

MARINAL

# COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY

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STEPHEN R, MAGUIN
Chief Engineer and General Manager

February 13, 2009

File No. 31R-110.10

Kimberly D. Bose, Secretary Nathaniel J. Davis, Sr., Deputy Secretary Federal Energy Regulatory Commission 888 First Street, N.E. Washington, D.C. 20426

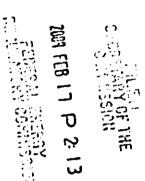
Dear Secretary Bose and Deputy Secretary Davis:

Comments on Scoping Document 1 for Eagle Mountain Pumped Storage Project (FERC Project No. P-13123-000)

Thank you for this opportunity to provide comments on Scoping Document 1 ("SD1") issued by the Federal Energy Regulatory Commission ("Commission" or "FERC") and the State of California State Water Resources Control Board ("Water Board" or "SWRCB") on December 17, 2008 for Eagle Crest Energy Company's ("ECEC's") Eagle Mountain Pumped Storage Project, FERC No. 13123 (the "Project"). The County Sasitation Districts of Los Angeles County (the "Districts") provide these comments to highlight some subjects for additional environmental studies and analysis which must be conducted as a part of the environmental review of the Project in accordance with the requirements of the National Environmental Policy Act, 42 U.S.C. § 4321 et seq. ("NEPA") and the California Environmental Ouality Act, California Public Resources Code §521000-21177 ("CEOA").

The Districts provide environmentally sound, cost-effective wastewater and solid waste management facilities that convert waste into resources like reclaimed water, energy, and recycled materials. The Districts are a confederation of 24 independent special districts, governed by Boards of Directors consisting of the presiding officer of the governing body of each city within the Districts and the presiding officer of the Los Angeles County Board of Supervisors for unincorporated territories, serving approximately 5.2 million people in Los Angeles County.

Due to a projected future shortfall in local solid waste disposal capacity, the Districts have been working with other public agencies to study means by which solid waste can be disposed of at sites



<sup>&</sup>lt;sup>1</sup> The District reserves the right to make additional comments and study requests during the course of the traditional licensing process. As reflected in these comments, ECEC's lack of specificity and incomplete analysis of impacts in Project materials issued to date makes it difficult to provide a full response. Accordingly, this letter is not intended to provide a full and complete list of all the studies necessary for ECEC to comply with applicable law, rules, and regulations with respect to this Project.

-2-

February 13, 2009

outside of the Los Angeles metropolitan area. Although nearly all of Los Angeles County's refuse is currently disposed of locally by truck, the Districts have taken a lead role in implementing a Waste-by-Rail System to provide long term disposal capacity to replace local landfills as they reach capacity and close. The Waste-by-Rail system will use an integrated local and remote infrastructure to transport refuse to remote disposal sites.

One of the remote landfill sites available to the Districts in connection with the Waste-by-Rail system is the Eagle Mountain Landfill located in Riverside County. It is fully permitted to receive residual solid waste by rail from Southern California. The Districts have entered into an agreement to purchase Eagle Mountain Landfill for use as part of their Waste-by-Rail program. The Districts have entered into this agreement with the current owners of the Eagle Mountain Landfill, Kaiser Eagle Mountain, LLC and Mine Reclamation, LLC (collectively, "Kaiser"). ECEC's Project proposes to use the Eagle Mountain Landfill site to generate and store electricity by filling the lower reservoir with water and using turbines to pump water from the lower to upper reservoir and generate electricity by a closed loop system.

The environmental review for the proposed ECEC project needs to clearly and completely describe the potential direct and cumulative environmental impacts to the design, construction and operation of the Eagle Mountain Landfill project (Landfill)—a pre-existing proposed project that will largely take place within and adjacent to the footprint proposed for the ECEC Project. The prospect of interference between ECEC's Project and the Landfill is obvious. These potential conflicts must be seriously studied and analyzed by ECEC before its own Project may proceed. However, no serious study or analysis of these interferences has been forthcoming from ECEC.

Implicit in these comments, as well as our previous comments on BCEC's Draft License Application (the "DLA") dated September 12, 2008 ("DLA Comments"), is the fact that no full assessment of the proposed Project by the Districts is possible because of ECEC's failure to provide a complete and accurate description of its proposal. The previous comments are attached hereto as Exhibit "B" and incorporated herein. ECEC does not, as an example, identify with any specificity the location of available or alternate transmission routes or the specific sources of groundwater for the initial fill and annual make-up water necessary to construct and operate this Project. ECEC must provide the Commission, the Water Board and the public more complete and accurate information regarding its proposed project to allow for adequate environmental review.

Long before the Landfill can be operated, the Districts will need to construct the landfill and its supporting infrastructure. This will include excavation, road construction, and the installation of piping, electrical work and landfill liners. Any simultaneity in the construction of the two projects will create potential traffic, air quality, noise, and biological impacts that also need to be considered. Because the Eagle Mountain Landfill has completed the permitting process, it should be considered an existing project and described completely and consistently with previously approved environmental documents and entitlements. The environmental analysis needs to include a significant number of studies and analyses and answer important questions concerning the incompatibility of the two land uses. A partial list of significant questions, studies and impact analyses required, including questions regarding the operation of the Visitor Center, tunnels under an active landfill, groundwater monitoring, seepage, desalinization operations, and the use of minerals and soil at the site, is included in Exhibit A which is attached to this comment letter.

As requested in September 12, 2008 letter, the Districts request that the scoping process be continued until ECEC provides an accurate project description clearly defining the analyses that needs to be undertaken such that the environmental impacts can reasonably be considered. If, however, ECEC

-3-

February 13, 2009

proceeds with a deficient draft application, the additional areas of analysis referenced herein must be included within the scope of the EIS/EIR review. Also, all studies currently reflected in the SD1 must be pursued sufficiently to thoroughly discuss the significant aspects of probable environmental consequences of the Project on the permitted landfill construction and operation. Significant additional analysis is necessary for the Commission and the Water Board to possess sufficient information to fully consider the Project and its impacts.

Very truly yours,

Stephen R. Maguin

Stephen R. Magneri

SRM:JLC:sif

cc: Camilla Williams, Division of Water Rights, State Water Resources Control Board FERC Service List for P-13123-000
Kim Nguyen, FERC
Terry L. Cook, Kaiser Eagle Mountain
Matthew D. Hacker, Metropolitan Water District of Southern California

4-

February 13, 2009

#### **EXHIBIT A**

- A. Characterize and mitigate any overlap between proposed project Phases I through IV and operation of Landfill.
- B. Potential Areas of Incompatibility
  - 1. Substantiate that the proposed project will not compromise the design, construction and operation of the Landfill.
    - (a) Need to study whether regulators would approve operation of the Landfill over the proposed power generation project.
    - (b) ECEC must substantiate that the Landfill will still comply with siting, design and operational requirements pursuant to 40 CFR 258 and Titles 23 and 27 of the California Code of Regulations regarding municipal solid waste landfills.
  - 2. Operational Issues
    - (a) Visitor's Center
      - (i) How will its operation impact the Landfill's operations?
      - (ii) Will the public have access to all Landfill property?
    - (b) Tunnels Under Active Landfill
      - (i) What type of methane barrier will be installed for subsurface facilities?
      - (ii) How will ECEC prevent the tunnels from becoming potential conduits for groundwater or landfill gas?
      - (iii) If the tunnels become flooded, how will any potential impacts to groundwater be remediated?
      - (iv) What potential pollutants could potentially alter groundwater chemistry from tunnel infrastructure and maintenance?

-6-

February 13, 2009

- (v) Where will the estimated 2,500 tons per year of desalinization salt ultimately be disposed?
- (e) Other Potential Incompatibilities
  - (i) How will the proposed transmission lines impact the operation of the Landfill's railyard and the Landfill as a whole?
  - (ii) How will the project's use of the switchyard impact the operation of the Landfill?
  - (iii) Could access to fine or coarse tailings or overburden piles for landfill purposes be blocked by this project's infrastructure or operation?
  - (iv) How will your project's traffic from the staging, storage, administration or areas affect the Landfill's operation?
  - (v) Where will earthen materials be obtained to build the dam and prepare both reservoirs and how much will be necessary? How will the use of these materials affect the Landfill's construction or operations?
  - (vi) Where will the significant quantity of tailings present in the East Pit be relocated for use for the Landfil?
  - (vii) How can the transfer station potentially impact landfill construction and operations?
  - (viii) How will security and maintenance be performed within the Landfill area, and how will these activities affect the operation of the Landfill?
  - (ix) How much fine and coarse tailing materials are needed for construction of the project, and how will use of these materials impact the Landfill project?
  - (x) Figure E.1-8 does not accurately depict the location of Landfill infrastructure. Please update this figure using information

February 13, 2009

contained in the Report of Waste Discharge for the Eagle Mountain Landfill.

- C. Completely describe, with project specific studies:
  - 1. What pollutants may be generated by the project?
  - 2. Determine specific scepage controls based upon detailed geologic mapping including but not limited to:

-7-

- (a) Detailed calculations for leakage losses from both reservoirs
- (b) Detailed calculations for pre-and post-seepage treatment
- (c) A detailed description of proposed seepage control, including all supporting calculations
- (d) A detailed three-dimensional groundwater flow model, such as Visual MODFLOW using particle tracking, for the proposed site should be used to illustrate the impact of seepage from treated and untreated reservoirs, including potential impacts from tunnels in the event they become flooded. Visual MODFLOW should be utilized to predict potential impacts to the Landfill. The groundwater model should be calibrated using historic water levels and pumping data, contained in the Report of Waste Discharge, before making predictions needed to assess potential impacts to the Landfill.
- (e) A detailed description, including a three-dimensional groundwater flow model described above, for the proposed site to illustrate the impact of proposed scepage recovery wells (modeling should be used to determine the estimated spacing of recovery wells needed to ensure the landfill groundwater monitoring network is not impacted by seepage).
- 3. Geology and Geotechnics

February 13, 2009

(a) Provide stability modeling for reservoir slopes and adjacent areas potentially impacted by the filling of mining pits with water. Modeling of critical existing and final landfill liner slopes should be performed to assess potential impacts to the Landfill in conformance with requirements of the State Department of Water Resources ("DWR"), addressing both impacts from the Maximum Credible Earthquake and Maximum Probable Earthquake events.

-8-

- (b) Provide detailed stability calculations for the upper dam in conformance with requirements of the State Department of Water Resources ("DWR"), addressing both impacts from the Maximum Credible Earthquake and Maximum Probable Earthquake events.
- (c) Provide an up to date asismicity study using current data and methodology approved by DWR.
- Groundwater, Potable Water and Sewerage
  - (a) Describe the long-term potential influences of pumping within the basin, provide a detailed three-dimensional groundwater flow model, such as Visual MODFLOW, for the Chuckawalla Valley that will provide basin-wide impacts from pumping along with maximum drawdown predicted for other potential water producers in the basin. The groundwater model should be calibrated using historic pumping data before making predictions needed to assess potential impacts to the basin. The calibrated model should consider groundwater pumping needed for the Landfill, assuming both projects are operational at the same time.
  - (b) The groundwater model should address potential impacts of both initial filling and any make-up water needed for the duration of the project.
  - (c) Visual MODEFLOW modeling for both the existing production well and proposed production well scenarios to assess potential impact to the basin.
  - (d) Based upon modeling results, how will pumping activities impact the landfill or other parties pumping water from the Chuckawalla Valley?

-9-

February 13, 2009

- (e) If water used to initially fill the reservoir is obtained from the Chuckawalla Valley, will existing production wells be utilized?
  - (i) Does ECEC have the authority to utilize these wells?
  - (ii) What is the capacity of each well to be used?
- (f) What potable water system will serve the proposed project, and what is the potable water demand of that project?
- (g) Which existing sewage facility will be used for the project, and what is the estimated quantity of sanitary sewage that will be generated?
- (h) Will wastes other than sewage wastes be discharged into the existing sewage system? What are the composition and the quantity of these wastes?

#### Storm Water

- (a) Provide a detailed hydrology study for the project, including:
  - (i) Design calculations for drainage structures necessary to accommodate applicable storm intensities specified by the Regional Water Quality Control Board for the Landfill project, assuming both projects will operate simultaneously, and
  - (ii) A study of where surface water will be directed due to the loss of East Pit storage capacity.
- (b) What materials will be stored within the proposed project's site?
- (c) How will ECEC monitor storm water from industrial activities pursuant to the General Industrial NPDES permit?

-10-

February 13, 2009

- (d) What best management practices will be used to prevent storm water pollution during construction activities?
- 6. Address and mitigate the potential impact of the open reservoirs attracting wildlife
  - (a) Among the species to be addressed are ravens, coyotes and other predators of the desert tortoise.
  - (b) How will the reservoirs affect the Landfill's ability to comply with the Biological Opinion?
- Perform a complete biological assessment for the proposed project, including a full evaluation of potential impacts to the Landfill project.
- 8. Perform a detailed visual assessment for the proposed project itself.

# Exhibit B



# COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY

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STEPHEN R. MAGUIN Chief Engineer and General Manager

September 12, 2008

File No. 31R-110.10

Scoretary Kimberly D. Bose Deputy Secretary Nathaniel J. Davis, Sr. Federal Energy Regulatory Commission 888 First Street, NE Washington, DC 20426

Dear Secretary Bose and Deputy Secretary Davis:

Comments Regarding Eagle Crest Energy Company's Draft License Application for FERC Hydroelectric Project No. 12509

Enclosed for the Federal Energy Regulatory Commission's ("Commission's") consideration in review of the above-referenced application, the County Sanitation Districts of Los Angeles County (the "Districts") submit this copy of their further comments regarding the Draft License Application ("DLA") for Bagle Crest Bnergy Company's ("BCBC's") Bagle Mountain Pumped Storage Project, FHRC No. 12509 (the "Project"), proposing construction of hydroelectric facilities on Eagle Mountain, near Desert Center, California. BCBC filed its first preliminary permit application for this Project in 1987, and is now on its fourth preliminary permit.

