Excavation Design Plan and provide feedback of its applicability to the data request asking for a plan to delineate the highly sensitive paleontological resource discovered on site. I agreed that the locations of the excavations (geotech, geo arch and Paleo) could be sufficient to delineate the paleo resource. However, all of the excavations would have to be monitored by a qualified paleontologist. I specifically stated that the excavation design was for geoarcheology and may not address the methodology required for geotech and paleontology and that a site-wide excavation plan may be a better approach. Angela Lieba (URS) stated that they intend to monitor all excavations for paleo and archeology and that the geoarch study plan, which was anticipated to be turned in shortly, would include the methodology to be used for paleo and geotech excavation.

On May 29, 2012, Angela Leiba sent me an email stating that everything I mentioned in the e-mail to Joe dated May 24 should be included in the Geoarch study design.

On May 30, 2012, I received the geoarch study design attached to an email from Pierre Martinez (CEC PM). The document appeared more general than specific and was not a design of a plan or methodology that could be followed to accomplish any field investigation. Specifically, it did not address the excavation methodology required to delineate the paleontological resource, collect and curate samples or assure that all site excavations would be monitored by a qualified paleontologist.

On June 6, 2012 a teleconference was conducted between me, Angela, Joe Stewart and Arlene Garcia-Herbst (URS). In that teleconference I explained that the geoarch design did not really address the excavation methodology required to delineate the paleo resource. I explained that the applicant should really prepare a Whole Site Excavation plan that provided the methodology for subsurface excavation,



sample collection, curation, and subsurface interpretation of all site excavations planned. I recommended that they determine and provide the sequence of excavation to conduct the work in a logical manner and minimize duplication of efforts or missing an opportunity to collect important information from excavations not necessarily intended for paleo exploration. That is, obtain paleo information from the geotech and geoarch excavations in addition to those excavations specifically intended for paleo exploration.

Angela reviewed my 11 point list (noted above) and made notes to it indicating that she would address what she could. She did not want to write up a Whole Site Excavation Plan. She stated that the geotech work will proceed as Ninyo and Moore have it planned and that the paleo and geoarch monitors can watch the excavations as they progress. She said the geoarch study was adequate and included the paleo study. I pointed out that it didn't and a better approach would be to use the geoarch plan as one of the three sections (the other two being geotech and paleo) in a Whole Site Excavation Plan. I stated that a Whole Site Plan would document the requirement that all excavations would be monitored by the appropriate people and a cohesive excavation plan could be developed and subsequently implemented. I emphasized that the borings should be conducted using continuous coring methods so that undisturbed samples could be collected. Angela stated that the methodologies that were used for excavation, collection and interpretation of paleo resources would be provided in the paleo resources report. I emphasized that the methodologies should be presented as a plan prior to implementation. That the effort should be planned, executed, interpreted and reported. I stated that if the methodology is already predetermined and written up as a template to be inserted into a report, it could easily be made into an excavation plan element with little effort.

cc:	Date: 7/19/12	Signed:
		Name: