

Appendix J
Comments and Responses on the DEIS

Comments and Responses for Author - Federal Agencies

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

August 28, 2002

Mr. Gene A. Kolkman, Field Manager
Bureau of Land Management
Ely Field Office
HC 33, Box 33500
Ely, Nevada 89301-9408

BUREAU OF LAND MANAGEMENT
ELY, NEVADA
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10/2/02

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Comments

Dear Mr. Kolkman:

The Environmental Protection Agency (EPA) has reviewed the Bureau of Land Management's (BLM) Draft Environmental Impact Statement (DEIS) for the **Draft Toquop Land Disposal Amendment to the Caliente Management Framework Plan and Draft Environmental Impact Statement for the Toquop Energy Project (CEQ #020210)**. Our review is pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act.

BLM has developed this document in response to a proposal by Toquop Energy, Inc. (Toquop Energy) to construct and operate a 1,110-megawatt (MW) natural gas-fired electric power generating plant. The plant and its associated features would be located on lands in Lincoln County, Nevada, which are currently managed by the Ely Field Office of BLM. The document evaluates potential environmental effects associated with the construction and operation of the generating plant including necessary connections to natural gas, electric transmission, water and site access facilities. These connections would require Rights-of-Way (ROWs) from BLM. The document also evaluates the effects of amending the Caliente Management Framework Plan (MFP) to enable the exchange of a private parcel of land owned by the Nevada Land and Resource Company, LLC (NLRC). The NLRC parcel is located in the Pah Rah Range, Washoe County, NV. This parcel would be exchanged for a federally managed parcel of land where the Toquop Energy Center would be located. Toquop Energy would then acquire the plant site from NLRC.

A proposed action and two alternatives were evaluated by BLM. The proposed action, identified as BLM's preferred alternative, includes the following components:

- Amend the Caliente MFP to allow for disposal of land in Toquop area
- Exchange BLM-managed public lands for a privately owned parcel to place the proposed plant site into private ownership.
- Issue of ROWs by BLM for Toquop Energy Project construction and operation.

Letter - F1. Signatory - Lisa
B. Hanf. (U.S.
Environmental Protection
Agency)

- Construct and operate a 1,110-MW combined cycle, natural gas-fired electric generating plant, with connections to a natural gas pipeline and electric transmission lines.
- Drill up to an estimated 15 wells in the Tule Desert Basin over the life of the project to produce an annual average flow of 3,800 gallons per minute of water for the power plant. Estimated use is up to 7,000 acre-feet of water per year.
- Construct and operate a 12.5 mile-long, 24-inch diameter buried pipeline from the wellfield in Tule Desert to the plant site.
- Construct and operate a manifold collection system to connect a wellfield water output to a pressure-regulating water tank.
- Construct and operate buried electric distribution power lines from the power plant to the well pumps.
- Pave and widen an existing dirt and gravel road to 24-feet, to provide for a 14.4-mile access road extending from I-15 to the plant.
- Provide a 12.5-mile long access right-of-way along an existing dirt and gravel road for maintenance activities between the power plant and the wellfield.

Alternative 1 differs from the proposed action in the location of the utility alignment. Alternative 1 proposes an eastern alignment of utilities from the plant site to the wellfield whereas the proposed action follows a western alignment from the plant site to the wellfield.

Alternative II differs from the proposed action and Alternative I in that the BLM managed parcel of land, which would be exchanged for the privately owned Pah Rah parcel, is located north of the proposed site and within the Tule Desert. Alternative II would require similar ROWs but connections to the pipeline, transmission lines, and the wellfield would differ in location and length.

The no action alternative would not involve a land exchange and therefore would not require an amendment to the Caliente Management Plan Framework. The proposed Toquop Energy Project would not be constructed on currently managed BLM lands.

EPA advocates an energy development approach which assures a long-term, sustainable balance between available energy supplies, energy demand, and protection of ecosystems and human health. EPA believes that the goals of providing additional energy supplies, aggressive energy conservation, and diversification of energy supply sources should be carefully balanced.

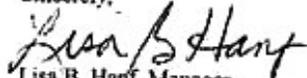
Consequently, we have several concerns about impacts of the proposed project due to a lack of some critical information in the DEIS. As such, we have rated this DEIS as category EC-2, Environmental Concerns - Insufficient Information (see attached "Summary of EPA Rating System"). In particular, we are concerned about impacts to air and water quality, and cumulative impacts. We are also concerned about the limited information provided to support the purpose and need for this project, and the narrow range of alternatives that were considered. Our detailed comments are attached.

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We appreciate the opportunity to review this DEIS. Please send two copies of the Final EIS to this office at the same time it is officially filed with our Washington D.C. Office. If you have any questions, or wish to discuss our comments, please call Ms. Shanna Draheim, of my staff, at (415) 972-3851.

Sincerely,


Lisa B. Hanf, Manager
Federal Activities Office

filename: toquop energy deis.wpd
MI#: 003726

Attachments: EPA Rating Sheet
Detailed comments

Letter - F1

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Environmental Consequences

Air Quality

F1-1

With respect to the emission limit for NO_x, EPA is aware of at least five permits for large combined cycle power plants with a Best Available Control Technology (BACT) emission rate of 2.0 parts per million (ppm) averaged over one hour, and more are expected in the coming months. EPA now considers this emission rate to be presumptive BACT for Nitrogen Oxides (NO_x) for combined cycle power plants of this size, unless a permit applicant can justify a higher limit based on technical or economic considerations.

F1-2

Toquop Energy's Potential for Significant Deterioration (PSD) permit application states that an oxidation catalyst for Carbon Monoxide (CO) control is not cost-effective and as stated in both the DEIS and the PSD application, the proposed CO emission limit will be 9 ppm. Several power plants that are similar to the proposed Toquop project have been permitted with BACT emission limits of 4 ppm CO, including three in Nevada (Reliant Arrow Canyon, SEMBRA Copper Mountain, and Gen West Silverhawk). If a power plant is constructed with selective catalytic reduction, the additional cost of constructing and operating an oxidation catalyst should be small, given the overall cost of the project. The \$6,708.00 per ton of CO removed figure in the source's PSD permit application appears to be very high. EPA has seen cost effectiveness numbers as low as \$500.00 per ton of CO removed using an oxidation catalyst.

F1-3

The installation of an oxidation catalyst for CO control would also provide additional environmental benefits. In addition to reducing CO emissions, catalytic oxidation reduces emissions of volatile organic compounds (VOC), including VOCs that are also hazardous air pollutants (HAP). Under the PSD program, the BACT analysis must include an analysis of other environmental impacts associated with all possible emission control strategies. Since the power plant will be a major source of HAPs, the use of catalytic oxidation would be a significant benefit in protecting human health and the environment because emissions of VOC HAPs would be reduced.

Water Resources

F1-4

The proposed action and Alternatives I and II could impact several major dry washes that are classified as waters of the U.S. and State waters. Therefore, BLM will need to consult with the U.S. Army Corps of Engineers (COE) and the Nevada Division of Environmental Protection (NDEP) regarding potential impacts to these waters. EPA recommends that the Final EIS describe the status of consultations with the COE and the state regarding permits necessary for constructing trenches and culverts, filling and re-routing an existing wash, and other activities that would potentially affect ephemeral streams. The Final EIS should also disclose whether a wetland delineation has been conducted. Of particular concern is the Toquop Wash and its

Response to Comment F1-1

While a number of recent projects have been permitted with NO_x emission limits of 2.0 parts per million by volume on a dry basis (ppmvd) @ 15% O₂, most were located in ozone nonattainment areas, near environmentally sensitive areas which necessitated extremely low limits to avoid undesirable impacts on air quality related values (AQRV's), or were based on limits requested in order to obtain "synthetic minor" status for projects. Few of the 2.0 ppmvd limits were based on one-hour averaging periods. Few of the projects have actually been constructed, and none have sufficient long-term operating history to demonstrate that the limits are achievable on a consistent basis. Furthermore, use of duct burners contributes significantly to uncontrolled NO_x emissions, so direct comparison of selective catalytic reduction (SCR) control on combined cycle projects cannot be made without considering duct burner sizing.

A review of the Environmental Protection Agency's (EPA's) RBLC database for projects permitted in 2002 shows a total of twenty gas fired combined cycle or cogeneration projects with NO_x data provided as concentrations or mass rate per unit of fuel consumed. Of these twenty, only one project has a limit of 2.0 ppmvd @ 15% O₂; this one project was located in an ozone nonattainment area. The remaining

nineteen projects, which included both Best Available Control Technology (BACT) and LAER limits, were all permitted at limits greater than 2.0 ppmvd @ 15% O₂.

California's Bay Area Air Quality Management District (BAAQMD) and South Coast Air Quality Management District (SCAQMD) both provide BACT workbooks/technology guidelines on their webpage. Based on ozone nonattainment issues in these areas, both districts would be expected to require state of the art NO_x controls, and furthermore California BACT does not include the same economic considerations as federal BACT, yet for one hour averaging periods, both districts are still recommending that BACT be set to 2.5 ppmvd @ 15% O₂.

A likely reason that most recent combined cycle projects have been permitted with limits of higher than 2.0 ppmvd @ 15% O₂ is the expected difficulty in maintaining consistent compliance. The margin for error in continuous emission monitoring systems (CEMS), ammonia interference with measurements, issues regarding NO_x adsorption/desorption in sampling systems, and problems associated with transient loading of turbines make it unlikely that these facilities could consistently meet a limit of 2.0 ppmvd @ 15% O₂. Each of these issues is addressed further below.

The anticipated measurement errors, associated with the CEMS that would be used to monitor NO_x emissions, would seriously inhibit the ability of Toquop Energy LLC to document compliance with a limit of 2.0 ppmvd @ 15% O₂. Mr. Fostin Curtiss of the Emission Measurement Center of USEPA was recently contacted in inquiry about anticipated CEMS accuracy in low concentration NO_x measurements. Mr. Curtiss responded that EPA was aware of accuracy issues, but as of yet was unable to quantify the CEMS inaccuracy. In a series of letters between the American Society of Mechanical Engineers (ASME) and the SCAQMD, the ASME indicated their concurrence with a recent paper authored by Mr. Wilfred Hung of Solar Turbines (Hung, 1998), which indicated that low level NO_x inaccuracies could be as large as +6 ppm. SCAQMD, in a May 26, 1998, response letter by Anuporn Ganguli, PhD., Senior Manager of the Stationary Source Compliance Group to Mr. Steve Weinman of ASME, indicated that they disagreed with Mr. Hung's estimate, but believed that, "At the measurement levels of interest, the accuracy of measurement is most likely +/- 1 ppmv NO_x."

A recent paper produced by Midwest Research Institute and Research Triangle Institute under agreement with EPA (MRI, 2000) confirms this estimated CEMS inaccuracy. The intent of this paper is to provide verification of the expected efficiency of various control techniques, as confirmed by empirical data. Page 5 of that document specifies that the data quality objectives for measurement of effluents of 2 ppm or less include an expected +/-50% error, and thus is in agreement with SCAQMD's analysis. (Tests would be based on Method 7E, which is similar to the technology used in NO_x CEMS.)

Ammonia interference is a known problem with NO_x CEMS used on SCR exhaust. Ammonia can be converted to NO when a high-temperature NO₂ to NO converter is used in a NO_x analyzer. While much of the ammonia would be expected to be removed in the water bath of a NO_x CEMS, conversion of even a tiny fraction of the ammonia slip from an SCR system can produce significant measurement errors where extremely low NO_x limits are required.

Some CEMS vendors have also recently been studying NO_x adsorption/desorption problems with low level NO_x measurements. Based on actual experience with CEMS calibration checks, it has been concluded that NO_x can be adsorbed in a portion of the sample transport or sample conditioning systems during periods of high NO_x emissions such as turbine startup, and is later desorbed by the system during periods of lower NO_x emissions. The ammonia scrubber typically used on the CEMS (but not on the reference method used for CEMS relative accuracy checks) for protection of the equipment is suspected as causing the problem. The exact measurement error has not yet been quantified. However, since any such desorption would depend primarily on the concentration of NO_x during startup

and thus would produce errors of equal magnitude regardless of the NO_x limit, the error would represent a larger percentage of a lower NO_x limit, and would thus represent a more significant problem for a NO_x limit of 2.0 ppmvd @ 15% O₂.

Turbine NO_x emissions are guaranteed by turbine vendors under only steady-state operating conditions. During periods of transient loading, uncontrolled emissions can increase. A higher percentage of NO_x removal is thus required in order to meet short-term emission limits.

Given CEMS inaccuracies of up to 1 ppm, another normal operations "contingency" of 0.5 ppm to cover ammonia interference, NO_x adsorption/desorption problems, and transient turbine loading, facility operators would need to have a routine operating target of 0.5 ppmvd @ 15% O₂ in order to consistently demonstrate compliance with a 2.0 ppmvd @ 15% O₂ limit. This target may be infeasible in practice.

Given the severe penalties that could result in noncompliance with NO_x limits, facility operators frequently overfeed ammonia in order to ensure compliance. Measured NO_x values from a number of operating facilities, cited in a paper by RMB Consulting (McRanie, 2002), reinforces this conclusion, "Another interesting observation is that the data have been given a 'flattop' just below the compliance level. This indicated that a source's response to approaching the limit is to increase NH₃ feed to the SCR."

Larger catalyst beds, with increased pressure drop, are required to meet lower NO_x limits. As a consequence, power plant efficiency is lower, and catalyst production and landfill disposal increase with lower NO_x limits. While these are minor considerations, both represent additional negative environmental consequences associated with lower NO_x limits.

Given that the CEMS inaccuracy could be as high as 50% of a low NO_x limit, issues regarding NO_x adsorption/desorption and ammonia interference, and difficulty in meeting permit limits during transient turbine operation, a limit of 2.0 ppmvd @ 15% O₂ would create significant risks of noncompliance for the Toquop Energy Project. Negative environmental consequences could also result. The proposed Toquop Energy Project limit of 2.5 ppmvd @ 15% O₂ is more stringent than most recently permitted projects in the United States, and represents a responsible, aggressive pollution reduction target.

References:

Hung, 1998. "Uncertainty in Gas Turbine NO_x Emission Measurements", Wilfred S. Y. Hung and Alan Campbell, Solar Turbines Incorporated, <http://energypubs.com/Features.cfm?catid=5&cmd=lookup&fid=221>

MRI, 2000. "Environmental Technology Verification Protocol-NO_x Control Technologies for Stationary Combustion Sources", prepared by Midwest Research Institute and Research Triangle Institute Under a Cooperative Agreement with USEPA, August 1000.

McRanie, 2002. "Low Level NO_x Measurements and Related Compliance Issues on Gas Turbine Combined Cycle Units", Richard D. McRanie, RMB Consulting and Research, <http://rmb-consulting.com/san/lownox.htm>

Response to Comment F1-2

The Toquop Energy Project will be located in an area that is in full attainment of the ambient air quality standards for carbon monoxide (CO). As demonstrated by the dispersion modeling submitted with the air permit application, the highest reasonable but conservative CO impact of the Toquop Energy Project (for either 1-hour or 8-hour averaging periods) would be only 17% of the Prevention of Significant Deterioration (PSD) modeling significance level. Thus, the Toquop Energy Project would create an insignificant change in ambient CO concentrations in the area.

Given the proximity of the Arrow Canyon, Copper Mountain, and Silverhawk projects to the Clark County CO nonattainment area, use of oxidation catalyst on those projects is perhaps more justified. Furthermore, at least one project, Arrow Canyon, was proposed with Westinghouse 501D turbines, which have CO emissions nearly three times higher than that of the GE 7FA turbines proposed for the Toquop Energy Project.

BACT is an emission limitation based on the maximum degree of reduction for each pollutant, on a case-by-case basis, taking into account technical feasibility, energy, and environmental impacts. Therefore, BACT for the Clark County projects is not necessarily the same as BACT for the Toquop Energy Project.

The cost effectiveness, calculated for use of oxidation catalyst to control CO for the Toquop Energy Project, was based on manufacturer's quoted capital, maintenance, and operations costs. CO removal was based on reduction of the combined turbine / duct burner exhaust to an anticipated target concentration of 3.0 ppmvd @ 15% O₂ of CO. Use of oxidation catalyst to control Toquop Energy Project CO emissions was demonstrated to be not cost effective.

Response to Comment F1-3

The use of an oxidation catalyst would reduce emissions of hazardous air pollutants (HAPs). However, as demonstrated in the air permit application and Table 4-4 of the DEIS, the TEF would not be a "major source" of HAPs.

The Toquop Energy Project would utilize General Electric (GE) 7FA turbines with GE's DLN 2.6 combustor. These combustors are of the lean premix type through the entire sequence of startup and normal operations. As indicated by Mr. Sims Roy of the Emission Standards Division of EPA in a 2001 technology memorandum (Roy, 2001) and in the May 20, 2002, teleconference on combustion turbine MACT, use of lean premix combustors achieve an equivalent HAP reduction as would the use of oxidation catalyst on a turbine with diffusion flame combustors. HAP emissions from the Toquop Energy Project are already an order of magnitude lower, on a per-megawatt basis, than many comparable projects in the region.

References:

Roy, 2001. "Hazardous Air Pollutant (HAP) Emission Control Technology for New Stationary Combustion Turbines", Sims Roy, USEPA Office of Air Quality Planning and Standards, August 21, 2001, <http://www.epa.gov/ttn/atw/combust/turbine/turbpg.html>

Response to Comment F1-4

Chapter 5 of the *Proposed Toquop Land Disposal Amendment to the Caliente MFP and FEIS for the Toquop Energy Project* reflects the status of consultation with the USACE and the State of Nevada.

In Comment Letter F3 on the DEIS, the USACE provided the BLM with guidance on the Department of the Army dredge and fill permit that will be required for discharges to Waters of the United States and advises that the project proponent avoid and minimize any adverse impacts to waters of the United States to the maximum extent practicable and to compensate for any permanent losses. State of Nevada comments on permits and potential effects associated with the proposed project are contained in Comment Letters S1, S2, S3, and S4.

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F1-4

tributaries which flow into the Virgin River. Toquop and its tributaries may receive greater nonpoint source pollution from impervious surfaces associated with the plant site and paved access road during storm events.

Biological Resources/Threatened and Endangered Species

F1-5

EPA commends BLM for the comprehensive list of measures to be implemented during project construction, operation and maintenance to avoid and reduce impacts to the desert tortoise. We recommend that *all workers* associated with the project be instructed on these measures and other standard operating procedures to avoid any potential harm to the species.