The Bagle Mountain Landfill (the "Landfill") is currently under contract to be sold to the Districts by Kaiser Eagle Mountain, LLC and Mine Reclamation, LLC (collectively, "Kaiser") The Landfill is permitted for development on a substantial portion of the property that ECEC proposes to use for its Project. The Project as proposed will have a direct impact on the Districts and the Landfill.

As reflected in the District's previous comments responding to ECEC's Preapplication Document, the Districts' and other parties' assessment of studies and impact analyses has been obstructed by ECEC's failure to provide a complete and accurate description of its proposal. The enclosed letter contains the Districts' further analysis of deficiencies and inaccuracies in the DLA and identifies additional studies that must be conducted to provide the Commission with adequate evidence for its consideration in issuing an original license for the Project. Should ECEC fail to correct these material and serious deficiencies in its license application, the Commission should reject the submittal as patently deficient pursuant to 18 C.F.R. § 4.32.

Very truly yours,

Stephen R. Maguin

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Enclosure



# COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY

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STEPHEN R. MAGUIN Chief Engineer and General Manager

September 12, 2008

File No. 31R-110.10

Ms. Ginger Gillin
GEI Consultants, Inc.
10860 Gold Center Drive, Suite 350
Rancho Cordova, CA 95670

Dear Ms. Gillin:

## Comments Regarding Engle Crest Energy Company's Draft License Application for Proposed FERC Hydroclectric Project No. 12509

Pursuant to 18 CFR §§ 385.210, .211, .214, the County Sanitation Districts of Los Angeles County (the "Districts") submit this comment letter in response to Applicant Eagle Crest Energy Company's ("ECEC") Draft License Application ("DLA") for its proposed Project No. 12509 ("Project.")

The Districts provide environmentally sound, cost-effective wastewater and solid waste management facilities that convert waste into resources like reclaimed water, energy, and recycled materials. The Districts are a confederation of 24 independent special districts, governed by Boards of Directors consisting of the presiding officer of the governing body of each city within the Districts and the presiding officer of the Los Angeles County Board of Supervisors for unincorporated territories, serving approximately 5.2 million people in Los Angeles County.

Due to a projected future shortfall in local solid waste disposal capacity, the Districts have been working with other public agencies to study means by which solid waste can be disposed of at sites outside of the Los Angeles metropolitan area. Although nearly all of Los Angeles County's refuse is currently disposed of locally by truck, the Districts have taken a lead role in implementing a Waste-by-Rail System to provide long term disposal capacity to replace local landfills as they reach capacity and close. The Waste-by-Rail system will use an integrated local and remote infrastructure to transport refuse to remote disposal sites.

One such remote landfill site is the Eagle Mountain Landfill located in Riverside County. It is fully permitted to receive residual solid waste by rail from Southern California. The Districts have entered into an agreement to purchase Eagle Mountain Landfill for use as part of their Waste-by-Rail program. The Districts have entered into this agreement with the current owners of the Eagle Mountain Landfill, Kaiser Eagle Mountain, LLC and Mine Reclamation, LLC (collectively, "Kaiser"). ECEC's Project would use the Eagle Mountain Landfill site to generate and store electricity by filling the lower reservoir with water and using turbines to pump water from the lower to upper reservoir and generate electricity by a closed loop system.

Ms. Ginger Gillin

-2-

September 12, 2008

I.

#### SUMMARY

The DLA is an insufficient document that fails to satisfy the requirements for a license application or to provide even a cursory basis for FERC to start environmental review as required by the National Environmental Policy Act, 42 USC §4321, et. seq. ("NEPA") The DLA: (1) relies upon illusory or non-existent infrastructure, facilities and approvals; (2) either ignores or glosses over real and substantial impacts to the design, construction and operation of the Eagle Mountain Landfill project ("Landfill")—a pre-existing proposed project that will largely take place within and adjacent to the footprint proposed for the BCBC Project; and (3) cites as bases for the application studies and information generated for other projects rather than that proposed by BCEC. Significant improvements are necessary for the DLA to properly describe the proposed project and its potential direct and cumulative environmental impacts.

H.