Cumulative Impacts

Well prepared cumulative impacts analyses are of increasing importance to EPA as they describe the threats and benefits to resources as a whole. Understanding these cumulative impacts can illuminate opportunities for minimizing those threats and highlighting benefits. The DEIS provides insufficient information on other on-going, planned, and reasonably foreseeable projects in the study area that may contribute to cumulative impacts. The list of interrelated projects identified in Chapter 1, Section 1.8 are not sufficiently described in order to make an informed evaluation of potential cumulative impacts that the proposed project may have. We recommend that the Final EIS:

F1-6

- focus on resources of concern – those resources that are “at risk” and/or are significantly impacted by the proposed project, before mitigation. The Cumulative Impacts section should identify which resources are analyzed, which ones are not, and why.

F1-7

- describe in sufficient detail other interrelated projects. Where studies exist on the environmental impacts of these other projects, such as county comprehensive plans or other EISs, use these studies as a source for quantifying cumulative impacts.

F1-8

EPA recommends that a separate Cumulative Impact Section be included in the Final EIS. This would enable the reviewer and project proponent to better evaluate the cumulative impacts of the project. The intent of such analysis is to provide a comprehensive evaluation of impacts both in time and space that this action, in concert with other actions, may have on resources of concern.

Purpose and Need

A DEIS should include a clear description of the project's purpose and need. Adequately defining the purpose and need of any proposed federal project is a critical element of an EIS. It

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Response to Comment F1-5

Comment noted.

Response to Comment F1-6

Which resources were analyzed, which were not, and why, have been identified in the new *Cumulative Impacts* section of the *Proposed Toquop Land Disposal Amendment to the Caliente MFP and FEIS for the Toquop Energy Project* (Section 4.18),

Response to Comment F1-7

The *Proposed Toquop Land Disposal Amendment to the Caliente MFP and FEIS for the Toquop Energy Project* (Section 1.8, *Interrelated Projects*) expands the description of interrelated projects.

Response to Comment F1-8

The *Proposed Toquop Land Disposal Amendment to the Caliente MFP and FEIS for the Toquop Energy Project* includes a separate Cumulative Impacts section (Section 4.18).

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should not simply state what a project will be or how it will work, it should lay out why the existing situation warrants a change. A clearly identified purpose and need sets the stage for thorough consideration of a range of alternatives.

The DEIS states that the proposed Toquop Energy Project would generate electrical power at competitive costs to ease power shortages (near- and long-term) in the western United States. The project would contribute to meeting the power demand for the Las Vegas, NV area and to meeting the capacity and energy requirements for the Arizona-New Mexico-southern Nevada power area. In addition, the purpose and need discussion alludes to potential economic benefits derived from the land exchange (tax base increases), plant construction and operation, employment opportunities, and increased revenues from project-related purchases.

F1-9 [EPA recommends that the purpose and need discussion include information about current and projected energy demands for the proposed service area and the degree to which the Toquop Energy project would contribute to the projected demand and capacity requirements for the Las Vegas area and the Arizona-New Mexico-southern Nevada power area.

F1-10 [In addition, the Final EIS would benefit from additional information for the Purpose and Need section responding to the stated economic need in Lincoln County. It is important to note that the land exchange is a separate action from the Toquop Energy Project and could proceed in the absence of the proposed energy project. Conversely, the Toquop Energy Project could proceed (on BLM managed lands) in the absence of the land exchange. Therefore, care should be taken to avoid linking economic benefits from the sale of the land/land exchange and those from plant construction and operation as it relates to Lincoln and/or Clark County.

Alternatives

CEQ Regulations for implementing NEPA (40 CFR, Parts 1500 - 1508) state that the alternatives section of an EIS should "rigorously explore and objectively evaluate all reasonable alternatives, and for alternatives which were eliminated from detailed study, briefly describe the reasons for their having been eliminated" (40 CFR, part 1502.14).

F1-11 [The DEIS presents three alternatives and a no-action scenario. The proposed action and Alternative I are virtually identical except for location of the water pipeline. Alternative II differs in the location of the plant site and subsequent location of the water pipeline and transmission lines. The similarities among the alternatives provide a very narrow range of options for decision makers to evaluate the proposed project.

F1-12 [The DEIS does identify several alternatives which were eliminated from further evaluation because they did not meet the project's Purpose and Need. The DEIS included a short discussion of some of the reasons for their elimination. However, the DEIS did not identify a clear set of criteria to be used to screen all alternatives in a similar manner. Although each

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Response to Comment F1-9

The Purpose and Need (Sections 1.2 and 1.3) quantify the project's contribution to overall power demand for the Las Vegas area and the Arizona-New Mexico-Southern Nevada power area.

Response to Comment F1-10

The Purpose and Need (Sections 1.2 and 1.3) provides additional information regarding the economic need of Lincoln County.

Information addressing the current economic status and benefits to Lincoln County of the power plant is presented in Sections 3.16.1 and 4.16.1 respectively of the *Proposed Toquop Land Disposal Amendment to the Caliente MFP and FEIS for the Toquop Energy Project*. The tax base generated by the Toquop Energy Project would have a significant beneficial impact on Lincoln County during both the construction and operational phases (please see Section 4.16.1 of the *Proposed Toquop Land Disposal Amendment to the Caliente MFP and FEIS for the Toquop Energy Project* for a detailed discussion of these impacts). Section 4.16.1 of the *Proposed Toquop Land Disposal Amendment to the Caliente MFP and FEIS for the Toquop Energy Project* describes the benefits to Lincoln County of the land exchange.

Response to Comment F1-11

The *Proposed Toquop Land Disposal Amendment to the Caliente MFP and FEIS for the Toquop Energy Project* presents a detailed analysis of an air-cooled alternative (Alternative 3).

Response to Comment F1-12

Section 2.7 (*Alternatives Considered During Scoping but Eliminated from Further Consideration*) of the DEIS provides the rationale for why various alternative project components were not analyzed in detail, including but not limited to alternative project locations (Section 2.7.2) and an alternative access road location (Section 2.7.3). These particular alternative project formulations were eliminated because they would not meet project Purpose and Need for one or more of the following reasons: would cause unacceptable environmental impacts, would cause greater environmental impacts than alternatives analyzed in detail, would be restrictive because of their high costs, and would not provide economic benefits to communities in and near Lincoln County.

In support of the alternatives selected for detailed analysis, Council on Environmental Quality (CEQ) guidelines require that federal agencies rigorously explore and objectively evaluate all “reasonable” alternatives and not disregard the “common sense realities” of a given situation in the development of alternatives. Agencies should seek a reasonable range of practical and feasible alternatives that will accomplish project objectives (i.e., best meet project Purpose and Need). The Proposed Action and Alternatives 1 and 2 described and evaluated in the DEIS were determined to best meet these criteria. An option under each that was addressed in the DEIS would be for the land exchange to not occur. Instead, the proposed project would be constructed and operated on land that would continue to be administered by the BLM.

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F1-12

alternative was described and a qualitative reason for elimination was provided, there was a lack of consistency in the reasons why each alternative was eliminated. Acknowledging that the purpose and need for the proposed project is based on cost effective power generation, we recommend that the analysis consider short-term versus long-term costs and benefits over the operating life of the plant.

Response to Comment F1-13

The *Proposed Toquop Land Disposal Amendment to the Caliente MFP and FEIS for the Toquop Energy Project* presents a detailed analysis of an air-cooled alternative (Alternative 3).

F1-13

For example, the DEIS identifies an air-cooled system as an alternative method of cooling the proposed power plant. An air-cooled system would utilize much less water than the applicant's preferred wet-cool option, and would have fewer emissions of particulates (PM₁₀). Power plants in the arid southern California and northern Mexico region have been developed using an air-cooled design to address these issues. The air-cooled system was eliminated from further consideration for the stated reasons of decreased plant efficiency, increased air emissions, increased capital and operating costs making the project non-competitive in the marketplace.

Response to Comment F1-14

The *Proposed Toquop Land Disposal Amendment to the Caliente MFP and FEIS for the Toquop Energy Project (Section 2.7.1)* provides additional quantitative data regarding alternative fuel uses.

F1-14

EPA recommends that a comparative analysis be conducted to compare wet-cooled and air-cooled systems to support the reasons for eliminating the air-cooled system alternative from further consideration. Furthermore, we recommend that additional quantitative data be included in Final EIS which better supports the decisions to eliminate alternatives advocating alternative fuel use (e.g., solar).

SUMMARY OF EPA RATING DEFINITIONS

This rating system was developed as a means to summarize EPA's level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the EIS.

ENVIRONMENTAL IMPACT OF THE ACTION

"LO" (Lack of Objections)

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

"EC" (Environmental Concerns)

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

"EO" (Environmental Objections)

The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

"EU" (Environmentally Unsatisfactory)

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

ADEQUACY OF THE IMPACT STATEMENT

Category 1" (Adequate)

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

"Category 2" (Insufficient Information)

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analysed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

"Category 3" (Inadequate)

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analysed in the draft EIS, which should be analysed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

*From EPA Manual 1640, "Policy and Procedures for the Review of Federal Actions Impacting the Environment."



Gene Kolkman
07/30/2002 09:48 AM

To: Jeff Weeks/EYFO/NV/BLM/DOI@BLM
CC:
Subject: Draft EIS, Toquop Energy Project

----- Forwarded by Gene Kolkman/EYFO/NV/BLM/DOI on 07/30/02 10:46 AM -----



Patricia E
Riley@USGS
07/29/02 09:51 AM

To: Gene Kolkman/EYFO/NV/BLM/DOI@BLM
CC:
Subject: Draft EIS, Toquop Energy Project

Gene,

F2-1 [USGS has reviewed the subject Draft EIS/MFP and has no comments to offer.

Thanks.

.....
Trish Riley
U.S. Geological Survey
423 National Center
Reston, VA 20192
703.648.6822

Letter - F2. Signatory - Trish Riley. (U.S. Geological Survey)

Response to Comment F2-1

Comment noted.



REPLY TO
ATTENTION OF

DEPARTMENT OF THE ARMY
U.S. ARMY ENGINEER DISTRICT, SACRAMENTO
CORPS OF ENGINEERS
1325 J STREET
SACRAMENTO, CALIFORNIA 95814-2922

July 29, 2002

Regulatory Branch (200250284)

Mr. Gene A. Kolkman, Field Manager
U.S. Bureau of Land Management
Ely Field Office
HC 33, Box 33500
Ely, Nevada 89301-9408

Dear Mr. Kolkman:

This responds to the Draft Toquop Land Disposal Amendment to the Caliente Management Framework Plan and Draft Environmental Impact Statement (EIS) for the Toquop Energy Project dated May 20, 2002. The project involves the construction of an 1,100-megawatt natural gas-fired, water-cooled electric power generating plant and associated features on public lands in Lincoln and Clark counties, Nevada.

In accordance with Section 404 of the Clean Water Act, the Corps of Engineers regulates the discharge (placement) of dredged and fill material in waters of the U.S., including wetlands and perennial, intermittent and ephemeral streams. A Department of the Army permit is the approving instrument for such discharges. Examples of activities requiring a Department of the Army permit include, but are not limited to, road crossings, utility line crossings, and commercial physical plant sites. The Sacramento District administers the regulatory permit program in Nevada.

The proponent or responsible party should be advised to obtain the necessary permit from the Corps of Engineers before beginning any activity involving a regulated discharge of dredged and fill material in waters of the U.S. For more information, please access our website at:

<http://www.spk.usace.army.mil/cespk-co/regulatory>

Please pay special attention to our nationwide general permit program.

For additional information about delineating ephemeral streams, refer to:

http://www.spl.usace.army.mil/regulatory/jd_guide.pdf

Generally speaking, a "bed and bank" and a surface connection of this channel to other waters of the U.S. are needed to demonstrate jurisdiction. However, this website document offers

BUREAU OF LAND MGMT.
ELY, NEVADA
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✓ NRR	
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C.F.	

Comments:

**Letter - F3. Signatory -
Grady L. McNure. (Corps
of Engineers, Sacramento
District)**

Response to Comment F3-1

Comment noted.

F3-1

Letter - F3

Page 2

2

additional guidance for determining jurisdiction of ephemeral streams.

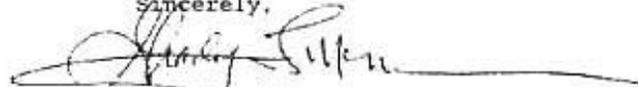
F3-2

F3-3

We request that your agency include the Corps of Engineers, Sacramento District as a designated cooperating agency under Council on Environmental Quality guidelines. We expect to use your EIS to satisfy our National Environmental Policy Act requirements for any Department of the Army permit application. We also advise that the proponent avoid and minimize any adverse impacts to waters of the U.S. to the maximum extent practicable and compensate for any permanent losses. We suggest close examination of our evaluation criteria, the Section 404(b) (1) guidelines, promulgated by the U.S. Environmental Protection Agency.

Please refer to number **200250284** in any future correspondence with the Sacramento District concerning this project. If you have any questions, please contact me at e-mail address, **Grady.McNure@usace.army.mil**, or telephone number (435) 986-3979.

Sincerely,



Grady L. McNure
Chief, St. George Regulatory Office
321 North Mall Drive, Suite L-101
St. George, Utah 84790-7310

Copy Furnished:

Ms. Kathleen Dadey, U.S. Environmental Protection Agency, Region IX, 75 Hawthorne Street, San Francisco, California 94105-3901

Response to Comment F3-2

The USACE has been added as a cooperating agency.

Response to Comment F3-3

Comment noted.

Comments and Responses for State Agencies

Comments and Responses for State Agencies	1
Letter - S1. Signatory - Carl Barrick. (Nevada State Department of Water Resources).....	3
Letter - S2. Signatory - Joesph M. Del Grosso. (Nevada Division of State Lands)	4
Letter - S3. Signatory - Rebecca L. Palmer. (Nevado State Historic Preservation Office)	5
Letter - S4. Signatory - Doug Hunt. (Department of Conservation and Natural Resources).....	6

NEVADA STATE CLEARINGHOUSE

Department of Administration
Budget and Planning Division
209 East Musser Street., Room 200
Carson City, Nevada 89701-4298
(775) 684-0209
Fax (775) 684-0260

DATE: June 4, 2002

- Governor's Office
- Agency for Nuclear Projects
- Agriculture
- Business & Industry
- Energy
- Minerals
- Economic Development
- Tourism
- Fire Marshal
- Human Resources
- Aging Services
- Health Division
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- Office of the Attorney General
- Washington Office
- Nevada Assoc. of Counties
- Nevada League of Cities

- Conservation-Natural Resources
- Director's Office
- State Lands
- Environmental Protection
- Forestry
- Wildlife
- Region 1
- Region 2
- Region 3
- Conservation Districts
- State Parks
- Water Resources
- Natural Heritage
- Wild Horse Commission

Letter - S1. Signatory - Carl Barrick. (Nevada State Department of Water Resources)

Response to Comment S1-1

Comment noted.

Nevada SAJ # E2002-178

Project: Draft Toquop Land Disposal Amendment to the Client Management Framework Plan and DEIS for the Toquop Energy Project

No sensitive information from this project is publicly available.

CLEARINGHOUSE NOTES:

Enclosed, for your review and comment, is a copy of the above mentioned project. Please evaluate it with respect to its effect on your plans and programs, the importance of its contribution to state and/or local area-wide goals and objectives, and its accord with any applicable laws, orders or regulations with which you are familiar.

Please submit your comments no later than **August 23, 2002**. Use the space below for short comments. If significant comments are provided, please use agency letterhead and include the Nevada SAJ number and comment due date for our reference. Questions? Heather Elliott, 684-0209

THIS SECTION TO BE COMPLETED BY REVIEW AGENCY

- No comment on this project
- Proposal supported as written
- Additional information below
- Conference desired (See below)
- Conditional support (See below)
- Disapproval (Explain below)

AGENCY COMMENTS:

Same comment as E2002-170

S1-1 Lincoln County has applications for water rights on file in the State Engineer's Office for the Toquop project. No decision has been made on these applications, however, they have been through the administrative hearing process. All waters of the State belong to the public and may be appropriated for beneficial use under the provisions of Nevada Revised Statutes (NRS) § Chapters 533 and 534 and not otherwise. Any water used for construction, dust control, and project operations should be provided by an established utility or under permits or waivers issued by the State Engineer under provisions of the Nevada Revised Statutes. All water wells, monitor wells, or boreholes existing, drilled, or utilized at the Toquop project or Pah Rah lands are the ultimate responsibility of the owner of the property and must be constructed, and plugged and abandoned in compliance with the Nevada Administrative Code Chapter 534. If artesian water is encountered in any well or borehole it shall be controlled as required by NRS 534.060(3)

Signature: CARL BARRICK

WATER RESOURCES

Agency

06-07-02

Date

BUREAU OF LAND MANAGEMENT
NEVADA STATE CLEARINGHOUSE
Department of Administration
Budget and Planning Division
209 East Musser Street., Room 200
Carson City, Nevada 89701-4298
(775) 684-0209
Fax (775) 684-0260

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DIVISION OF
STATE LANDS

DATE: June 4, 2002

- Governor's Office
- Agency for Nuclear Projects
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- Business & Industry
- Energy
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- Nevada League of Cities

- Conservation-Natural Resources
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- State Lands
- Environmental Protection
- Forestry
- Wildlife
- Region 1
- Region 2
- Region 3
- Conservation Districts
- State Parks
- Water Resources
- Natural Heritage
- Wild Horse Commission

**Letter - S2. Signatory -
Joseph M. Del Grosso.
(Nevada Division of State
Lands)**

Response to Comment S2-1

Comment noted.

Nevada SAI # E2002-178
Project: Draft Toquop Land Disposal Amendment to the Client Management Framework Plan and DEIS for the Toquop Energy Project

Yes No. Sensitive information on this project is not available.

CLEARINGHOUSE NOTES
Enclosed, for your review and comment, is a copy of the above mentioned project. Please evaluate it with respect to its effect on your plans and programs, the importance of its contribution to state and/or local areawide goals and objectives, and its accord with any applicable laws, orders or regulations with which you are familiar.

Please submit your comments no later than **August 23, 2002**. Use the space below for short comments. If significant comments are provided, please use agency letterhead and include the Nevada SAI number and comment due date for our reference. Questions? Heather Elliott, 684-0209.

HIS SECTION TO BE COMPLETED BY REVIEW AGENCY:

- No comment on this project
- Proposal supported as written
- Additional information below
- Conference desired (See below)
- Conditional support (See below)
- Disapproval (Explain below)

AGENCY COMMENTS:

Our analysis of the project leads us to concur that the proposed action is the most feasible and has the least potential for adverse environmental impacts.


nature
c:\nards\delgrosso.doc

STATE LANDS
Agency

022.02
Date

Department of Administration
Budget and Planning Division
209 East Musser Street., Room 200
Carson City, Nevada 89701-4298
(775) 684-0209
Fax (775) 684-0260

JUN 04 2002

State Historic Preservation Office

DATE: June 4, 2002

- Governor's Office
- Agency for Nuclear Projects
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- Energy
- Minerals
- Economic Development
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- Fire Marshal
- Human Resources
- Aging Services
- Health Division
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- Region 2
- Region 3
- Conservation Districts
- State Parks
- Water Resources
- Natural Heritage
- Wild Horse Commission

Letter - S3. Signatory - Rebecca L. Palmer. (Nevado State Historic Preservation Office)

Response to Comment S3-1

Comment noted.

Nevada SAI # E2002-178

Project: Draft Toquop Land Disposal Amendment to the Client Management Framework Plan and DEIS for the Toquop Energy Project



CLEARINGHOUSE NOTES:

Inclosed, for your review and comment, is a copy of the above mentioned project. Please evaluate it with respect to its effect on your plans and programs; the importance of its contribution to state and/or local areawide goals and objectives; and its accord with any applicable laws, orders or regulations with which you are familiar.

Please submit your comments no later than **August 23, 2002**. Use the space below for short comments. If significant comments are provided, please use agency letterhead and include the Nevada SAI number and comment due date for our reference. Questions? Heather Elliott, 684-0209.

THIS SECTION TO BE COMPLETED BY REVIEW AGENCY:

- No comment on this project
- Proposal supported as written
- Additional information below
- Conference desired (See below)
- Conditional support (See below)
- Disapproval (Explain below)

AGENCY COMMENTS:

Rebecca L. Palmer
Signature

Historic Preservation 8/14/02
Agency Date



KENNY C. GUINN
Governor

STATE OF NEVADA
DEPARTMENT OF CONSERVATION AND NATURAL RESOURCES

DIVISION OF WILDLIFE

1100 Valley Road
Reno, Nevada 89512
(775) 688-1300 • Fax (775) 688-1595

R. MICHAEL TURNIPSEED, P.E.
Director

Department of Conservation
1110 Valley Road
Reno, Nevada
89512
TERRY R. GRAMBERTH
Administrator

BY OFFICE	INITIALS	DATE
COM		
RA		
MFR		
BS		
CR		
FR		
C.F.		

August 23, 2002

Ms. Heather Elliott
Nevada State Clearinghouse
209 East Musser Street, Room 200
Carson City, NV 89701-4298

Nevada SAI#: E2002-178, Draft Toquop Land Disposal Amendment to the Caliente Management Framework Plan (MFP) and DEIS for the Toquop Energy Project (DEIS)

Dear Ms. Elliott:

The conceptual actions were reviewed and responded to in writing previously; the first in a letter dated September 10, 2001 sent to the BLM's Ely Field Manager concerning the Toquop Energy Power Plant EIS scoping process, and a subsequent letter dated 17 December 2001 (SAI E2002-065) sent to you regarding the NOI for an amendment to the Caliente MFP accommodating a land disposal/exchange and ROW for the Toquop Energy Power Plant. Regarding wildlife values, our comments in both letters were based on review by Division staff from our Western Region (re: Pah-Rah parcel) and Southern Region (re: Toquop parcel and Power Plant) offices. The lead office for making the responses on behalf of the entire Division rested with the Southern Region as significant concerns regarding wildlife and habitat occur in the Toquop project area.

As you may recall from our September 10, 2001 letter, we initially opposed the proposed action(s) concerning:

- Packaging the land exchange /MFP amendment as separate NEPA actions by separate BLM offices when the two were obviously inseparable,
- An illogical and non-objective comparison of wildlife values between the Pah-Rah and Toquop sites justifying the land exchange, and
- Disregard for significant wildlife concerns at and off-site of the proposed Toquop Energy location

We made these comments in recognition of national commitments to augment the western power grid's capabilities by the addition of production facilities in many of the western states. Over the past 3 years, 12 energy production facilities have been proposed or are under construction along the I-15/Kern River Gas Pipeline corridor, all except the proposed project are within Clark County. Cumulative impacts to wildlife habitats have yet to be adequately addressed.

S4-1 [

We also appreciate reasonable proposals by local communities in pursuit of economic fitness. The Lincoln County Land Act provided for approximately 12,000 acres to allow growth by the City of Mesquite while making it possible for Lincoln County to increase its tax revenues. A portion of land sale revenues is available to support development of a Habitat Conservation Plan (HCP), thereby attending to federal Endangered Species Act considerations. The Division is participating in that HCP's

Letter - S4. Signatory - Doug Hunt. (Department of Conservation and Natural Resources)

Response to Comment S4-1

Section 4.5 (Biological Resources) of the DEIS described potential cumulative impacts for the following biological resources: threatened, endangered and sensitive species (specifically desert tortoises); vegetation and noxious weeds; wildlife and fisheries resources; and wetland/riparian zones, floodplains, and waters of the United States. The potential for cumulative impacts on wildlife habitat was addressed under several of these headings.

development. The Division is also participating in the Coyote Springs Investments HCP effort of which approximately 2/3 of the 43,000 acres of CSI's lands are within Lincoln County. We understand the essential need to balance biological science, economics, and politics in successful development and implementation of HCP's and similar conservation minded efforts. CSI lands occur within critical habitat for the desert tortoise, whereas the Lincoln County Land Act lands are adjacent to critical habitat, and the proposed Toquop Power Plant sites are adjacent to and pass through critical habitat.

Because of our concerns for wildlife and habitat, you may also recall our request and offer in our December 17, 2001 letter to participate on the team developing the DEIS and MFP Amendment now before us. To our knowledge, the BLM and the project proponents have demonstrated little interest in seeking clarification to any of our responses or asking for consultation with us outside of the formal NEPA process. We find this hardly a productive consultation between two governmental agencies having responsibilities for wildlife resources and inconsistent with the intent of several federal laws and regulations, including Federal Land Policy and Management Act of 1976, Fish and Wildlife Coordination Act of 1946, Sikes Act of 1973, and CFR 43, Part 24.

At our annual coordination meeting with the BLM's Ely staff last February, BLM's Jeff Weeks was evasive regarding the biological and economic inequity between the Pah-Rah and Toquop sites. More recently at the Public Meeting in Las Vegas last July 9, Southern Region biologists again reiterated Division's concerns to Jeff Weeks who once again evaded recognition of Division's previously written comments saying that BLM had yet to hear from biologists in our Western Region, and that a forthcoming response from our State Office might ensure BLM's more serious attention to our responses and interest. As our Regional Offices have full authority and responsibility for site specific inputs into federal land management agency planning, this unprofessional response to Nevada Division of Wildlife staff inputs and resource concerns is unacceptable.

I can assure you Division's Western Region Supervising Habitat Biologist, Roy Leach, and Area Game Biologist, Mike Dobel have relayed to the Southern Region that the Pah-Rah parcel is of little long-term value to wildlife. The parcel's native habitat components have been extensively invaded by cheatgrass following persistent fire events. The Pah-Rah Mountain's wildfire history has favored expansion of invasive plants and perpetuated a shortened fire cycle precluding shrub community establishment, especially sagebrush. Re-establishment of sagebrush communities is crucial to wildlife such as sage grouse, pronghorn, and mule deer.

Dave Buhlig, Realty Specialist assigned to the exchange project from the BLM's Carson Field Office, related his personal sightings of sage grouse, pronghorn, mule deer, and chukar at the July 9th Public Meeting. However, context of these sightings on the parcel's perimeter were not obvious. While simple use of the Pah-Rah parcel by wildlife may impart wildlife value, the true value of this parcel as wildlife habitat relates to its area contribution to the adjacent lands and the ability of its and adjacent habitats to support the *long-term persistence* of sage grouse, mule deer, pronghorn, chukar, and other wildlife populations. Our assessment finds adjacent lands are being developed at a rapid pace with communication sites, future utility corridors, a mine north of the parcel, and residential development pressing in from the west and north. Two of three sage grouse leks in the area have already been abandoned. The Division anticipates that any short-term benefit to wildlife of the Pah-Rah parcel will be eroded by the established development pattern. We cannot concur that the parcel, if acquired by the BLM, will be protected by the various procedures and processes identified in the DEIS.

On page 1-12, under the listing of State of Nevada Permits and Approvals, the Division's role is limited to *consultation* for disturbance on BLM land. We have the following summary of additional requirements:

Letter - S4

Page 2

Response to Comment S4-2

Comment noted.

Response to Comment S4-3

Table 1-3 of the *Proposed Toquop Land Disposal Amendment to the Caliente MFP and FEIS for the Toquop Energy Project* shows that State of Nevada authorization would be required for the take or removal of the state-protected desert tortoise and banded Gila monster.

S4-2

S4-3

S4-3
S4-4

- Both the desert tortoise and banded Gila monster are State protected reptiles; authorization for their take or removal will be requisite in addition to any federal or local authorizations.
- Construction of cooling ponds will pose a continual hazard for migratory birds and other wildlife. The DEIS is remiss in failing to address a problem that has had significant consequences recently at other power facilities in southern Nevada. In addition to addressing federal regulations for the Migratory Bird Treaty, a State of Nevada Industrial Artificial Pond permit may be required should the evaporation ponds be chemically laden and toxic to wildlife;
- Consultation with BLM and the project proponents has yet to occur to the satisfaction of the Division.

Hence, we are compelled to request conference with the various offices of the BLM, U.S. Fish & Wildlife Service, Lincoln County, and Vidler, LLC to address outstanding issues too numerous to fully include here on the proposed actions contained in the DEIS.

Sincerely,

 Doug Hunt
 Chief, Habitat Bureau

DBH:dbh

- cc: Administrator, NDOW
 NDOW, Game Bureau
 NDOW, Habitat Bureau
 BLM, Nevada State Office
 BLM, Carson Field Office
 BLM, Ely Field Office
 BLM, Las Vegas Office
 USFWS, Nevada State Office
 USFWS, Las Vegas Sub-Office

Letter - S4
 Page 3

Response to Comment S4-4

Section 4.5.4, Wildlife and Fisheries Resources, of the Proposed Toquop Land Disposal Amendment to the Caliente MFP and FEIS for the Toquop Energy Project includes a discussion of potential impacts of the cooling pond on wildlife

Meeting the requirements of the North America Migratory Bird Treaty Act has been included in Appendix B Standard Construction and Operations Procedures. Table 1-2 of the FEIS has been revised to include the need for a State of Nevada Industrial Artificial Pond permit.

Comments and Responses for Local Agencies

Comments and Responses for Local Agencies	1
Letter - L1. Signatory - Kay Brothers. (Southern Nevada Water Authority)	3
Letter - L2. Signatory - Michael Winters. (Virgin Valley Water District)	10



SOUTHERN NEVADA
WATER AUTHORITY

Gene A. Kolkman, Field Manager
Bureau of Land Management
Ely Field Office
HC 33, Box 33500
Ely, Nevada 89301-9408

August 29, 2002

BUREAU OF LAND MGMT. ELY, NEVADA RECEIVED		
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C.F.		
Comments		

Administrative Office
1001 S. Valley View Blvd.
Las Vegas, Nevada 89153
Telephone: (702) 258-3939
Fax: (702) 258-3268

Project Office
1900 E. Flamingo, Ste. 170
Las Vegas, Nevada 89119
Telephone: (702) 862-3400
Fax: (702) 862-3470

Southern Nevada Water System
243 Lakeshore Road
Boulder City, NV 89005
Telephone: (702) 564-7697
Fax: (702) 564-7222

Letter - L1. Signatory - Kay Brothers. (Southern Nevada Water Authority)

Response to Comment L1-1

The Proposed Toquop Land Disposal Amendment to the Caliente MFP and FEIS for the Toquop Energy Project presents a detailed analysis of an air-cooled alternative (Alternative 3).

Dear Mr. Kolkman:

SUBJECT: COMMENTS ON THE DRAFT TOQUOP LAND DISPOSAL AMENDMENT TO THE CALIENTE MANAGEMENT FRAMEWORK PLAN AND DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE TOQUOP ENERGY PROJECT

On May 20, 2002, the Bureau of Land Management (BLM) issued the Draft Toquop Land Disposal Amendment to the Caliente Management Framework Plan and the Draft Environmental Impact Statement (DEIS) for the Toquop Energy Project. The Southern Nevada Water Authority (Authority) is responsible for securing water resources and represents the major water and wastewater purveyors in southern Nevada, including the Las Vegas Valley Water District, the Cities of Boulder City, Henderson, Las Vegas, and North Las Vegas, the Clark County Sanitation District, and the Big Bend Water District in Laughlin. The Authority has reviewed the document and provides the following comments.

Failure to Analyze Reasonable Range of Alternatives

The purpose and need for the project are described in the DEIS as generating electrical power at competitive costs and generating economic benefits to Lincoln County. The DEIS presents only two alternatives, which are virtually identical except for location, and the no action. This is an inadequate range of alternatives for the described purpose and need, and does not comply with the Council on Environmental Quality's (CEQ) Regulations for implementing NEPA, which require agencies to "rigorously explore and objectively evaluate all reasonable alternatives..." (40 CFR 1502.14) and "identify and assess the reasonable alternatives" (40 CFR 1500.2).

The Authority submitted comments during the scoping for this project on the need to evaluate water-efficient technologies, such as an air-cooled plant, for the proposal. The DEIS eliminates analysis of an air-cooled plant from consideration on the basis that an air-cooled plant would be non-competitive in the regional marketplace and economically unfeasible. This is untrue given that there are several air-cooled power plants in various stages of completion in the region. The Mirant Las Vegas and

L1-1

Aracelis M. Cyphers, Chair
Hillman Councilman

Shari Buck
North Las Vegas Councilman

BOARD OF DIRECTORS

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Las Vegas Mayor

Daria Herrera
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County Commissioner

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Boulder City Councilman

Myrna Williams
County Commissioner

Duke Energy Moapa facilities, both of which will have similar generating capacity to the proposed Toquop Energy Project, are air-cooled plants currently under construction in the Apex area and scheduled to be operational in 2002.

In a very recent ruling the Nevada State Engineer held that "The State Engineer ... does not believe it is prudent to use substantial quantities of newly appropriated ground water for water cooled power in one of the driest places in the nation, particularly with the uncertainty as to what quantity of water is available from the resource, if any." See, *Nevada State Engineer Ruling No. 5115* at 24-25. Thus, the range of alternatives considered in the DEIS are deficient in that none of the existing alternatives even mentions the stated policy of the State of Nevada in regard to wet-cooled power plants in this region and that no alternative analyzes use of more water-efficient technologies in the depth required by 40 CFR 1502.14.

Furthermore, Lincoln County, Vidler Water Company, Inc. and Cogentrix Energy, Inc. have acknowledged that wet-, air-, and hybrid-cooling options are all possible for this project. A February 26, 2001 letter from Vidler Water Company to the Nevada State Engineer (attached) contained the following statement:

"In mid 2000, Cogentrix Energy, Inc. approached Vidler and Lincoln about siting a power plant in [Lincoln County]. Cogentrix presented its plans to build a 1000 megawatt combined cycle gas fired plant. *Various plant operation scenarios for cooling purposes, and therefore water demands, are possible.* The first option is a "wet" plant that would require approximately 6700 acre-feet of water annually. The second option is a "dry" plant that uses approximately 1000 acre-feet. The third option, *being seriously considered*, is a hybrid of the dry and wet plant that will use approximately 4000 acre-feet." (emphasis added).

Cogentrix Energy itself considers air cooling generally and hybrid cooling in particular to be viable alternatives to a wet-cooled power plant. These should have been analyzed as alternatives in the DEIS.

Decision Made Before Completing NEPA

On page 2-41, section 2.6.4.3.3, the DEIS states "Toquop Energy has selected a water-cooled mechanical-draft cooling tower as the best available alternative for the project..." (emphasis added). This is contrary to NEPA and the CEQ Guidance, which state "NEPA procedures must insure that environmental information is available to public officials and citizens before decisions are made..." (emphasis added) (40 CFR 1500.1).

While an air-cooled plant might not maximize the economic benefits to Toquop Energy, maximizing economic benefits to a private corporation is not identified as part of the purpose and need for the project. Air-cooled power plants are clearly economically competitive, given that other air-cooled plants are being constructed in the area.

Regardless of any pre-NEPA decision made by Toquop Energy, BLM is required to include in an EIS "reasonable alternatives not within the jurisdiction of the lead agency" (40 CFR 1502.14). Given the scarcity of water resources in this area, the other development projects in the area which will require water resources (Lincoln County Land Act and Mesquite Land Act), and that there are

L1-1

other air-cooled power plants in the region, an air-cooled power plant and hybrid cooling should have been analyzed as full alternatives for the project. This would have clearly identified both the positive and negative impacts for the different plant types, and provided a more reasonable range of alternatives for consideration by public officials and citizens.

Response to Comment L1-2

The report has been reviewed and considered, and the BLM acknowledges disagreement with the conclusions. The reasons for the disagreement are described in *Section 4.4.1, Ground Water Resources—Incomplete and/or Unavailable Information*.

Failure to Adequately Address Groundwater Resources Impacts

The groundwater resources impact analysis in the DEIS is based solely upon a CH2M HILL 2002 report. The Virgin Valley Water District (VVWD) also prepared a report on the impacts of water resource development in the Tule Desert basin (Katzner et al., 2002). This report was provided to the Nevada State Engineer, Lincoln County and Vidler Water Company in early April 2002, prior to the State Engineer's hearings on their Tule Desert basin groundwater applications, and prior to the release of the DEIS. The analysis in this report contradicts the CH2M HILL report, and shows that groundwater withdrawals of 7,000 – 14,000 acre-feet per year (afy) in the Tule Desert basin will have an adverse impact on the lower Virgin River Valley. In order to have the "best available representation of current and predicted conditions" as claimed in the DEIS, the information from the VVWD report should have been included.

Response to Comment L1-3

The *Proposed Toquop Land Disposal Amendment to the Caliente MFP and FEIS for the Toquop Energy Project* clarifies the description of the monitoring program (see *Sections 2.2.3.4 and 4.23, Monitoring*).

L1-2

The DEIS needs to disclose that there is scientific disagreement regarding the range of possible impacts that could occur from the proposed groundwater withdrawals. These impact evaluations have been completed by recognized scientific experts in this region and field, and the DEIS cannot ignore evaluations which do not fit with the preferred conclusion of no significant impacts.

The DEIS also implies that a single monitoring well would be adequate to determine if there is any significant decline in groundwater levels. Given the acknowledged complexity of the groundwater systems in this area, as described in the DEIS, it is unreasonable to assume that a single monitoring well would be adequate to determine effects from pumping. To date, only minor volumes of water have been pumped from a stock watering well and an exploratory production well in the Tule Desert basin, less than 10 afy and 45 afy, respectively. Water level changes induced by the proposed project, which would withdraw greater than 7,000 afy are unknown. A more complete monitoring program needs to be developed to identify short-term and long-term water level and water quality effects.