# THE DLA RELIES UPON NON-EXISTENT OR UNSTUDIED FACILITIES AND ASSUMPTIONS

The DLA contains a number of crucial but unsupported assumptions that go to the heart of the feasibility of the Project and its ability to satisfy its objectives. These include: (1) the assumption that infrastructure will exist to convey power generated by the Project to customers of Southern California Edison ("SCE"); (2) assumptions about the availability and cost of the land to be used for the Project, (3) the assumption that sufficient sources of water will exist for the Project at a reasonable cost; and (4) assumptions that financing for the Project will exist on terms set forth by ECEC. Each of these assumptions is unsupported by existing studies or existing facts.

ECEC's application assumes that the power generated by the Project will be conveyed through a 500kV line extending 50.5 miles to a proposed Colorado River Substation to be built by SCE adjacent to an existing SCE Palo Verde-Devers 500 kV line. (DLA, Ex. "A," p. 4-1.) The existing line conveys power from Arizona's Palo Verde nuclear power plant to California. ECEC provided no studies to show that even the proposed line would possess enough capacity to convey all of the power generated by the Project. The DLA alludes to other transmission connection upgrades that may be necessary to service nearby markets, but it does not identify what these upgrades would be, what they may cost, where they may be located, or what impacts they will have on the local environment or the Landfill. (DLA, Ex. "A," ES-1.)

Regardless of any other "upgrades" that may be necessary, it is now unclear that the second 500 kV line will ever be built. The Arizona Corporations Commission ("ACC"), which possesses state regulatory jurisdiction over the portion of the line to be built in Arizona, rejected the application to construct the line on the grounds that it would impair Arizona's ability to provide power for its own citizens and that California did not have need for the power to be transmitted. SCE has appealed the ACC's decision to FERC, where it appears that both ACC and the Sierra Club will oppose SCE. In any event, it will likely not be known for years whether the line will be approved and whether, if it is approved, economic and other circumstances will permit construction and operation of the second line. The DLA contains no factual basis for any assumption that FERC (or the Federal Courts) will approve construction of the second line. Without the 500kV line, BCEC's ability to carry on its own Project will remain speculative.

The DLA lists the cost for "land and water rights" for the Project as \$24.2 million (DLA, Ex. "D", p. 1-1.), but this figure relies upon a number of unsupported assumptions regarding the availability of the land and water necessary for the Project. ECEC assumes that it will not purchase the necessary land from Kaiser, the Districts, or others, but that it will instead lease all of that land from the present owners for \$2 million. (DLA, Ex. "D", pp. 1-1, 1-2; § 4.3.) The rental figure was not supported by any market or other analysis, and there is no basis for ECEC to assume that the present owners would lease the necessary land and/or water to BCEC at any price. Since it is unclear from BCEC's description the extent to which its operations would impact Landfill operations, the District may potentially lose a site for disposal with a capacity of 708 million tons, which would include 100 years of operation at 20,000 tons per day. The value of the property as a constructed landfill would therefore run into the billions of dollars, but no consideration of this possibility was included in ECEC's calculations. The DLA's assumptions are unrealistic and again suggest the speculative nature of the Project.

ECEC also assumes that enough water will be available for its Project at a reasonable cost, but it doesn't provide the basis for these assumptions. Although the DLA states that the water for the Project will come from unidentified "wells" or, if necessary, from the Metropolitan Water District, its assumptions are not accompanied by an analysis identifying the specific source of the water, the impact of the Project on the availability of water for other uses, including the Landfill, the impact of drawing the water on the environment, or any facts or studies to support the per acre foot cost assumed by BCEC (\$1,000 per acre foot). (DLA, Ex. "D", p. 1-2; Ex. "B", p. 2-9.) ECEC's assumption that it will have sufficient water to run its Project is based upon a further assumption—that it can purchase or lease suitable land and wells to generate the necessary water. (Ex. "B", p. 2-10.) This assumption is also presented without support. In view of the sourcity of water at the Project site and the growing statewide scarcity of water resources, ECEC's broad assumption that it will have enough water to operate the power part of its Project, not to mention its future needs for potable water and water for ancillary aspects of its Project, is speculative.

The DLA further assumes that financing will exist to build and operate the Project at a six-percent interest rate for 70% debt ratio for a 20-year term on a Project-financed basis. (DLA, Ex. "D", p. 5-3.) This assumption appears to be wildly optimistic, and it was not accompanied in the DLA by any analysis of existing or future financial market conditions or other factual support.