Response to Comment L1-4

The FEIS analyzes impacts of a natural gas-fired power plant of up to 1,100 mw utilizing up to 7,000 afy of groundwater from the Tule Basin. The analysis bounds the effects of a smaller plant capacity utilizing less than 7,000 afy of groundwater.

L1-3

Failure to Address Water Supply Issues

The project includes the assumption that the Nevada State Engineer will grant to Lincoln County and Vidler Water Company the entire requested amount for this development, and will allow the water to be exported for use at the Toquop parcel. The State Engineer has not yet issued a decision regarding these water right applications. In other recent water rights decisions in the nearby Coyote Springs, California Wash, Garnet Valley and Hidden Valley hydrologic basins, the State Engineer has deferred his decision or granted only a portion of the requested rights because of a lack of scientific information and to avoid adverse impacts.

Lincoln County (co-proponent) and Vidler Water Company are the senior permit holders in

L1-4

The DEIS does not describe an alternative source of supply for the project, should the groundwater rights not be granted or should the State Engineer require a reduction in groundwater pumping due to impacts to senior water rights holders or the environment. Since this could impact the power plant's

the Tule Basin. Considering existing water rights and pending senior applications, there is no unappropriated surface water in the Virgin River. Conveyance of existing permitted surface water from the Virgin River would require new ROWs through ACEC and critical habitat, both inconsistent with the Las Vegas RMP.

The proponents do not have senior groundwater permits in the Virgin Valley Basin or basins with similar proximity to the project site to the east, south, and west. Conveyance of existing permitted groundwater from these basins would require new ROWs through ACEC and critical habitat, both inconsistent with the Las Vegas RMP.

New or existing sources of water other than ROW co-proponents Lincoln County and Vidler Water Company would not fulfill the water-related economic/critical benefits component to the purpose and need.

Gene A. Kolkman
August 29, 2002
Page 4

L1-4

capability to operate, thereby affecting the feasibility of the entire project, it should have been addressed in the DEIS.

Deficient Cumulative Impacts Analysis

L1-5

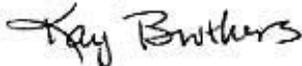
The DEIS fails to provide an analysis of cumulative impacts on groundwater resources. In Section 4.4.1.1.3 of the DEIS, it states that full implementation of the Lincoln County Land Act and the Mesquite Land Act will likely have a considerable associated demand, but that sufficient information about the specific demands and potential sources is unavailable. However, the NEPA compliance documents for these actions estimated water use and potential sources. This information should have been included in the DEIS.

The groundwater applications filed jointly by Lincoln County and Vidler Water Company in the Tule Desert basin are in the amount of 14,000 afy, which is not clearly identified in the DEIS. The DEIS implies that only 7,000 afy would be removed from this basin, and under the cumulative impacts states "no other reasonably foreseeable action are known to be planned in the region that would utilize the ground water resources from the Tule Desert." Either the cumulative analysis needs to address the entire application amount, or the document should make clear that the groundwater right application is being revised to request only 7,000 afy.

In conclusion, the Authority believes that this DEIS is inadequate in several key areas, including lack of evaluation of reasonable alternatives for the project, lack of complete information on groundwater resources impacts, failure to address water supply issues, and deficient cumulative impacts analysis. A supplemental DEIS that provides a more thorough and complete analysis should be issued.

The Authority appreciates the opportunity to comment on this DEIS. If you have any questions about these comments, please contact me at (702) 258-3108, or Lisa Luptowitz at (702) 862-3789.

Sincerely,



Kay Brothers
Deputy General Manager,
Engineering/Operations

KB:LL:sh

c: Michael Johnson, Virgin Valley Water District

Attachment: *Files of the Nevada State Engineer: Application #66932.*

Reference cited:

Katzer, Terry, Gary L. Dixon, and Michael Johnson. 2002. *Impact Analysis of Water-Resource Development in Tule Desert, Lincoln County, Nevada on the Water Resources of the Lower Virgin River Valley, Clark County, Nevada.* Prepared for the Virgin Valley Water District. Report VVWD-02.

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Page 4

Response to Comment L1-5

The *Proposed Toquop Land Disposal Amendment to the Caliente MFP and FEIS for the Toquop Energy Project* includes a separate *Cumulative Impacts* section, Section 4.18, which contains a discussion of cumulative impacts related to this comment.



VIDLER WATER COMPANY, INC.

www.vidlerwater.com

Letter - L1

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February 26, 2001

Mr. Hugh Ricci, State Engineer
NV Division of Water Resources
123 W. Nye Ln
Carson City, NV 89706-0810

Re: Toquop Energy Project - Application # 66931

Dear Mr. Ricci:

This letter is intended to provide information regarding a proposed power plant called the Toquop Energy Project in Lincoln County.

Lincoln County and Vidler Water Company formed a partnership in early 1999 to utilize the counties' water resources. The goal is to bring the county much needed economic development. In mid 1999, water right applications were filed in several basins throughout Lincoln County. The co-applicants are Lincoln County and Vidler Water Company.

In mid 2000, Cogentrix Energy, Inc. approached Vidler and Lincoln about siting a power plant in the County. Cogentrix presented its plan to build a 1000 megawatt combined cycle gas fired plant. Various plant operation scenarios for cooling purposes, and therefore water demand, are possible. The first option is a "wet" plant that would require approximately 6700 Acre-feet of water annually. The second option is a "dry" plant that uses approximately 1000 acre-feet. The third option, being seriously considered, is a hybrid of the dry and wet plant that will use approximately 4000 acre-feet. Cogentrix is currently second in line on the Navajo Transmission Line que and has expended approximately one million dollars on the project to date. Cogentrix is in the preliminary stages of obtaining approval for its environmental permits.

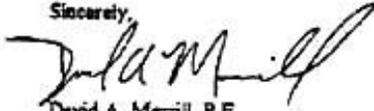
Vidler, through its sister company, Nevada Land and Resource Co., LLC, agreed to acquire the land from the current owner, the Bureau of Land Management. Dorothy A. Timian-Palmer, is the Chief Operating Officer for both Vidler and NLRC. NLRC owns approximately 1.2 million acres of land generally located along the Interstate 80 corridor between Reno and Wendover. The BLM is interested in NLRC land located in the Pah Rah Mountain Range east of Reno. In turn, NLRC identified the Toquop Project land in Lincoln. The location is key since both electric and natural gas transmission lines cross the site (see figure 1).

The County and Vidler agreed to work with Cogentrix to locate and permit the water. The water is to be piped from the Tule Desert groundwater basin to the project, a distance of about 14 miles. Tule was chosen based on its proximity to the site, its "open" status, its relative lack of pumping and its carbonate aquifer tapping potential. Vidler has completed two 2000 foot monitoring wells in Tule Desert. Our hydrogeologist, Gary Small of Hydrosystems, Inc., is currently preparing the final report on the monitor well drilling program. We will file this report with your office after completion. We anticipate drilling one additional monitoring well before deciding where and what size the test/production well should be. Following permit issuance, and depending on the demand, additional production wells will be drilled. Vidler is very committed to this project having expended approximately one million dollars to date.

Lincoln/Vidler have two water right applications in the Tule basin. The Applications are numbered 64692 and 64693 (figure 2). The National Park Service and the Virgin Valley Water District protested the applications. Application number 64693 was recently changed to 66932 to modify the point of diversion to match the monitor well site and to include the project in the place of use. Steve Walker, Walker and Associates, is currently analyzing the National Park Service protest and Dorothy is working with the Virgin Valley Water District concerning their issues. Hopefully, we will have these protests resolved within the next 90 days.

Please call if you have any questions at 775-885-5000 extension 102.

Sincerely,



David A. Merrill, P.E.
Project Engineer

C: Christine Thiel, P.E., Deputy State Engineer, NV Division of Water Resources
Lincoln County Commissioners, c/o Corrina Hogan, County Clerk w/o Attachments
Pat King, Vice President, Cogentrix Energy, Inc. w/o Attachments

**VIRGIN VALLEY WATER DISTRICT**

500 Riverside Road
Mesquite, Nevada 89027
(702) 346-5731
Fax (702) 346-2596

August 29, 2002

Gene A. Kolkman, Field Manager
Bureau of Land Management
Ely Field Office
HC 33 Box 33500
Ely, NV 89301-9408

Mr. Kolkman,

Subject: COMMENTS TO DRAFT TOQUOP LAND DISPOSAL AMENDMENT
TO THE CALIENTE MANAGEMENT FRAMEWORK PLAN AND
DRAFT ENVIRONMENTAL IMPACT STATEMENT FOR THE
TOQUOP ENERGY PROJECT: DES 01-17

Enclosed are the comments by the Virgin Valley Water District (VVWD) for the above referenced draft environmental impact statement. Upon review of the technical documents supporting the hydrogeology for the proposed project, several scientific discrepancies are observed.

VVWD submits the following document, which more completely addresses the hydrogeology of the Lower Virgin River Valley and impacts associated with pumping over 7,000 acre-feet of ground water from Tule Desert.

Geology and hydrology of the lower Virgin River Valley in Nevada, Arizona and Utah: Virgin Valley Water District, Mesquite, Nevada, Report No. VVWD-01, 126 p. Dixon, G. L., and Katzer, T., 2002.

While this report was referenced in the DEIS, clearly the authors did not understand the hydrology as presented in the report and have not reviewed specific sections. The following reports were released by Virgin Valley Water District in April 2002 and more

**Letter - L2. Signatory -
Michael Winters. (Virgin
Valley Water District)**

VIRGIN VALLEY WATER DISTRICT

appropriately, address the water resources of the lower Virgin River Valley ground-water flow system:

Impact Analysis of Water Resource Development in Tule Desert, Lincoln County, Nevada on the Water Resources of the Lower Virgin River Valley Clark County, Nevada. Virgin Valley Water District, Mesquite, Nevada, Report No. VVWD-02, 51 p., Katzer, T., Dixon, G. L., and Johnson, M., 2002.

An Isotopic and Geochemical Evaluation of Groundwater in the Tule Desert Area of Southeastern Nevada. Consultant Report for Virgin Valley Water District, Mesquite, Nevada, Report No. VVWD-03, 22 p., Thomas, J.M., 2002

The following documents are additional information

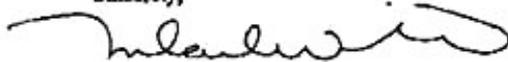
Transcript of Proceedings Volume I through III; In the matter of Applications Nos. 64692, 64693 and 66932 filed by Lincoln County and Vidler Water Company, Inc. To appropriate public waters of an underground source within the Tule Desert Hydrographic Basin (#221) and to change the point of diversion and place of use of Application 64693.

Nevada State Attorney General opinion 2002-15, issued March 21, 2002 addresses legality of agreements between Lincoln County and Vidler Water Company, Inc.

Please enter these documents along with the specified comments from the VVWD. The VVWD is not opposed to a power plant, however VVWD opposes the wasteful use of water resources associated with a water-cooled power plant within the most arid region in the country in proximity to one of the fastest growing communities in the nation.

VVWD would fully support an air-cooled power plant designed with the best available technology that provides benefit to the community. Should you have any questions or require additional information please contact me at 702-346-5731.

Sincerely,



Michael Winters
General Manager, Virgin Valley Water District

C: George Benesch, General Council, Virgin Valley Water District

Letter - L2

Page 2

Letter - L2

Page 3

**Toquop Electric Generation Project
Draft Environmental Impact Statement Comments
Virgin Valley Water District**

Purpose:

The purpose of this document is to provide technical comments regarding the Draft EIS for the Toquop Energy Project.

Summary:

Virgin Valley Water District serves approximately 16,000 residents with 4,320 connections in southeastern Nevada. VVWD has approximately 12,000 acre-feet per year of ground water and 2,500 acre feet per year of surface water to supply the total required water resources. The City of Mesquite, located in Clark County, Nevada, is the fastest growing city in the United States with a population less than 50,000. The proposed Toquop Generation plant requires a ground water resource in excess of 7000 acre feet per year. VVWD's interest is in assuring continued reliable water operations and it is critical that state water resources be appropriately allocated. VVWD recognizes and supports increasing electric supply in the state and supports the economic benefits that can accrue to Lincoln County and the state of Nevada from the construction and operation of the proposed generation facility. However, it is critical that the design of the generator includes cooling technology that minimizes water demand and that the generation plant is connected to the electric grid in a manner that benefits the local electric utilities. Federal and state agencies should remain diligent in avoiding speculative exploitation of water resources for power generation or any other purpose.

Comments:

1. Toquop Energy currently has no permit to appropriate public waters of the State of Nevada. The existing perennial yield as established in State of Nevada Department of Conservation and Natural Resources, Division of Water Resources Water Resource Reconnaissance Series Report 51, table 16 states the perennial yield is 1,000 acre-feet. If the identified perennial yield is 1,000 acre-feet per year, how can BLM not recognize the limited water resource availability in the region and sanction the use of 7 times the established perennial yield and allow Toquop Energy pre-select a wet-cooled power plant as the best available alternative.
2. Applications Nos. 64692, 64693 and 66932, filed by Lincoln County and Vidler Water Company, Inc. to appropriate public waters of an underground source within the Tule Desert Hydrographic Basin (#221) and to change the point of

L2-1

Response to Comment L2-1

With respect to the perennial yield being 1,000 acre-feet per year (afy), page 64 of the State of Nevada, Department of Conservation and Natural Resources, Division of Water Resources, Water Resources Reconnaissance Series Report 51 (Glancy and Van Denburgh, 1969), states that, "the preliminary estimate of water that could be salvaged within the Tule Desert is assumed for reconnaissance purposes to be about one-half the estimated annual recharge or about 1,000 acre-feet." Table 18 (page 63) of the same report (Report No. 51) lists the "estimated perennial yield" at 1,000 acre-feet.

Specifically, the estimated value of 1,000 afy is based on a method (Eakin et al., 1951) that correlates altitude with precipitation to estimate the amount of recharge. No attempt was made in Report No. 51 to verify through field studies (e.g., local vegetative analyses) that the assumed precipitation values were appropriate.

Subsequent reports by consultants to Virgin Valley Water District (Dixon and Katzer, 2002, referenced in the DEIS), present a method that improves the accuracy of the recharge estimates. Walker and Associates (2002) use a similar approach as reported in Dixon and Katzer 2002 and conclude that, "considerably more recharge occurred [in the Tule Desert] than originally estimated by [Report No. 51]."

Additionally, in a recent report prepared by consultants to Virgin Valley Water District (Katzer et al., 2002, Table 3), the annual ground-water recharge for the Tule Desert is estimated to be 8,968 afy. Katzer et al. (2002) further state (page 31) that, "the original study [in Report No. 51] is outdated...[The Report No. 51] estimate of perennial yield was no more than a reconnaissance estimate and cannot be supported with today's data base and new techniques." Lastly, page 32 of Katzer et al. (2002) states, "the perennial yield or groundwater recharge [is] 9,000 afy for the Tule Desert."

Letter - L2

diversion and place of use of Application 64693, identify the place of use as the Lincoln County Land Act and the Toquop Energy project parcel. BLM has not included in the draft EIS the cumulative impacts to the lower Virgin River Basin and existing senior water right permit holders for both of the proposed actions.

L2-2

3. The place of use for Applications Nos. 64692, 64693 and 66932 filed by Lincoln County and Vidler Water Company, Inc. to appropriate public waters of an underground source within the Tule Desert Hydrographic Basin (#221) and to change the point of diversion and place of use of Application 64693 does not include the alternative 2 location for the Toquop Energy's facility specified in the subject DEIS. How can BLM include an alternative when there is not an identified water supply for the project?

L2-3

4. Under the opinion of the Nevada Attorney General's Office, the agreement between Lincoln County and Vidler Water Company is not legal. How can Vidler Water Company enter into an agreement with Toquop Energy committing water resources to the project when the agreement involves a political subdivision of the State and is not recognized as legal under the laws of the State of Nevada?

5. The proposed generation plant as characterized in the Executive Summary (ES-1, Purpose and Need) could contribute to meeting capacity and annual energy requirements regionally. Since no electrical transmission interconnection is contemplated to the Power District serving the city of Mesquite, Nevada and local customers, there is no improvement in local electric service or reliability. The Toquop Generation plant intends to electrically interconnect to the existing Navajo 500kV AC transmission line subject to study and approval of the transmission operator, Nevada Power Company. This will not enhance the lower voltage transmission system serving the City of Mesquite, Lincoln County Land Act and other local electric customers.

L2-4

6. No source of electrical power for the proposed production wells in Tule Desert is identified. The 15 production wells will place a substantial increased load on the already weak existing 138 kva radial electrical grid serving the Mesquite, Nevada area. The increased demand will reduce the system reliability and is not in the best interest of the community.

L2-5

7. The Proposed Toquop Generation Plant is proposed as a wet cooled plant as stated in Chapter 2, Sections 2.2.3.4 and will require up to 7,000 acre feet of water per year. The use of this amount of water for cooling purposes could be obviated by using dry cooled technology either in total or in combination with wet cooling. This would substantially reduce the annual water demand but was not considered for the reasons described in Section 2.6.4. The arguments used in Section 2.6.4 do not accurately reflect the considerations and economics of other proposed projects in southern Nevada (See tables below).

L2-6

Response to Comment L2-2

Section 4.4.2.1.1 of the *Proposed Toquop Land Disposal Amendment to the Caliente MFP and FEIS for the Toquop Energy Project* demonstrates that there will be no substantial decline in ground water levels or a substantial depletion of ground water resources in the Virgin River Valley.

Response to Comment L2-3

The source of water for Alternative 2 is stated in the DEIS to be the same as for the Proposed Action (See Section 2.4.3, page 2-31).

Response to Comment L2-4

As stated in the Sections 1.2 and 1.3 of the *Proposed Toquop Land Disposal Amendment to the Caliente MFP and FEIS for the Toquop Energy Project*, the Toquop power project would contribute to meeting the demand for power in the Las Vegas area and would also contribute to meeting the capacity and annual energy requirements for the southern Nevada power area. Although the City of Mesquite and adjacent areas are not served from a direct connection to the Navajo Transmission Line or

the Red Butte-Harry Allen Electric Transmission Line, the overall strengthening of the power grid in the southern Nevada area will have a positive benefit to the reliability and electrical service to the region, including the City of Mesquite and adjacent areas, including the Overton Power District.

Response to Comment L2-5

As stated in *Section 4.3.1.1.1*, of the DEIS, the source of power for the wellfield will be electricity generated at the power plant and conveyed to the wellfield along the utility corridor. Chapter 2 of the *Proposed Toquop Land Disposal Amendment to the Caliente MFP and FEIS for the Toquop Energy Project* contains a similar statement in the description of the Proposed Action and alternatives.

Response to Comment L2-6

The *Proposed Toquop Land Disposal Amendment to the Caliente MFP and FEIS for the Toquop Energy Project* presents a detailed analysis of an air-cooled alternative (Alternative 3).

The following tables reflect projected annual water use for proposed generation projects in southern Nevada and it is apparent that other projects are using dry cooled technologies for cooling:

Table - 1. - Air-cooled power plants located in southern Nevada (data source Clark County Department of Air Quality Management):

Operator	Plant Designation	Plant Output (megawatts)	Water Usage (acre-feet)
Duke	Mospa	1170	700
Mirant	Apex	1100	700
GenWest	Silverhawk	600	350
Reliant	Arrow Canyon	500	300
Reliant	Bighorn	900	220
Nevada Power	Harry Allen ¹	960	450
Diamond Generating	Ivanpah	500	55

¹ Expansion of existing facility

Table - 2. - Proposed water-cooled power plants in southern Nevada

Operator	Plant Designation	Plant Output (megawatts)	Water Usage (acre-feet)
PG&E	Meadow Valley Generating Center	1196	6615 ^A
Calpine	Mospa Fault Energy Center	1120	7000
Cogentrix	Toquop Energy	1100	9000 ^B

^A Utilizes existing permitted water rights

^B Volume identified as maximum under agreement with LC/VVWD, actual volume obtained from picoboldings.com web site.

The State Engineer of Nevada has previously issued water permits sufficient for the use of dry cooled technology in cases where applicants were requesting water permits for electric generation uses. VVWD has serious concerns that the impact of ground-water extraction from the basin will impact the existing ground water and the surface water yields and believes this is not in the public interest of the residents of Nevada.

Recommendations:

- L2-7 [1. The BLM should require evaluation of a 120 kV transmission interconnect to the Overton Power District to improve transmission reliability to the local electrical grid.
- L2-8 [2. The BLM should require full environmental and economic analysis of dry cooled alternatives for the Toquop Energy Project as opposed to the token effort set forth in current DEIS.

Comments to specific Sections are as follows:

L2-9 [Section 2.2.3.2, p. 2-21, Equalization and evaporation ponds should have a series of monitor wells surrounding them to determine if they are leaking. No mention is made of the tons of total dissolved solids that will be produced and hauled to an off-site disposal area, which is not identified. The closest is the Mesquite Landfill, which is up gradient from the Virgin River so there is the potential for flood flows to mobilize the "dry wastes" and deposit them in the Virgin River. Additionally the direction of flow of the ground water underlying the landfill is toward several public supply wells. Thus there is a potential for contamination if the 'dry wastes' are mobilized by precipitation and infiltrate through the overlying sediments and reach the water table. There is no evaluation of this process in the DEIS.

L2-11 [Section 3.2.2.1.1, p: 3-3. Authors go into exhaustive dissertation on the regional geologic history and setting without any references. Apparently authors have done a lifetime of work in the Lower Virgin River Valley and Tule Desert, but have not published a single technical paper on the subject since the plethora of scientific information is not referenced. No reference is made to mapping by Tschanz and Pampeyan (1970) or the numerous publications on the structural and tectonic relationship in the area by Axen (1990) and numerous documents by Andersen (Anderson and Barnhard, 1993a; Anderson and Barnhard 1993b, Anderson and Hintze 1993). Carpenter (1989, 1994) has several publication and extensive mapping in the Tule Desert area and has not been referenced by the DEIS authors.

L2-12 [Map 3-2 is from Stewart (1980) however no reference is made to the publication. DEIS author have renamed mapped faults by Tschanz (1970), Carpenter (1994), Dixon and Katzer (2002). Only two faults have been properly named and identified which are the Gourd Spring and East Mormon faults. DEIS authors illustrate a small portion of the structures in the area and did not reference the major faults which are the East Tule Desert and West Tule Desert faults as defined and mapped by Carpenter (1994). The fault zones link subsurface flow from Tule Desert into the lower Virgin River Valley. The Piedmont fault as depicted on Map 3-2 is totally incorrect. The Piedmont fault as mapped by Moore (1972) is one of the major basin-forming faults in the lower Virgin

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Response to Comment L2-7

Comment noted.

Response to Comment L2-8

The *Proposed Toquop Land Disposal Amendment to the Caliente MFP and FEIS for the Toquop Energy Project* presents a detailed analysis of an air-cooled alternative (Alternative 3).

Response to Comment L2-9

As stated on page 2-18 (*Section 2.2.3.2*) of the DEIS, the evaporation and equalization ponds will be double-lined to reduce the potential for leakage. All relevant permits to operate these ponds will be sought from the appropriate state and local regulatory authorities. The operation and monitoring of these ponds will be in compliance with all applicable and relevant state and local laws and requirements. The ponds will include a leak detection system.

Response to Comment L2-10

As stated on page 2-18 (Section 2.2.3.2) of the DEIS, the solids that settle out from the discharge into the evaporation ponds will be removed from the site and disposed of at an approved offsite disposal facility. The disposal process will be conducted in a manner that is in accordance with all applicable and relevant laws and regulations governing the disposal of such material. The Mesquite landfill could receive the pond solids if the material is assessed to be compatible with the type of waste that is acceptable for disposal at that landfill.

Response to Comment L2-11

All of the listed documents were reviewed in the preparation of the DEIS. Most of the documents have been specifically cited in the *Ground Water Technical Resources Report* by CH2M HILL (2002b) which served as the basis for the DEIS work.

Response to Comment L2-12

Map 3-2 has been revised. See response to Comment L2-11.

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Page 7

L2-12 River valley and continues a southwest trend into Nevada towards Lake Mead at the base of the Virgin Mountains.

L2-13 Bohannon and others defined the Virgin River Depression in 1993 based on interpretations from gravity and seismic data. Nowhere has this been defined by the line depicted on Map 3-2. Bohannon (1993) did not constrain the tectonically derived basin to certain parts of the valley fill, but included the entire basin. The magenta colored line depicted on Map 3-2 is merely a figment of the DEIS authors and not referenced in the literature.

L2-14 Section 3.2.2.1.2, p. 3-9, Substrate at the plant site consists of Muddy Creek. Bohannon, (1984) does not describe any cemented conglomerate in the upper portion of the Muddy Creek. Dixon and Katzer, 2002 identified Quaternary sediments related to ground water discharge approximately 1 mile north of the plant site, no indication that at the surface Tertiary Muddy Creek is exposed at the plant site.

L2-15 Section 3.2.2.1.3, p. 3-9, DEIS Authors identify the most significant active fault as the Piedmont fault. They have failed to identify the most significant faults in Tule Desert, which are the East Tule Desert and West Tule Desert faults (Carpenter, 1994) The authors have not identified the quaternary faults scarp in the alluvium associated with the East Tule Desert fault in the vicinity of MW#2 (Carpenter, 1994).

L2-16 Section 3.3.1.3.1, p. 3-15, Text describes the principal components to the flow of the Virgin River in the vicinity of the project area, but ignores the contribution from ground water. Dixon and Katzer (2002, plate 3) clearly show the direction of ground water is to the Virgin River throughout the lower Virgin River Valley. This in-flow to the river has been documented by Glancy and Van Denburgh (1969, p. 36) This omission reflects an obvious bias by the authors of the EIS to show the ground water in the Toquop Wash area does not reach the river. The misstatement concerning lack of ground-water inflow to the river appears in many places in the DEIS.

L2-17 Text states little or no flow actually occurs at the confluence of Beaver Dam Wash and the Virgin River. Beaver Dam Wash is perennial in the reach immediately upstream from the confluence with the Virgin River. This error has no impact on the Project area, but does reflect a lack of attention to hydrology by the authors of the EIS.

L2-18 Section 3.3.1.3.1, p. 3-16, Another example of either a misunderstanding of hydrology or lack of attention to the literature is the reference to a single measurement of flow of the Virgin River upstream from Lake Mead by Metcalf (1995) of "17,400 acre-feet per year." To make a miscellaneous measurement of 17,400 acre-feet would require measuring nearly 9,000 cubic-feet/second. And it is inappropriate to consider that as

Response to Comment L2-13

Map 3-2 in the *Proposed Toquop Land Disposal Amendment to the Caliente MFP and FEIS for the Toquop Energy Project* includes the notation "The line depicted on the map is intended to approximate the boundary of the Virgin Valley Depression for illustrative purposes and is not intended to be an exact demarcation."

Response to Comment L2-14

Section 3.2.2.1.2 of the *Proposed Toquop Land Disposal Amendment to the Caliente MFP and FEIS for the Toquop Energy Project* contains text in response to this comment.

Response to Comment L2-15

Comment noted.

Response to Comment L2-16

Dixon and Katzer (2002) was reviewed during preparation of the DEIS and the BLM disagrees with the conclusions of that report with respect to ground water inflow to the Virgin River. The

DEIS concludes that there is no significant ground water inflow to the Virgin River, and the rationale for this conclusion is presented in CH2M HILL (2002b) which is cited in the FEIS. The contours of groundwater elevation depicted on Plate 3 of Dixon and Katzer (2002) are unfounded in many locations.

Page 36 of Glancy and Van Denburgh (1969) describes the possibility of ground-water discharge to the Virgin River as follows: “ground-water flow from recharge areas northwest and southeast of the river probably enters the river system along the channel between the Littlefield gage and Lake Mead. However, the magnitude of flow and areas where it enters the Virgin River are unknown.” The report does not present any direct evidence to support this hypothesis. The report does, however, present indirect evidence consisting of unsupported comments by local residents who, “report that springs were occasionally observed along the channel near Mesquite, Bunkerville, and Riverside.” In addition, based on a single measurement on July 17, 1968, the flow 8 miles downstream of the Littlefield gage was found to be 10 percent greater than at the gage itself. The report implies that the cause of the increase in flow was uncertain but, “may have been the result of return flow from the Littlefield and Petrified Springs canals, additional ground-water discharge to the stream channel, or a combination of both.” The possibility that groundwater flow could discharge into the Virgin River, however, is not documented in Glancy and Van Denburgh (1969) as stated in the comment.

Response to Comment L2-17

Little or no flow from Beaver Dam Wash into the Virgin River is cited as a common occurrence in Holmes et al. (1997).

Response to Comment L2-18

The text of the *Proposed Toquop Land Disposal Amendment to the Caliente MFP and FEIS for the Toquop Energy Project* puts the value reported by Mecalf (1995) in proper context. The conclusions of the DEIS are not affected by this revision.

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Page 8

Response to Comment L2-19

Thomas (2002), does not directly discuss chloride as an indicator of groundwater in the carbonate aquifer, but where Thomas (2002) does discuss chloride the statements are consistent with the EIS. Specifically, on page 1 of Thomas (2002), it is stated, "groundwater from the deep production well [in the Tule Desert] has the lowest chloride and some of the highest sulfate and sodium of any of the Tule Desert area groundwater. The low chloride concentration may indicate that this groundwater has flowed into the [Tule Desert] basin from a deep regional water source and has not interacted with the local rocks and sediments as extensively as the other groundwater in the basin." Because the "deep regional water source" is the carbonate aquifer in the vicinity of the Tule Desert, the implication of these quotes from Thomas (2002) is that chloride concentration in the deep production well in the Tule Desert could be indicative of water from the regional carbonate aquifer system. This is consistent with the conclusions presented in the DEIS.

Response to Comment L2-20

All available chemical data on groundwater to the northeast and east of the Tule Desert (reported in CH2M HILL, 2002a) suggests that

L2-18

yearly flow. What Metcalf did (1995, Table 7, p. 62, Appendix C, p. 163) was make a miscellaneous measurement of 24 cubic-feet/second. The authors wrongly expanded that number to an annual volume, thus showing they have little understanding of Virgin River hydrology.

L2-19

Section 3.4.3.1.1, p. 3-27 and 3-29, Text states low chloride values typify ground water in the carbonate aquifer, however this is contrary to the work of Thomas (2002). DEIS authors continually ignore data that doesn't fit their model.

L2-20

Section 3.4.3.1.1, p. 3-30, Text states the source of ground water in the carbonate aquifer can only be from the north in the Parata area and they infer the carbonate water is in addition to the water recharged in Tule Desert. DEIS authors ignore carbonate inflow from the northeast and east because that water is clearly from the lower Virgin River Valley drainage area, is part of the total basin water budget, and is already applied for by ground-water applications.

L2-21

Section 3.4.2.1.3, p. 3-34/35, Text states the source of Littlefield Springs is mainly from the Virgin River that infiltrates into sinkholes upstream in Utah and emerges downstream at the Littlefield Springs, EIS Authors cite Trudeau et al., (1983) as their source. However there is no mention of the sink holes in the reference. Cole and Katzer (2000) were the first to identify the sinkholes and further indicated that the flow of the Littlefield Springs was about half ground-water discharge. Once again DEIS authors paid scant attention to the literature.

L2-22

Section 3.4.2.2.3, p. 3-36, Text states that Dixon and Katzer (2002) estimate the perennial yield of the basin-fill aquifer system in the Virgin River Valley is approximately 40,000 afy, after estimates of current pumping are taken into account. This is wrong. The estimate of 40,000 afy of perennial yield includes the current pumping (Dixon and Katzer, 2002, p. 82 & 96). Yet another example of lack of attention to detail by the DEIS authors.

L2-23

Section 3.4.2.3, p. 3-37, Text states CH2M HILL (2002) presents the evidence that there is no ground-water discharge to the Virgin River. This is incorrect and is the result of bias by the DEIS authors who do not want to admit that ground water in the lower Virgin River Valley, including Tule Desert does discharge to the Virgin River. As stated previously in this review this in-flow to the river has been documented by Glancy and Van Denburgh (1969, p. 36). Metcalf (1995, p. 150) indicated her data were inconclusive regarding ground-water discharge to the river. Woessner et al., (1981, p. 45) indicates ground water does discharge to the river. Brothers et al., (1993) and Dixon and Katzer (2002) all present data that shows there is not enough water in the river to satisfy the ET demand without a ground-water component. DEIS author's credibility is seriously degraded by their unwillingness to confront this issue.

L2-24

Section 4.4.1.1.1 p. 4-7, CH2M HILL (2002) state that that Tule Desert is essentially a hydrologic sub-unit of the Virgin River Valley, by extracting water from

groundwater from these areas does not flow into the Tule Desert. Specifically, deuterium data from North Tunnel Spring, Upper Lime Mountain Well and Lower Lime Mountain Well (-94, -87 and -86 permil, respectively) suggest that there is no correlation between groundwater from these locations (which are northeast and east of the Tule Desert, respectively), and the deep production well in the Tule Desert.

Response to Comment L2-21

Section 3.4.2.1.3, Springs, better describes the potential sources of water to Littlefield Springs discussed in Trudeau et al. (1983) and Cole and Katzer (2002).

Response to Comment L2-22

Section 3.4.2.2.3, Aquifer Characteristics, replaces the phrase, "taken into account" with the word "include." The conclusions of the DEIS are not affected by this revision.

Response to Comment L2-23

BLM acknowledges disagreement on this issue. *Section 3.4.2.2.4, Virgin River/Ground Water Interaction*, of the *Proposed Toquop Land Disposal Amendment to the Caliente MFP and FEIS for the Toquop Energy Project* characterizes the nature of the disagreement. Section 4.1.2 of the *Proposed Toquop Land Disposal Amendment to the Caliente MFP and FEIS for the Toquop Energy Project* addresses incomplete and/or unavailable information.

Response to Comment L2-24

As stated in Section 4.4.1.1.1 (page 4-7) of the DEIS, "Outside the Tule Desert, specifically, in the Virgin River Valley hydrographic area, groundwater levels, as well as the availability of the groundwater resources, would remain unchanged as a result of pumping in the Tule Desert." Section 4.4.1.1.1 (pages 4-9 and 4-10) of the DEIS presents the results of six separate analyses to support the conclusion that project pumping would not result in either substantial groundwater level declines or a substantial depletion of the groundwater resource within the Virgin River Valley.

L2-24

Tule Desert ground water is no longer able to directly recharge the confined aquifer system associated with the lower Virgin River Valley (Katzner, 2002). This impacts the senior water right permit holders and applicants reducing the volume. The two basins are connected through the surface drainage of Toquop Wash and sub-surface flow. (Katzner, 2002, Dixon 2002)

L2-25

Section 4.4.1.1.1, p. 4-7, Text discusses ground-water level declines in Tule Desert and in adjacent lower Virgin River Valley resulting from pumping 7,000 acf from Tule Desert. The conclusions are that ground-water level declines will be insignificant and the removal of 7,000 acf for 42 years will not create adverse impacts, either in Tule Desert or the lower Virgin River Valley. The only aquifer test in the valley produced a pumping drawdown of several hundred feet. This single test is insufficient to accurately calculate the drawdowns from full production. It is doubtful pumping will be restricted to the underlying bedrock since any reduction in pressure at the bedrock-alluvial contact will induce ground water from the alluvial aquifer. The EIS authors indicate the bedrock is the target production zone, but at the same time they indicate the bedrock has poor ability to transmit ground water. The further indicate the low transmissivity will restrict the spread of the water-level decline. This is incorrect hydrologically and easily proved by solving the Theis non-equilibrium equation drawdown based on the Cooper-Jacob modification is: $s = 264 Q/t \cdot \log(0.3 T/r^2 \cdot S)$; Where s = drawdown, in feet at distance r from the pumping well; Q = pumping rate in gpm; T = transmissivity, in gallons per day per foot; t = time in days for the duration of the pumping test and S = a storage coefficient of 0.005. For the example problem assume:

L2-26

$Q = 2000 \text{ gpm}$, $T = 12,000 \text{ g/d/ft}$, $t = 20 \text{ years}$, $r = 1 \text{ mile}$, and $S = 0.005$.

Solving the Theis non-equilibrium by substituting the above values equals a drawdown one mile from the pumping well of 100 ft. Increasing the T to 18,000g/d/ft and holding the other values constant equals a drawdown of about 70 ft. So the greater the T the less the drawdown.

L2-27

The text also states most of the water entering the project wells will come from the north because of the steep gradient so there will be little impact on the ground-water system to the south, particularly in the lower Virgin River Valley. This is absolute nonsense. Once pumping begins the gradients surrounding the wells tend to equalize. The ground water pumped will come from transient storage and will no longer be available to the down-gradient part of the flow system. This ground-water flow system will adjust by a decline in water levels. It is incorrect to state pumping will intercept all the natural ground-water discharge and therefore have no impact on the remaining ground water in the basin.