Despite all of these uncertainties and unsupported assumptions, BCEC's "schedule" for obtaining all of its entitlements, all of the land and water necessary for the Project, constructing and beginning operation of the Project is overly aggressive. The DLA assumes that the FERC license will be granted less than two years from now despite the previously-identified uncertainties and the likelihood of, at best, a lengthy regulatory delay regarding the construction of the Palo Verde #2 line. ECEC then assumes that sufficient land and water will be accured and power purchase agreements and financing agreements will be reached within one month after the license is granted, with construction to start only two years thereafter. This timetable likely assumes that there will be no opposition to the Project—a prospect which appears unrealistic in light of the intervenors and protestors who already exist. This schedule certainly does not provide for any potential interference with the Districts' Landfill. Once again, the bases for ECEC's aggressive schedule are not sufficiently identified, and the aggressiveness of the schedule makes the Project appear even more speculative.

Ms. Ginger Gillin

4-

September 12, 2008

III.

# THE DLA DOES NOT ADEQUATELY CONSIDER THE PROJECT'S POTENTIAL INTERFERENCE WITH THE LANDFILL

The prospect of interference between ECEC's Project and the Landfill is obvious. However, ECEC spends only approximately 5 pages of its lengthy submittal discussing potential interferences, and it summarily rejects the possibility of any significant interference problems. This is largely because ECEC's assumes, based upon "our understanding of the landfill needs in Southern California and the current landfill implementation schedule," neither of which is specifically stated, that "the pumped storage project will be constructed before the landfill project." In view of the apparently unsupported assumptions that form the basis of ECEC's "schedule" for implementation of its Project, its oursery dismissal of the possibility of any significant conflicts is not credible. These potential conflicts must be seriously studied and analyzed by ECEC before its own Project may proceed.

Long before the Landfill can be used, the District will need to construct the landfill and its supporting infrastructure. This will include excavation, road construction, and the installation of piping. electrical work and landfill liners. Any simultaneity in the construction of the two projects will create potential traffic, air quality, noise, and biological impacts that BCBC does not consider in its DLA. Its primary assumption is that the only potential problem is if waste is being placed in the East Pit at the same time that water is present in the reservoirs. This underestimates the nature and scope of potential problems. To the extent that BCEC simply assumes that the projects can be modified to accommodate minimal conflicts, this assumption does not consider that previously approved environmental documents and entitlements may need to be reopened, which may obstruct and delay both projects. The very assumption that regulators would approve a landfill operating above a power project circulating water to generate power is itself highly speculative. ECEC needs to undertake a significant number of studies and analyses and answer important questions concerning the incompatibility of the two land uses in order for FERC to even minimally assess the consequences of granting a license for the Project. A partial list of significant questions, studies and analyses required of BCEC, including questions regarding the operation of the Visitor Center, tunnels under an active landfill, groundwater monitoring, seepage, desalinization operations, and the use of minerals and soil at the site, is included in Exhibit "A", Item I, which is attached to this comment letter.

IV.

# THE DLA CONTAINS INSUFFICIENT INFORMATION ABOUT THE PROJECT IT PROPOSES

Although the DLA contains a new biological study relating to certain species, most of the studies and reports it cites were prepared for other projects, not BCEC's Project. Studies relating to the impacts of a landfill or other project on the Project's site do not consider the specific features of ECEC's Project or sufficiently consider its impact upon nearby projects and activities and upon the environment itself. The potential environmental impacts of the actual facilities to be constructed are rarely, if at all, considered. For example, the DLA assumes that additional transmission towers and infrastructure will be necessary somewhere at the Project site, but it doesn't describe the location of those towers or consider the possible impacts of different alternative locations. The DLA proposes desalinization ponds that will generate an estimated 2,500 tons of salt but doesn't indicate where this salt will be ultimately be disposed of or any impacts accompanying the construction and operation of this facility. (DLA, Ex. "A", p. 1-9.)

Ms. Ginger Gillin

-5-

September 12, 2008

BCEC must also consider the impact that its proposed project will have on the land uses in the area near the project. For example, there is a large-scale solar farm covering approximately 15,000 acres being developed by Opti-Solar, Inc. next to Eagle Mountain. These impacts include air quality, traffic, noise and light pollution, seathetics, and other impacts on natural resources and sensitive species, including the desert tortoise. A partial list of necessary information required regarding potential impacts of the Project is included in Exhibit "A", Item II.

V.

#### THE DLA IS INSUFFICIENT

ECEC's submission raises significantly more questions than it answers. The Project and its impacts are not adequately considered, and even the basic assumptions underlying the DLA are highly speculative. The Districts request, at the very least, that ECEC engage in further review of the matters identified herein to correct deficiencies and provide a basis for comprehensive review of the application and its impacts. FERC and all parties affected by the Project are entitled to adequate information to permit a meaningful assessment of the Project.

The Districts reserve the right to submit further comments based upon inadequacies in this and future applications and upon modifications to this application in the future.

Very truly yours,

Stephen R. Maguin

Stephen R. Mazum

SM:sif Attachment – Exhibit "A"

### EXHIBIT "A"

## L INCOMPATIBILITY

- A. Claim that no overlap between Phases I through IV and operation of Landfill requires additional study and proof.
- B. Potential Areas of Incompatibility
  - 1. ECEC has not substantiated that its project will not compromise the design, construction and operation of the Landfill.
    - (a) Need to study whether regulators would approve operation of the Landfill over the proposed power generation project.
    - (b) BCEC must substantiate that the Landfill will still comply with siting, design and operational requirements pursuant to 40 CFR 258 and Titles 23 and 27 of the California Code of Regulations regarding municipal solid waste landfills.

## Operational Issues

- (a) Visitor's Center
  - (i) How will its operation impact the Landfill's operations?
  - (ii) Will the public have access to all Landfill property?
- (b) Tunnels Under Active Landfill
  - (i) What type of methane barrier will be installed for subsurface facilities?
  - (ii) How will ECEC prevent the tunnels from becoming potential conduits for groundwater or landfill gas?
  - (iii) If the tunnels become flooded, how will any potential impacts to groundwater be remediated?

- (iv) What potential pollutants could potentially alter groundwater chemistry from tunnel infrastructure and maintenance?
- (v) What type of groundwater monitoring facilities will be installed for the subsurface facilities, and how will the collected groundwater be managed?
- (vi) Why does the drainage system described in Exhibit "A", Section 5 include oil-separating facilities? Where will such waste be generated? How much oily waste is anticipated? Where will this wastewater be disposed?
- (vii) Please provide a detailed description and diagrams of the powerhouse drainage sump pit described in Exhibit "A", Section 1.5.

## (c) Groundwater monitoring

- (i) How will the loss of existing landfill groundwater monitoring wells impact the landfill?
- (ii) Will replacement groundwater monitoring wells be equivalent to those that are removed?
- (iii) Will the replacement wells have the same capture zone and equivalent water chemistry (undiluted by seepage from the reservoirs)?

## (d) Desalinization Ponds

- (i) What type of liner and monitoring facilities are proposed?
- (ii) Provide specific drawings, locations and specifications.
- (iii) How will the ponds impact the railyard operations for the Landfill?
- (iv) Provide a detailed layout of any overlap between your project and the Landfill project.

- (v) Where will the estimated 2,500 tons per year of desalinization salt ultimately be disposed?
- (e) Other Potential Incompatibilities
  - (i) How will the proposed transmission lines impact the operation of the Landfill's railyard and the Landfill as a whole?
  - (ii) How will the project's use of the switchyard impact the operation of the Landfill?
  - (iii) Could access to fine or coarse tailings or overburden piles for landfill purposes be blocked by this project's infrastructure or operation?
  - (iv) How will your project's traffic from the staging, storage, administration or areas affect the Landfill's operation?
  - (v) Where will earthen materials be obtained to build the dam and prepare both reservoirs and how much will be necessary? How will the use of these materials affect the Landfill's construction or operations?
  - (vi) Where will the significant quantity of tailings present in the East Pit be relocated for use for the Landfill?
  - (vii) How can the transfer station potentially impact landfill construction and operations?
  - (viii) How will security and maintenance be performed within the Landfill area, and how will these activities affect the operation of the Landfill?
  - (ix) How much fine and coarse tailing materials are needed for construction of the project, and how will use of these materials impact the Landfill project?
  - (x) Figure E.1-8 does not accurately depict the location of Landfill infrastructure. Please update this figure using information

contained in the Report of Waste Discharge for the Eagle Mountain Landfill.

#### II. INSUFFICIENT INFORMATION IN APPLICATION

- A. With the exception of a recent wildlife study, the other information cited in the application and compiled by BCBC appears to be generated in connection with the landfill project, and it does not address the impacts of ECEC's project. Significant additional efforts are needed in the following areas:
  - 1. What pollutants may be generated by the project?
  - 2. As described in Exhibit "A", Sections 1.1 and 1.2, ECEC will determine specific scepage controls after geologic mapping is performed. Geologic mapping has been performed for the Eagle Mountain Landfill. These geologic maps and detailed hydrogeologic data are included in the Report of Waste Discharge previously remitted to the Regional Water Quality Control Board. Accordingly, please provide the following information regarding scepage:
    - (a) Detailed calculations for leakage losses from both reservoirs
    - (b) Detailed calculations for pre-and post-seepage treatment
    - (c) A detailed description of proposed scepage control, including all supporting calculations
    - (d) How was a seepage loss of 600 acre-feet per year determined as noted in Exhibit "A", Section 1.9 and Exhibit "B", Section 5.1?
    - (e) A detailed three-dimensional groundwater flow model, such as Visual MODFLOW using particle tracking, for the proposed site should be used to illustrate the impact of seepage from treated and untreated reservoirs, including potential impacts from tunnels in the event they become flooded. Visual MODFLOW should be utilized to predict potential impacts to the Landfill. The groundwater model should be calibrated using historic water levels and pumping data, contained in the Report of Waste Discharge, before making predictions needed to assess potential impacts to the Landfill.