Regardless of the magnitude of the drawdown the simple fact is the water removed from Tule Desert has already been applied for by the senior water-right purveyor in the lower

Response to Comment L2-25

Section 3.4.2.1.2 (page 3-30) cites the Water Resources Technical Report (CH2M HILL, 2002b) as providing the results of the aquifer testing in the Tule Desert. Neither the EIS nor CH2M HILL (2002b) use the aquifer tests directly to calculate the water-level decline at full production. Inasmuch as these aquifer tests provide the only actual hydraulic data on groundwater in the Tule Desert, the EIS appropriately bases its conclusions regarding anticipated water-level declines on these results.

Response to Comment L2-26

Section 4.4.1.1.1 (page 4-8) of the DEIS states, "...low transmissivity acts to limit the lateral extent of water level decline around a pumping well (that is, the lower the transmissivity, the smaller the radius of influence around a well)." This statement is based on the relationship in the Theis non-equilibrium equation, cited in the comment. At issue is the extent of the radius of influence of the well, and not the water level decline (drawdown) at a particular radial distance. Specifically, the comment is correct in stating that with an increase in transmissivity there will be a reduction in drawdown at the same distance from the well, all other parameters (aquifer storativity, and pumping duration and rate) being constant. However, the

reason for the reduced drawdown at a given distance from the well is because the overall radius of influence of the well increases with higher transmissivity (i.e., the water flows to the well from a greater lateral distance the higher the transmissivity) because the volume of aquifer affected is constant (in the case where aquifer storativity, and pumping duration and rate are unchanged).

Response to Comment L2-27

Wells pumped under the influence of a strong uni-directional horizontal component of hydraulic gradient, such as observed in the Tule Desert, will develop an asymmetrical cone of depression in which the water level declines will be less over a similar distance downgradient (i.e., south, in the Tule Desert) of the wells.

As stated in Section 4.4.1.1.1 (page 4-7), "the maximum drawdown would remain above the top of the fractured-rock aquifer and no de-watering of the aquifer would occur." This point, together with the conclusion presented in 3.4.2.1.2 (page 3-31) that, groundwater is confined under pressure within the fractures of the rock" supports the conclusion that water that flows to the production wells in the Tule Desert is derived primarily from the expansion of the water and the compression of the rock, and less from groundwater in storage.

Virgin River Basin, which depends, in part, on the recharge from Tule Desert. DEIS authors have misstated and confused simple hydrologic laws.

Ground water model presented by CH2M HILL (2002) does not represent existing conditions, is grossly over simplified and not calibrated. Therefore the simplistic model is of no practical value in assessing potential impacts of pumping in Tule Desert on the lower Virgin River Valley. The ground water model does not include the geophysical data, ground water elevations, borehole lithologies or recharge estimates. The model area uses constant head boundaries, which correlates to an inexhaustible supply of water entering the model from the north. Based on Darcy's law as presented by CH2M HILL (2002) flow through the model is approximately 43,000 acre-feet per year. This is several orders of magnitude higher than data presented in Glancy and Vandenberg (1969). Width of the flow system is 25 miles, length 45 miles, transmissivity = 14,500 gallons per day / square foot and equivalent to a 2% gradient. From water level data presented (Katzner 2002) the groundwater gradient is 1%. The significance is that the southern constant head boundary as presented (CH2M HILL, 2002) is at or near sea level to achieve the 2% gradient over the 45-mile long model length, which is not possible. This calculates to a 4750-foot head loss through out the model area. The model analysis is based on aquifer tests that pumped under 60 acre-feet of water (page 4-10 CH2M HILL, 2002).

L2-28

Section 4.4.1.1.1, p. 4-9, Text states as one of the reasons the Tule Desert pumping will not impact the water resources in the lower Virgin River Valley is Dixon and Katzer (2002) estimated a perennial yield of 40,000 afy after current pumping of about 12,000 afy is taken into account. This is wrong and as previously stated in this review the total estimate of perennial yield is 40,000 afy. When the existing pumping is subtracted there is 28,000-afy remaining. If 7,000 afy is developed in Tule Desert then that leaves a balance of 21,000 afy of perennial yield.

L2-29

The DEIS implies that the 7,000 acre-feet per year is still under the estimated perennial yield. This does not take into account the 262,000 acre-feet in application to appropriate ground water on file with the Nevada State Engineers office that pre-date the 1999 filings in Tule Desert by Lincoln County and Vidler Water. What number is actual being is actually required; the DEIS has values of 7,000, 7,100 and 7,200 acre-feet per year. The agreement for purchasing water by Toiyup Energy states up to 9,000 acre-feet per year DEIS authors continually misrepresent the existing literature.

L2-30

The Muddy Creek Formation is understood only by CH2MHILL (2002) to be unconfined. Dixon and Katzer (2002) indicate ground water in the Muddy Creek is artesian and controlled by the numerous north-south trending faults that riddle the Muddy Creek. Additionally the well drillers report submitted to Division of Water Resources, log number 43686, is a 805-foot well completed in the Muddy Creek associated with permit no. 52296. This well is located southwest of Bunkerville, Nevada, south of the river on the lower terrace of the Virgin River flood plain and is a flowing-artesian well at

L2-31

Response to Comment L2-28

A simple numerical model is of great practical value in assessing potential impacts in the absence of additional data. The purpose of the model used in CH2M HILL (2002b), the results of which are presented in Section 4.4.1.1.1 (page 4-7) of the DEIS, is to estimate the anticipated water level declines in the presence of a steep hydraulic gradient. The purpose of model was not to simulate ground water flow in the Tule Desert, and therefore the model was not calibrated as it was only important to represent the observed hydraulic gradient and then simulate pumping under those conditions. The boundaries of the model were deliberately placed at some distance from the simulated wells so as not to affect the results of the simulations. The actual values at the boundaries are irrelevant, only the gradient that resulted.

Katzer et al. (2002) has been reviewed and considered, and the BLM acknowledges disagreement with the conclusions. The reasons for the disagreement are described in Section 4.4.1, *Ground Water Resources Incomplete and/or Unavailable Information*.

Response to Comment L2-29

The comment supports the conclusion stated in Section 4.4.1.1.1 of no significant impact to

ground water resources in the Virgin River Valley by stating that after taking the project pumping into account there would still be 21,000 afy of perennial yield in the Virgin River Valley. Also, as noted in the response to Comment L2-22, text in the *Proposed Toquop Land Disposal Amendment to the Caliente MFP and FEIS for the Toquop Energy Project* replaces the phrase "taken into account" with the word "include."

Response to Comment L2-30

The *Proposed Toquop Land Disposal Amendment to the Caliente MFP and FEIS for the Toquop Energy Project* uses 7,000 acre-feet per year consistently throughout the document. The impact analysis in the DEIS also used 7,000 acre-feet per year.

Response to Comment L2-31

The *Proposed Toquop Land Disposal Amendment to the Caliente MFP and FEIS for the Toquop Energy Project* states that there is evidence that the ground water in the Muddy Creek Formation within the Virgin River Valley is confined. The conclusions of the DEIS were not changed by this revision.

With respect to the water quality data presented, the results are insufficient to conclude that the ground water from the well in question is similar to the water quality associated with the Tule Desert. Although the values of chloride, arsenic and total dissolved solids are similar to analyses from the Tule Desert, there are no data on deuterium or key cations such as calcium, potassium and sodium that are necessary to draw a definitive conclusion with respect to a comparison of water types.

Response to Comment L2-32

See response to comments L2-26 and L2-27. The impacts analysis in the Draft EIS (developed in CH2M HILL, 2002b) assumes that the aquifer is homogeneous and isotropic. Although these conditions are undoubtedly not met within a few tens of feet from a given production well, at the scale of the overall well field analysis in the EIS (i.e., over an area that is approximately three times the size of the Tule Desert [CH2M HILL 2002b, Figure E-1]), the assumption of homogeneous, isotropic conditions is considered reasonable based on the highly fractured nature of the aquifer.

Response to Comment L2-33

On page 4-10 of the DEIS, the reference to the results presented in Las Vegas Valley Water District (1992) are intended to illustrate the point that under the hypothetical situation whereby the well field for the proposed project was located in the Virgin River Valley. In this location, the results of the Las Vegas Valley Water District study concluded that, spatially concentrated pumping 10,000 afy from the Muddy Creek Formation in the vicinity of Halfway Wash indicates that drawdowns on the order of 5 feet extend no more than 6 miles from the pumping center after 50 years. In other words, the well field for the project could be

L2-31 5 gallons per minute. Clearly the ground water in the Muddy Creek is confined. Ground water quality associated with the well indicates the water quality is similar to the water quality associated with Tule Desert. The chloride concentration is 10 milligrams per liter (mg/l), arsenic is 0.0080 mg/l, and total dissolved solids of 410 mg/l. Attached is the well log and chemical analysis associated with permit no. 52296.

L2-32 p. 4-9/10 continued. Text indicates the results of the singular aquifer test in Tule Desert proves there will be no adverse impact resulting from ground-water drawdowns on the water resources of the lower Virgin River Valley. DEIS authors ignore the lack of homogeneity and isotropy.

L2-33 Text further cites Las Vegas Valley Water District (1992) as additional evidence that there will be no impact. This is inappropriate because the Tule Desert ground-water system behaves entirely different than the Virgin River floodplain aquifer even though they are connected hydraulically by the Muddy Creek Formation. Text defines ground-water flow directions as conveniently moving south out of Tule Desert, but west of the Toquop Wash so there can be no impact on ground-water levels or resources in the lower Virgin River Valley. In fact Tule Desert is bisected by numerous north trending faults, including the Toquop Wash fault, that are conduits for preferred ground-water flow. DEIS authors either do not understand the hydrogeology or are biased in their interpretations.

L2-34 Section 4.4.1.2.1, p. 4-11. Text states pumping in Tule Desert will have no impact on any springs in the entire basin. As presented previously in this review there is significant evidence to indicate the Virgin River reach between the Littlefield gaging station and the Riverside Bridge, which is downstream from the junction of Toquop Wash and the Virgin River is an area of ground-water discharge. There are reported springs (BioWest, oral commun., 2002) downstream from the Riverside Bridge. Much of the lower river is dry or at very low flow during the summer months, however, the amount of evapotranspiration is significant and indicates that there must be some contribution to the shallow floodplain aquifer by ground water. Some of this ground water originates in Tule Desert. This is a fact the DEIS authors choose to ignore.

L2-35 Section 4.18.3, p. 4-84. Text has one sentence summarizing the unavoidable adverse impacts on ground-water resources. And fortuitously there appear to be none according to DEIS authors. Impacts are minimized or ignored through out the DEIS. In reality, ground-water drawdowns in Tule Desert will be several hundred feet at the well heads and in the range of 100-300 feet several miles downgradient in the lower Virgin River Valley. The amount of ground water consumed from Tule Desert will not be available for use by the single Public Municipal Water Purveyor in the basin. The Toquop Wash area has been identified as a potential ground-water development resource area (Dixon and Katzer, 2002, Figure 17, p. 91) and the proposed pumping in Tule Desert will adversely impact this resource area.

placed in the Virgin River Valley, as opposed to the more distant Tule Desert, and pump more water (10,000 afy as opposed to 7,000 afy for the project) for a longer period (50 years as opposed to 42 for the project) and still not adversely affect the water level in existing municipal wells in the Virgin River Valley based on the modeling results of the Las Vegas Valley Water District.

The geologic faults described in the comment support the conclusion of the DEIS that ground water flows south from the Tule Desert into the Virgin River Valley.

Response to Comment L2-34

Section 3.4.2.2.4 (page 3-37) of the DEIS concludes based on rationale presented in CH2M HILL (2002b) that there is no significant ground water inflow to the Virgin River downstream of Littlefield Arizona (see also response to comment L2-16). The locations or flow rates of specific springs in the Virgin River downstream of Littlefield are not documented in the known technical literature.

The comment notes that much of the lower [Virgin] river is dry or at very low flow during the summer months. This comment actually supports the argument that there is no direct ground water discharge to the river. As referenced in Section 3.4.2.2.4 (page 3-37) of the DEIS, the comment that ground water in the vicinity of the Virgin River originates in the Tule Desert is not supported by the available water-chemistry data (CH2M HILL, 2002b, Section 4.2.5; CH2M HILL, 2002a).

The EIS neither states nor implies that, “pumping will intercept all the natural ground water discharge and therefore have no impact on the remaining ground water in the basin.” The potential water level declines in the Tule Desert are clearly identified in the EIS.

Response to Comment L2-35

The BLM acknowledges that, contrary to the conclusion of the EIS, Katzer et al. (2002) conclude that drawdowns in the range of 100 to 300 feet will occur downgradient in the lower Virgin River Valley. The basis for the disagreement in these conclusions is described in *Section 4.4.1, Ground Water Resources—Incomplete and/or Unavailable Information*.

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REVIEW SUMMARY

This review of the document titled "Draft Toquop Land Disposal Amendment to the Caliente Management Framework Plan and Draft Environmental Impact Statement for the Toquop Energy Project" casts serious doubts on the credibility of the authors and their understanding on the hydrology of the lower Virgin River Valley. These flaws may be carried throughout the entire document thus reducing the overall believability of the EIS evaluation and negating many of the conclusions.

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OWNER Bruno Biasi ADDRESS Post Office Box 60
Bunkerville, Nevada
 LOCATION S 1/4 M 14 Sec 25 T 13 N/S R 70 E Clark County
 PERMIT NO. _____

1. TYPE OF WORK
 New Well Recondition
 Deepen Other
 4. PROPOSED USE
 Domestic Irrigation Test
 Municipal Industrial Stock
 5. TYPE WELL
 Cable Rotary
 Other

6. LITHOLOGIC LOG

Interval	Water Status	From	To	Thickness
Boulders & loose sand		0	10	10
Hard conglomerate		10	40	30
Red sticky clay, some D&A gravel		40	50	10
Red sticky clay		50	70	20
Gravel		70	110	40
Gravel w/ sand		110	130	20
Small gray w/ bldrs		130	150	20
Sm. gray w/ fine sand		150	205	55
Fine sandy clay w/ some pea gravel		205	220	15
Fine sandy clay		220	235	15
Clay w/ silt & sticky clay		235	250	15
Clay w/ rough sm. gray		250	265	15
Sharp rough gray w/ sandy clay		265	280	15
Clay w/ small rough gray		280	295	15
Galy w/ sandy silt		295	330	35
Hard clay		330	385	55
Sandy clay		385	430	45
Clay w/ sm. boulders		430	450	20
Hard clay w/ fine silty sand		450	550	100
Clay		550	805	255

8. WELL CONSTRUCTION
 Diameter hole 12 inches Total depth 805 feet
 Casing record
 Weight per foot _____ Thickness .250

Diameter	From	To
<u>8</u> inches	<u>+1</u> feet	<u>335</u> feet
_____ inches	_____ feet	<u>235</u> feet
_____ inches	_____ feet	<u>335</u> feet
_____ inches	_____ feet	_____ feet

 Well backfilled from _____ feet
335 to bottom _____ feet
 Surface seal: Yes No Type Cement
 Depth of seal 50 feet
 Gravel packed: Yes No 335
 Gravel packed from 50 feet to 335 feet
 Perforations:
 Type perforation Mill slots
 Size perforation 5/32 x 3" 8 rows
 From 115 feet to 235 feet
 From _____ feet to _____ feet
 From _____ feet to _____ feet
 From _____ feet to _____ feet

9. WATER LEVEL
 Static water level _____ Feet below land surface
 Flow _____ G.P.M.
 Water temperature _____ °F. Quality _____

Date started March 1, 1982
 Date completed March 22, 1982

10. DRILLERS CERTIFICATION
 This well was drilled under my supervision and the report is true to the best of my knowledge.

7. WELL TEST DATA

Pump RPM	G.P.M.	Drop Down	Allow Flow Time

Name THOMPSON DRILLING CO., INC.
4185 West Harmon
 Address Las Vegas, Nevada 89103
 Nevada contractor's license number 4286A
 Nevada driller's license number 582
 Signed Richard Thompson
 Date April 13, 1982

8. BAILER TEST

G.P.M.	Draw down	feet	hours

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NEL LABORATORIES

CLIENT: Virgin Valley Water District
 PROJECT ID: VVWD
 PROJECT #: NA
 TEST: Inorganic Non-Metals
 MATRIX: Drinking Water

CLIENT ID: Biasi #4
 DATE SAMPLED: 1/10/00
 NEL SAMPLE ID: L0001081-01

PARAMETER	RESULT	REPORTING LIMIT	D. F.	METHOD	UNITS	ANALYZED
Chloride	10	0.5	5	EPA 300.0	mg/L	1/11/00
Fluoride	2.4	0.4	1	SM 4500-F C	mg/L	1/12/00
Nitrate, as N	ND	0.5	5	EPA 300.0	mg/L-N	1/11/00
Nitrite, as N	ND	0.5	5	EPA 300.0	mg/L-N	1/11/00
pH	8.16	2	1	EPA 150.1	pH Units	1/11/00
pH Temperature	22.8	1	1	EPA 150.1	°C	1/11/00
Sulfate	170	10	100	EPA 300.0	mg/L	1/17/00
Total Dissolved Solids	414	25	1	SM 2540 C	mg/L	1/11/00

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Page 16

D.F. - Dilution Factor

ND - Not Detected

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NEL LABORATORIES

CLIENT: Virginia Valley Water District
 PROJECT ID: VVWD
 PROJECT #: NA

CLIENT ID: Biasi #4
 DATE SAMPLED: 1/10/00
 NEL SAMPLE ID: L0001081-01

TEST: Metals
 MATRIX: Drinking Water

ANALYST: JTY - Reno Division

Letter - L2

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PARAMETER	RESULT mg/L	REPORTING LIMIT	D. F.	METHOD	DIGESTED	ANALYZED
Arsenic	0.0080	0.001 mg/L	1	EPA 200.8	1/13/00	1/16/00
Barium	0.019	0.0025 mg/L	0.5	EPA 200.7	1/13/00	1/14/00
Cadmium	ND	0.002 mg/L	0.5	EPA 200.7	1/13/00	1/14/00
Chromium	ND	0.003 mg/L	0.5	EPA 200.7	1/13/00	1/14/00
Copper	ND	0.002 mg/L	0.5	EPA 200.7	1/13/00	1/14/00
Iron	ND	0.05 mg/L	0.5	EPA 200.7	1/13/00	1/14/00
Lead	ND	0.001 mg/L	1	EPA 200.8	1/13/00	1/16/00
Magnesium	30	0.25 mg/L	0.5	EPA 200.7	1/13/00	1/14/00
Manganese	0.084	0.0025 mg/L	0.5	EPA 200.7	1/13/00	1/14/00
Mercury	ND	0.0002 mg/L	1	EPA 245.1	1/13/00	1/13/00
Selenium	0.0022	0.001 mg/L	1	EPA 200.8	1/13/00	1/16/00
Silver	ND	0.005 mg/L	0.5	EPA 200.7	1/13/00	1/14/00
Zinc	ND	0.05 mg/L	0.5	EPA 200.7	1/13/00	1/14/00

D.F. - Dilution Factor

ND - Not Detected

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Date: August 29, 2002

**TO: Gene A. Kolkman
Bureau of Land Management
Ely Field Office
FAX: (775) 289-1910**

**FROM: Lisa Luptowitz
SNWA Resources Department
Water Resources Division
Phone: (702) 862-3789
FAX (702) 862-3751**

Number of Pages (including cover sheet): 7
If you experience problems with the fax, please call (702) 862-3752

Documents/Comments:

Original hard copy being sent by regular mail

Letter - L2

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Comments and Responses for Groups and Organizations

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Geoff Kolkman, Manager
BLM/Ely F.O.
HC 33, Box 33500
Ely, NV 89301

The Toiyabe Chapter of the Sierra Club

Nevada and Eastern California

PO Box 8096, Reno, NV 89507

August 16, 2002

ATTORNEY	DATE
D.M.	
RE	
NRA	
SS	
CAI	
FIRE	
C.F.	