18

- (f) A detailed description, including a three-dimensional groundwater flow model described above, for the proposed site to illustrate the impact of proposed seepage recovery wells (modeling should be used to determine the estimated spacing of recovery wells needed to ensure the landfill groundwater monitoring network is not impacted by seepage).
- (g) How could reservoir seepage "reach...the nearby Colorado River Aqueduct" as described in Exhibit "A"?

## Geology and Geotechnics

- (a) The License Application does not contain the BMEC 1994 study discussed in Exhibit "E", Section 6.5.7. This study, performed by Kaiser and MRC, did not consider the impact of filled reservoirs on lined landfill slopes. BCBC should provide stability modeling for reservoir slopes and adjacent areas potentially impacted by the filling of mining pits with water. Modeling of critical existing and final landfill liner slopes should be performed to assess potential impacts to the Landfill in conformance with requirements of the State Department of Water Resources ("DWR"), addressing both impacts from the Maximum Credible Earthquake and Maximum Probable Earthquake events.
- (b) Provide detailed stability calculations for the upper dam in conformance with requirements of the State Department of Water Resources ("DWR"), addressing both impacts from the Maximum Credible Earthquake and Maximum Probable Earthquake events.
- (c) Update the seismicity study contained in Exhibit B using current data and methodology approved by DWR.

#### 4. Groundwater, Potable Water and Sewerage

(a) What model was used to assess groundwater pumping impacts to the Chuckawalla Valley (eg. Figures B2-16 through B2-18)? (Use of the Theis equation to predict water levels is not an appropriate methodology to assess long-term impacts to the basin.)

- (b) As data presented in Figures E2-19 and E2-20 do not reflect long-term potential influences of pumping within the basin, provide a detailed three-dimensional groundwater flow model, such as Visual MODFLOW, for the Chuckawalla Valley that will provide basin-wide impacts from pumping along with maximum drawdown predicted for other potential water producers in the basin. The groundwater model should be calibrated using historic pumping data before making predictions needed to assess potential impacts to the basin. The calibrated model should consider groundwater pumping needed for the Landfill, assuming both projects are operational at the same time.
- (c) The groundwater model should address potential impacts of both initial filling and any make-up water needed for the duration of the project.
- (d) Please revise Figure E.1-3 to show specific locations of existing production wells discussed in Exhibit "E", Section 1.1. In addition, Figure 1.E-3 should also be revised to illustrate potential locations of new production wells. Visual MODEFLOW modeling should be performed for both scenarios (i.e., existing vs. new production wells) to assess potential impact to the basin.
- (e) Based upon modeling results, how will pumping activities impact the landfill or other parties pumping water from the Chuckawalla Valley?
- (f) If water used to initially fill the reservoir is obtained from the Chuckawalla Valley, will existing production wells be utilized?
  - (i) Does ECEC have the authority to utilize these wells?
  - (ii) What is the capacity of each well to be used?
- (g) What potable water system will serve the proposed project, and what is the potable water demand of that project?

- (h) Which existing sewage facility will be used for the project, and what is the estimated quantity of sanitary sewage that will be generated?
- (i) Will wastes other than sewage wastes be discharged into the existing sewage system? What are the composition and the quantity of these wastes?

#### Storm Water

- (a) Provide a detailed hydrology study for the project, including:
  - (i) Design calculations for drainage structures necessary to accommodate applicable storm intensities specified by the Regional Water Quality Control Board for the Landfill project, assuming both projects will operate simultaneously, and
  - (ii) A study of where surface water will be directed due to the loss of East Pit storage capacity.
- (b) What materials will be stored within the proposed project's site?
- (c) How will ECEC monitor storm water from industrial activities pursuant to the General Industrial NPDES permit?
- (d) What best management practices will be used to prevent storm water pollution during construction activities?
- 6. Address and mitigate the potential impact of the open reservoirs attracting wildlife
  - (a) Among the species to be addressed are ravens, coyotes and other predators of the desert tortoise.
  - (b) How will the reservoirs affect the Landfill's ability to comply with the Biological Opinion?
- Perform a complete biological assessment for the proposed project, including a full evaluation of potential impacts to the Landfill project.

8. Perform a detailed visual assessment for the proposed project itself—use of the Landfill project's visual assessment is insufficient.