Dear Manager Kolkman,

On behalf of the Toiyabe Chapter of the Sierra Club, I am submitting comments on the Draft Toquop Land Disposal Amendment to the Caliente Management Framework Plan and Draft Environmental Impact Statement for the Toquop Energy Project (draft Toquop amendment/EIS). Many of our over 5,000 members live and recreate near or on public lands in the Ely F.O. area and are concerned about potential environmental impacts of power plant projects and also about losing public lands through disposal actions. This comments are based on a preliminary review of the document and may be expanded later.

The Sierra Club strongly supports the no-action alternative because it is totally inappropriate for power plants in the arid Mojave Desert to use up to 7,000 acre feet of groundwater annually to cool a gas-fired electric power generating plant when other cooling technology is available. We understand that this is the position of the Clark County Commission and are surprised that this is not also the position of the Lincoln County Commission. In addition, the power plant would have unacceptable impacts on the fragile desert environment, including on air quality and on the threatened Desert Tortoise and water-dependent TES species which will be affected by proposed massive groundwater withdrawals.

The draft EIS is deficient in identifying and analyzing the environmental impacts of the proposed project as well as in requiring mitigation for those impacts. For example, the project proposal includes paving 14.4 miles of the dirt road presumably to improve access for motor vehicles from the proposed power plant site to Interstate 15. Yet this road goes through the Mormon Mesa Area of Critical Environmental Concern which was established to protect the threatened Desert Tortoise. The EIS analysis, however, finds no significant environmental impacts on Desert Tortoise or its critical habitat of either reconstruction or paving of the road. No data is presented to support this conclusion. No data is presented on increased vehicle usage or speed or estimated mortalities of the threatened species, yet the EIS finds no significant environmental impacts of subsequent use of the paved road by high-speed motor vehicles on Desert Tortoise. The EIS proposes no mitigation for the road impacts on Desert Tortoises.

We assume that the EIS determinations of no significant environmental impacts are based on the Biological Assessment (BA) prepared by the BLM for the US Fish & Wildlife Service in connection with the Toquop amendment/EIS process. Please send us a copy of this BA. What is the status of the Section 7 consultation process with the USFWS on this project? Has a USFWS Biological Opinion (BO) been completed on the project? If not, when is a completed BO expected? Does the BLM intend to finalize the draft Toquop amendment/EIS without a BO issued by the USFWS? We strongly urge the BLM to delay finalizing the EIS until USFWS requirements for protecting Desert Tortoises can be incorporated into the EIS.

Thank you for considering our comments and request

Sincerely,

Rose Strickland
Conservation Committee

cc: Bob Abbey, State BLM Director

Letter - G1. Signatory - Rose Strickland. (The Toiyabe Chapter of the Sierra Club)

Response to Comment G1-1

Section 4.5.1 (Threatened, Endangered, and Sensitive Species) of the DEIS described short-term and long-term and direct and indirect impacts expected on desert tortoises and their habitat as a result of project construction and operation. The number of acres of desert tortoise habitat that would be impacted and the number of tortoises these impacted acres would provide habitat for were discussed in Section 4.5.1. Extensive measures to protect desert tortoise and their habitat apply to the proposed project and were described in detail in *Section 4.5.1.1.2 (Mitigation)* and *Appendix A (Measures for Protecting Desert Tortoises and Their Habitat)* of the DEIS. These measures are an integral part of the Proposed Action and the action alternatives. They include the applicable Terms and Conditions of the Reasonable and Prudent Measures of the U. S. Fish and Wildlife Service's Biological Opinion (BO) for the Approved Caliente Management Framework Plan Amendment and Record of Decision for the Management of Desert Tortoise Habitat that was prepared by the Bureau of Land Management (BLM) in the year 2000.

G1-1

Specifically for the proposed project, permanent tortoise-proof fencing will be required for the access road from Interstate-15 to the plant to protect desert tortoises and because the access road is within the Mormon Mesa Area of Critical Environmental Concern. All of the information above was clearly stated in the DEIS. Section 4.5.1.1.2 of the DEIS also stated that additional measures to protect desert tortoise beyond those included in the DEIS may be further developed during formal consultation with the FWS under Section 7 of the Endangered Species Act and stipulated in the BO for the proposed Toquop Project. *Section 4.10 (Wilderness Study Areas, Areas of Critical Environmental Concern, and Wild and Scenic Rivers)* of the DEIS discusses impacts on the Mormon Mesa ACEC and its designation as a desert tortoise Special Management Area.



Western Land Exchange Project

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web: www.westlx.org

Mr. Gene A. Kolkman, Field Manager
Bureau of Land Management
Ely Field Office
HC 33, Box 33500
Ely, Nevada 89301-9408

August 29, 2002

Dear Mr. Kolkman:

The Western Land Exchange Project is a non-profit, membership organization that monitors federal land trades and conducts research, outreach, and advocacy for reform in federal land exchange law and policy. This letter constitutes our comments on the Draft Toquop Land Disposal Amendment to the Caliente Management Framework Plan and Draft Environmental Impact Statement (DEIS) for the Toquop Energy Project.

The Right of Way Alternative

The DEIS briefly mentions an alternative to the proposed land exchange that would "keep all public lands needed for the project under BLM management and issue ROWs for the power plant site," DEIS 1-7, but fails to consider it in any detail. Such an alternative is eminently reasonable and must be fully analyzed in the Final EIS.

Purpose and Need

The Purpose and Need section misleads the public by declaring a dire public need for the proposed plant because of near- and long-term power shortages in the western United States. DEIS 1-1. In truth, many of the power projects that were hurriedly proposed after the recent California energy "shortage" have been canceled or delayed because of a glut of power on the western market. According to the Public Utilities Commission of Nevada, six proposed generation plants in Nevada alone have been postponed. See <http://www.puc.state.nv.us/ELECTRIC/propgen.pdf>

While the DEIS claims that the proposed project would contribute to meeting the demand for power in the Las Vegas area . . . [and] the Arizona-New Mexico-southern Nevada power area, "it notably does not mention whether the City of Mesquite or Lincoln County would be served by the project. The DEIS also fails to mention whether local or regional electric utilities would be guaranteed first rights to purchase Toquop Energy power or instead the power would simply be placed on the Western grid for sale to the highest bidder. These issues must be addressed in the Final EIS, or the agency will have failed to demonstrate a purpose and need for the power plant.

The DEIS also overstates the purpose and need for the land exchange. The proposed exchange would acquire a square mile parcel within 1.5 miles of I-80, DEIS 3-61, that is "typical of other relatively undisturbed habitats at similar elevations in the surrounding area." DEIS 3-54. The parcel "supports a fairly monotypic vegetation community," DEIS 3-53, and contains no wetlands, other aquatic areas or riparian vegetation, DEIS 3-55. The Pah Rah land would provide an insignificant amount of sage grouse habitat and negligible improvements in management efficiency. The final EIS must include a map of the Reno

Letter - G2. Signatory - Christopher J. Krupp. (Western Land Exchange Project)

Response to Comment G2-1

All of the action alternatives described in Chapter 2 of the DEIS allowed for either the completion of a land exchange or issuance of a right of way for the Toquop Power Plant site. The impact analysis sections (Chapter 4) discuss in detail where a difference in impacts would result if a right-of-way were issued. The *Proposed Toquop Land Disposal Amendment to the Caliente MFP and FEIS for the Toquop Energy Project* identifies disposal through sale or exchange. For example, in the FEIS, Section 4.16.5, *Tax Receipts if No Land Exchange Were to Occur under the Proposed Action, Alternative 1, Alternative 2, or Alternative 3* specifically addresses the two options. Section 4.16.5 and Appendix B, *Standard Construction and Operation Procedures*, of the of the *Proposed Toquop Land Disposal Amendment to the Caliente MFP and FEIS for the Toquop Energy Project* describe the differences in liability between right-of-way administration and transfer to private ownership.

G2-1

G2-2

G2-3

G2-4

Response to Comment G2-2

The Purpose and Need Statement (Sections 1.2 and 1.3) quantifies the project's contribution to overall power demand for the Las Vegas area and the Arizona-New Mexico-Southern Nevada power area.

Response to Comment G2-3

See response to Comment L2-4.

Response to Comment G2-4

See response to Comment G3-3.

G2-4

area that shows public and private land ownership patterns—the map will reveal just how inconsequential this exchange would be in terms of land management efficiencies. Further, during scoping we specifically requested that the DEIS identify the factors that make the offered parcel, of all the private inholdings in the Pah Rah Mountains, especially susceptible to communications site development. The DEIS provides little or no evidence of any threat of development to the NLRC-offered parcel and generally does not demonstrate the purpose and need for the proposed land trade.

G2-5

Future Use of Selected Land Not Needed for Power Plant

Toquop Energy would require only 100 of the 640 acres that NLRC would acquire through the proposed land exchange. DEIS 2-18. The Final EIS must identify the future use of the remaining 540 acres and whether NLRC or Toquop Energy would own the land.

G2-6

Coyote Springs Land Exchange

The DEIS fails to analyze all interrelated projects. The proposed Coyote Springs Land Exchange, which would transfer up to 14,000 acres of BLM-managed lands approximately 35 miles west of the proposed power plant to an investor seeking to develop up to 50,000 homes on the property, was not identified as an interrelated project likely to have cumulative impacts. The Final EIS should analyze the cumulative impacts likely to result from the Coyote Springs Land Exchange and subsequent development.

G2-7

Vidler Water Company/Lincoln County Application for Water Rights in Tule Desert

In the discussion of the wellfield that would supply the proposed project with cooling water, the DEIS notes that Vidler Water Company and Lincoln County have jointly applied for the required water rights. The Final EIS should discuss the Nevada Attorney General's opinion that the Vidler/Lincoln County relationship violates Nevada law. It should also acknowledge that the Division of Water Resources of the State of Nevada Department of Conservation and Natural Resources has established a perennial yield of 1,000 acre-feet for the Tule Desert Hydrographic Basin. See Glancy, P.A., and Van Denburgh, A.S., 1969, Water-resources Appraisal of the Lower Virgin River Valley Area, Nevada, Arizona and Utah: Nevada Department of Conservation and Natural Resources, Water Resources Reconnaissance Series Report 51. The final EIS must address how the proposed project would be affected if the Nevada State Water Engineer were to reject the joint application to withdraw seven times the perennial yield of the Tule Desert basin. If the application were rejected, Toquop Energy would need to find an alternative source of 7,000 acre-feet of cooling water per year, not a simple proposition in Nevada. BLM must also explain why it is analyzing a proposal that the State of Nevada has concluded would violate its laws.

G2-8

Several studies contradict the DEIS' conclusion that the lower Virgin River does not receive inflow from ground water. See Dixon, G.L. and Katzer, T., 2002, Geology and Hydrology of the Lower Virgin River Valley in Nevada, Arizona and Utah: Virgin Valley Water District, Mesquite, Nevada, Report No. VVWD-01; Glancy and Van Denburgh, 1969; Brothers, K., Katzer, T., Mojib, R.M., Grinnell, G., Bernholtz, A., and Johnson, M., 1993, Addendum to Hydrology and Interactive Computer Modeling of Ground and Surface Water in the Lower Virgin River Valley, Primarily in Clark County, Nevada: Las Vegas Valley Water District, Cooperative Water Project, Series Report No. 1-A. The Final EIS must address these studies and justify BLM's contrary position.

G2-9

The DEIS states that the large amount of ground water in storage in the Virgin River Valley would mitigate any impacts to the Virgin River of pumping 7,000 acre-feet/year for Toquop Energy cooling. DEIS 4-9. Given this position, the Final EIS must consider the cumulative impacts that would result if the Southern Nevada Water Authority and the Virgin Valley Water District's existing applications for more than 260,000 acre-feet/year of water in the Virgin River Valley were granted.

G2-10

Range Of Alternatives

The Final EIS must fully consider a broader range of alternatives than the DEIS has provided. It is spurious to claim that other alternatives were initially considered but

G2-11

Response to Comment G2-10

Section 4.4.1.1.1 of the *Proposed Toquop Land Disposal Amendment to the Caliente MFP and FEIS for the Toquop Energy Project* demonstrates that there will be no substantial decline in ground water levels or a substantial depletion of ground water resources in the Virgin River Valley. Consequently, the project will not contribute to cumulative impacts to the Virgin River Valley that would result if the Southern Nevada Water Authority and the Virgin River Water District existing applications for more than 260,000 acre-feet per year of water in the Virgin River Valley were granted.

Response to Comment G2-11

The *Proposed Toquop Land Disposal Amendment to the Caliente MFP and FEIS for the Toquop Energy Project* presents a detailed analysis of an air-cooled alternative (Alternative 3).

Response to Comment G2-5

If the land is exchanged, the Pah Rah parcel will be managed for multiple use.

Response to Comment G2-6

If the exchange takes place, Toquop Energy would acquire all 640 acres of the Toquop Parcel from NLRC. One-hundred acres would be used for the power plant and the remaining 540 acres of land would remain in Toquop Energy ownership. While there is potential for other industrial uses, there are no plans at this time for new uses of those lands.

Response to Comment G2-7

The Coyote Springs development has been included in the list of interrelated projects in Section 1.8 and cumulative impacts have been analyzed in *Section 4.18, Cumulative Impacts*, of the of the *Proposed Toquop Land Disposal Amendment to the Caliente MFP and FEIS for the Toquop Energy Project*.

Response to Comment G2-8

See response to Comment L2-1.

Response to Comment G2-9

Section 4.4.1, Ground Water Resources— Incomplete and/or Unavailable Information of the *Proposed Toquop Land Disposal Amendment to the Caliente MFP and FEIS for the Toquop Energy Project* addresses incomplete and/or unavailable information.

ultimately rejected from further consideration because they were infeasible. The only reason other alternatives were deemed infeasible is because NLRC was unwilling to consider them. A glaring example of this is the BLM's failure to consider alternative cooling systems for the proposed power plant because air-cooling would require approximately one-tenth the water of water-cooling and eliminate a substantial profit source for NLRG's sister company, Vidler Water Company.

Letter - G2

Page 3

The DEIS asserts that an air-cooled system was ultimately not considered because, among other things, "[t]he use of an air-cooled system would result in increased capital and operations costs and make the project unable to fulfill the requirement set out in the Purpose and Need that the proposed action generate power at competitive rates to the consumer," and "[t]he increased capital and operation cost associated with the air-cooled option would result in making the project non-competitive in the regional wholesale electric marketplace, thus making the project economically unfeasible." DEIS 2-40. Other proposed power projects in southern Nevada put the lie to these claims. Duke Energy's Moapa Energy Facility, Mirant Corporation's Apex Generating Station, Pinnacle West Energy's Silver Hawk Power, Diamond Generating's Ivanpah Energy Center and Reliant Energy's Bighorn and Arrow Canyon projects are all examples of air-cooled power generating facilities proposed for southern Nevada. If those projects are feasible, so too is an air-cooled facility for Toquop Energy and the Final EIS must consider such an alternative.

Response to Comment G2-12

The action as proposed is that the wellfield and water pipeline would only be capable of providing water for the proposed power plant. If approved through the NEPA process, this is in fact what will occur. Any additional use of this pipeline and the required increase in size would require separate BLM and NEPA analysis.

Environmental Impacts

When determining the environmental consequences of the proposed power project, the DEIS should not have assumed that the design of the Tule Desert wellfield and associated pipelines would only have sufficient capacity to supply the Toquop Energy Project. Vidler Water Company and Lincoln County have previously proposed that the Tule Desert Hydrographic Area and accompanying pipelines supply water to the 13,500-acre development resulting from the Lincoln County Land Act of 2000 (LCLA). In fact, one of the applications identified in the DEIS as a source of water for the power facility (No. 64693), specifically identifies LCLA lands, as well as Toquop Energy, as a place of use. The agency cannot avoid cumulative impact analysis by relying on false assumptions.

Response to Comment G2-13

See response to Comment G7-9.

The BLM continues to artificially isolate the groundwater impacts of each project and avoid any analysis of the cumulative groundwater impacts from the numerous projects proposed for the area. While the DEIS acknowledges that development resulting from the Mesquite Lands Act (MLA) and LCLA will likely have a considerable associated water demand, "DEIS 4-11, it claims there is insufficient information regarding specific demand and potential sources for water to assess potential cumulative impacts. DEIS 4-11. This is the same type of claim the BLM made in the environmental assessment (EA) for the first phase of the LCLA. In that document, the BLM estimated the eventual water demand for the first phase of LCLA development at more than 21,000 acre-feet per year, and asserted that the water would come from the Tule Desert or Kane Springs Valley Hydrographic Areas. Given that information, there is no reason that the DEIS could not assess the cumulative groundwater impacts of LCLA development.

Response to Comment G2-14

One of the objectives of the water resources analysis was to determine whether or not the proposed project would affect the Virgin River, and subsequently its biological resources. Extensive ground water hydrologic investigations that included field studies and analytical modeling were conducted by professional hydrologists to address this issue. Particular emphasis was placed on conducting very rigorous hydrologic investigations for a number of reasons, including that stated in this comment (i.e., because of past controversy surrounding the hydrologic relationship between

The assessment of the impacts to threatened and endangered species is inadequate. There is significant controversy regarding the hydrologic relationship between Tule Desert groundwater and the Virgin River. Given the controversy, the BLM was obligated to analyze impacts to the Southwestern willow flycatcher, Yuma clapper rail, woundfin, and Virgin River chub if 7,000 acre-feet of groundwater were annually withdrawn from below the Tule Desert and Virgin River flows were linked to that groundwater. Further, while the DEIS admits that for the desert tortoise an ongoing potential exists for added incremental impacts from all projects that could have long-term effects, "DEIS 4-16, it makes no effort to qualify or quantify those effects. The proposed project must be subject to the Southeastern Lincoln County Multi-Species Habitat Conservation Plan (HCP), despite the fact that project permitting would be completed prior to HCP implementation. The HCP is largely meaningless if other projects are held to it but construction and operation of the power plant are not.

Tule Desert ground water and the Virgin River). Water resources study results were critically reviewed by agency specialists and representatives expert in this field prior to the incorporation of study findings into the DEIS. Results of these studies indicate that the proposed project would not adversely affect the Virgin River, its aquatic and riparian habitat, or biota associated with these Virgin River habitat types. Results of ground water studies and conclusions are discussed extensively in Section 4.4 of the DEIS (Section 4.4.1.4 of the DEIS specifically concludes that flow in the Virgin River would not be affected by the proposed project). Based on this finding, Section 4.5.1 of the DEIS concludes that the proposed project would not directly or indirectly impact aquatic or riparian habitats of the Virgin River used by Southwestern willow flycatcher, Yuma clapper rail, woundfin, and Virgin River chub.

Regarding desert tortoises, please see the responses to comments F1-5 and G1-1 regarding the qualitative and quantitative descriptions of impacts and cumulative impacts on desert tortoises. In addition, *Section 4.5.1.1.2 (Mitigation)* of the DEIS notes that measures for protecting desert tortoises described in Appendix A of the DEIS are consistent with measures contained in area Habitat Conservation Plans.

Section 4.1.2 of the *Proposed Toquop Land Disposal Amendment to the Caliente MFP and FEIS for the Toquop Energy Project* addresses incomplete and/or unavailable information.

G2-15

The discussion of cumulative impacts on air quality must include analysis of the effects of the buildout of LCLA and MLA lands. The air-quality impacts caused by approximately 200,000 new residents living less than fifteen miles from the proposed power plant are significant and must be considered.

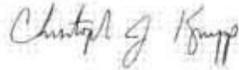
G2-16

Future of Land Exchange if Power Plant is Cancelled

The DEIS did not mention Aquila Corporation's plans to acquire Cogentrix, the would-be owner and operator of Toquop Energy. In the past year, Aquila has lost more than 90 percent of its stock value in the face of intense scrutiny of its Enron-like energy trading business and accounting practices. Considering Aquila's financial difficulties, the glutted energy market, and delays and scale-backs with other Nevada power plants, the Final EIS should address whether the land exchange would be completed if Aquila/Cogentrix were to cancel its Toquop Energy plans. If the Toquop Plant were canceled the land exchange must also be canceled, because the agency has shown no discernible public benefit in creating a private inholding among public lands in southeastern Nevada to eliminate one of hundreds of private inholdings in northwestern Nevada.

Thank you for the opportunity to comment.

Sincerely,



Christopher J. Krupp
Staff Attorney

Letter - G2

Page 4

Response to Comment G2-15

Section 4.18, Cumulative Impacts of the Proposed Toquop Land Disposal Amendment to the Caliente MFP and FEIS for the Toquop Energy Project analyzes the effects of the Mesquite Land Act and the Lincoln County Land Act disposal areas.

Response to Comment G2-16

These are independent decisions. One of the actions could proceed without the other action proceeding.



COMMITTEE FOR IDAHO'S HIGH DESERT

P.O. BOX 2863 BOISE, IDAHO 83701
208-429-1679 www.cihd.org

July 25, 2002

BLM
Ely Field Office
Gene Kolkman
HC 33, Box 35500
Ely, NV 89301-9408



Dear Mr. Kolkman,

Here are the comments of the Committee for Idaho's High Desert and Western Watersheds Project on the Draft Toquop Land Disposal Amendment and DEIS for the Toquop Energy Project.

G3-1

We are deeply concerned about the failure of BLM to adequately consider cumulative impacts of the many developments, land disposal actions and power developments that are occurring in this area. We are also deeply concerned about the impacts to water supplies and aquifers in the region

What are the cumulative impacts of all the various new developments to water supplies? Desert tortoise habitats? Cultural sites? Recreational uses of the affected lands? What are the cumulative impacts to desert tortoise of various developments and increased human activities associated with the power plant?

G3-2

BLM has failed to adequately identify and quantify water volumes available from possible water sources from this project.

Pumping from an underground aquifer may rapidly deplete the water source. How much volume of water is present in the aquifer? What is the recharge rate? What is the source of the aquifer's water?

What is the relation between Vidler and Sierra Pacific? In these days of corporate roguery and deception, the public deserves to know if there is any connection between the two entities.

G3-3

Pah Rah parcel: We are concerned that BLM is simply acting out the bidding of a private corporation seeking to profit from wheeling and dealing in disposal and trading of public lands. Why is there no alternative parcel of land being proposed for trade? The PahRah parcel is described as "desirable". What data does BLM have to support this?

Role of Vidler. What exactly is the role of Vidler water here?

ES-5 describes a "distribution line" to a wellfield along the 12.5 mile-long western water pipeline ROW.

G3-4

Why has an alternative site along the existing corridor not been evaluated for location of the power plant?

Letter - G3. Signatory - Katie Fite. (Committee for Idaho's High Desert)

Response to Comment G3-1

Section 4.18, *Cumulative Impacts*, of the *Proposed Toquop Land Disposal Amendment to the Caliente MFP and FEIS for the Toquop Energy Project* further addresses the cumulative impacts of interrelated projects.

Response to Comment G3-2

Section 3.4.2.1.1 (page 3-25) of the DEIS provided an estimate by the Nevada Department of Water Resources of approximately 530,000 acre-feet of ground water in storage in the basin-fill deposits of the Tule Desert. Additionally, page 3-31 in Section 3.4.2.1.2 provides an estimate of approximately 400,000 acre-feet in storage within the fractured-rock aquifer in the Tule Desert. The amount of recharge to the Tule Desert has been estimated by Walker (2002) to be approximately 8,968 acre-feet per year (Katzer et al., 2002).

Pages 3-29 and 3-30 in Section 3.4.2.1.2 of the DEIS presented a discussion of the general origin of the ground water in the fractured-rock

aquifer of the Tule Desert based on water chemistry data. Section 4.4.1.1.1 (pages 4-9 and 4-10) of the DEIS presented the results of six separate analyses to support the conclusion that project pumping would not result in either substantial groundwater level declines or a substantial depletion of the groundwater resource within the Virgin River Valley.

Response to Comment G3-3

See Section 2.2.2.2, Section 3.9.2.1, and Map 3-13 in the DEIS regarding BLM's reasons for acquiring this parcel. BLM's current land use plans provide for this acquisition. Acquiring this parcel will provide the resources identified in the DEIS by eliminating another portion of the "checker board" land and by "blocking in" more of the area as shown on the map.

Response to Comment G3-4

Section 2.7.2, Alternative Locations, of the Proposed Toquop Land Disposal Amendment to the Caliente MFP and FEIS for the Toquop Energy Project clarifies that the Proposed Action power plant site is the only site located in Lincoln County outside of critical desert tortoise habitat, with access to both electric and gas transmission facilities, and with existing road access.

Letter - G3

Page 2

G3-5 [BLM has failed to evaluate a reasonable range of alternatives. Why has the alternative of an air-cooled power plant not been fully evaluated? Air-cooled power plants use only a fraction of the water that water-cooled plants do. What are the differences in water volume between an air-cooled and water-cooled plant?

G3-6 [Why has a plant location in or near the Las Vegas area not been evaluated as an alternative? There are many existing power lines there, and far less power would be lost if it was generated closer to the site of use. Please quantify this.

G3-7 [Are any other projects planning to tap into the wells in the Tule Desert? If so, what are these projects?

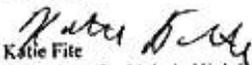
G3-8 [We are very concerned at BLM's hasty and preliminary conclusion (ES-13) that "no adverse effects on ground water resources would occur". BLM has failed to present adequate data that: no lowering of the ground water levels in wells will occur, no regional aquifer depletion will occur, no ground water quality degradation will occur, and no change in Virgin River flow will occur.

ES-13 states that 236 acres of desert tortoise habitat will be disturbed.

G3-9 [Mitigation: We believe BLM has failed to require adequate mitigation.

Please keep us fully informed of all parts of this project.

Sincerely,


Katie Fite
Committee for Idaho's High Desert
PO Box 2863
Boise, ID 83701
208-429-1679

Response to Comment G3-5

The *Proposed Toquop Land Disposal Amendment to the Caliente MFP and FEIS for the Toquop Energy Project* presents a detailed analysis of an air-cooled alternative (Alternative 3).

Response to Comment G3-6

Please see the response to Comment G3-4.

Response to Comment G3-7

No plans exist for the use of water from the wells installed for this project by other projects.

Response to Comment G3-8

The statements related to potential impacts to ground water resources in the Executive Summary of the DEIS summarize the extensive analyses and findings presented in Section 4.4.1 (beginning on page 4-7). Section 4.4.1.1.1 (pages 4-9 and 4-10) of the DEIS presented the results of six separate analyses to support the

conclusion that project pumping would not result in either substantial groundwater level declines or a substantial depletion of the groundwater resource within the Virgin River Valley.

Response to Comment G3-9

Consistent with CEQ, many protective, precautionary measures would be implemented as a part of the Proposed Action to prevent, reduce, or minimize the occurrence of adverse project-related impacts. These measures were described in detail in the DEIS in *Appendix A (Measures for Protecting Desert Tortoises and Their Habitat)*, *Appendix B (Standard Construction and Operating Procedures)*, and *Appendix C (Cultural Resources Programmatic Agreement)*. All of these measures would be implemented as an integral part of the Proposed Action or one of the action alternatives. Where potential impacts on a particular resource are anticipated to occur despite the measures listed in Appendices A, B, and C, mitigation measures were described in Chapter 4 of the DEIS. Table ES-2 in the Executive Summary of the DEIS summarized the best management practices (BMPs), standard operating procedures (SOPs), and mitigation that would be implemented for the various resource areas.

Comments and Responses for Citizens

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Letter - C6. Signatory - Charles E. Hancock	8
Letter - C7. Signatory - Don Oliver	11

JOHN F. LINK
P.O. BOX 279
RENO, NEVADA 89504
TEL: (775) 827-3369 FAX: (775) 827-3369

OFFICE OF LAND RIGHT
ELY, NEVADA
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Comments

Letter - C1. Signatory - John F. Link.

June 29, 2002

Bureau of Land Management
Gene A. Kolkman, Field Manager
Ely Field Office
HC 33, Box 33500
Ely, Nevada 89301-9408

Response to Comment C1-1

Comment noted.

RE: NEVADA LAND & RESOURCES COMPANY, LLC LAND SWAP

Dear Mr. Kolkman:

After reading an article in the Reno-Gazette Journal dated June 18, 2002, and the Draft Toquop Land Disposal Amendment to the Caliente Management Framework Plan and Draft Environmental Impact Statement for the Toquop Energy Project regarding Nevada Land & Resources Company, LLC's (NLRC) land swap in the Pah Rah Range east of Reno in Washoe County for land in the Toquop Wash area I feel that this proposed swap is a blatant rip off of the taxpayer

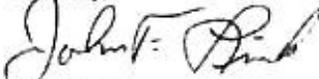
The land owned by NLRC in Section 9, Township 20 North, Range 23 East in Washoe County is in a very remote portion of the Pah Rah Range that has little, if any, commercial value because there is very little chance of developing water, and it has very poor access and can therefore only be considered as non-developable.

The land in the area of Toquop Wash area, however, is alongside an existing electrical transmission line and an existing natural gas line and is on reasonably developable ground, and the many springs in the area suggest that there is adequate subsurface water available for the building of the proposed electric power generation plant.

How could anyone in their right mind consider trading on an acre for acre basis for such land? A more equitable trade for the benefit of the taxpayer would be if Nevada Land & Resources Company, LLC were to trade all of their railroad grant land sections that they own in the Pah Rah Range for the section of land at Toquop Wash.

There is absolutely no comparison in the value and potential value of the land in the Pah Rah area and that in the Toquop Wash area and this swap should not be allowed to proceed.

Sincerely,


John F. Link

C1-1

7/10/02

Provide Your Comments

We would like you to provide comments on the Draft Toquop Land Disposal Amendment to the Caliente Management Framework Plan and Draft Environmental Impact Statement for the Toquop Energy Project. Please use this form to express your opinions. You may complete and return this form before leaving the meeting, or you may complete the form later and mail it to:

GENE A. KOLKMAN, FIELD MANAGER
U.S. BUREAU OF LAND MANAGEMENT
ELY FIELD OFFICE
HC 33, Box 33500
ELY, NV 83901-9408

The comment period ends August 29, 2002. Thank you for your participation.

PLEASE PRINT

Name: SHIRLEY TAYLOR

Address: 1221 WISWAM ST MESQUITE

My comments are as follows (if needed, attach additional pages):

C2-1

I AM STILL CONCERNED ABOUT THE WATER ASPECT - I KEEP SAYING "IT'S RUBBING SALT IN THE WOUND TO PAY PAUL."

Letter - C2. Signatory - Shirley Taylor.

Response to Comment C2-1

Comment noted.

Legas 7/9/02

Provide Your Comments

We would like you to provide comments on the Draft Toquop Land Disposal Amendment to the Caliente Management Framework Plan and Draft Environmental Impact Statement for the Toquop Energy Project. Please use this form to express your opinions. You may complete and return this form before leaving the meeting, or you may complete the form later and mail it to:

GENE A. KOLKMAN, FIELD MANAGER
U.S. BUREAU OF LAND MANAGEMENT
ELY FIELD OFFICE
HC 33, Box 33500
ELY, NV 8901-9408

The comment period ends August 29, 2002. Thank you for your participation.

PLEASE PRINT

Name: ROBERT NARD

Address: 1701 Whitney Mesa Drive, Suite 101, Henderson NV 89014

My comments are as follows (if needed, attach additional pages):

C3-1 [By using conventional cooling towers over an air cooled condenser approx. 2000 Acre Feet more water is needed per 500 MW of power = 4000 Acre Ft/Year. Excessive water use is major concern. We need to conserve water in this state at all costs.]

C3-2 [Also, a Project Labor Agreement should be used on the project with the So NV Building Construction Trades Council to be affiliated with local LABOR, Highly Skilled, Safety, etc.]

Letter - C3. Signatory - Robert Nard.

Response to Comment C3-1

The Proposed Toquop Land Disposal Amendment to the Caliente MFP and FEIS for the Toquop Energy Project presents a detailed analysis of an air-cooled alternative (Alternative 3).

Response to Comment C3-2

Comment noted.

JOHN M. TOROK
P. O. Box 2302
Reno, Nevada 89505-2302
Tel: (775) 851-2899 Fax: (775) 851-4025

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Letter - C4. Signatory - John M. Torok.

Response to Comment C4-1

Comment noted.

June 28, 2002

Bureau of Land Management
Ely Field Office
Gene A. Kolkman, Field Manager
HC 33, Box 33500
Ely, Nevada 89301-9408

Dear Mr. Kolkman

The idea that Nevada Land & Resources Company, LLC's land in the Pah Rah Range east of Reno in Washoe County is equal in value to that in the Garden or Toquop Wash areas is shows pure foolishness on the part of the Bureau of Land Management staffs in both the Carson City District and the Ely District if the BLM actually believe this.

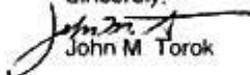
Section 9, Township 20 North, Range 23 East in Washoe County is in a remote portion of the Pah Rah Range that has little or no commercial value, no or very little chance of developing any water, has very poor access and can only be considered as non-developable.

The land in the area of Toquop Wash sets alongside an existing natural gas line and existing electric transmission line, is on reasonably level developable ground, and with many springs in the area suggests that there is adequate subsurface water available for the building of the proposed electric power generation plant.

How could anyone in the right mind consider trading and acre for acre basis for such land. A more fair trade for the benefit of the United States Taxpayers would be if Nevada Land & Resources Company, LLC were trade all of the railroad grant land sections they own in the Pah Rah Range for the section of land at Toquop Wash.

There is just simply no comparison of the value of the non-developable land in the Pah Rah Range and that at Toquop Wash where subsurface water is available, and there is existing power and natural gas lines.

Sincerely,


John M. Torok

C4-1

6/5/02
Done [signature]

Letter - C5. Signatory - John I. Sutherland.

June 1, 2002
Ref#N-74105

Dear Mr. Pope,
Subject: Proposed Pat. B. Land Exchange N-74105

Response to Comment C5-1
Comment noted.

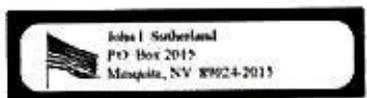
C5-1

We strongly support the land exchange proposed in N-74105. The high cost of electricity in southern Nevada for fixed income retirees like ourselves is becoming quite a financial burden. It is our recommendation that the USDI, BLM do everything possible to facilitate this exchange.

The opposition by the Fish and Game and the American Indians should be disregarded for the betterment of all Southern Nevada residents.

Sincerely, John I Sutherland, rtd
Joyce Sutherland, rtd

John Sutherland
Joyce Sutherland



702-346-2239

2002 JUN 11 10:00 AM
FBI - LAS VEGAS

CHARLES E. HANCOCK
2130 PINE RIDGE DRIVE
RENO, NEVADA 89508

X
NR
Jo

Dave

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Letter - C6. Signatory - Charles E. Hancock.

Response to Comment C6-1

Comment noted.

John Singlaub, Manager
Carson City Field Office, BLM
5665 Morgan Mill Rd.
Carson City, NV 89701

6/15/02

REF. N-74105-NOEP

Dear Mr. Singlaub,

This is in response to your Notice of Exchange Proposal N-74105. Following are my comments and concerns on the appraisal of the offered land.

The supplemental appraisal report is a continuation of a series of appraisal reports prepared by Mr. Norbitz, MAI covering offered lands being used by BLM land exchange proponents. My major concern deals with the treatment of the access problem on the offered isolated checkerboard section in this exchange. I had the same concern in the Wingfield Springs and Wads-Fornly land exchanges. However the IBLA determined that I did not have standing and did not have to consider the merits of my appraisal.

Access to any parcel being appraised is a key element in the valuation process. Access falls into two categories - legal and physical.

C6-1

appraisers generally discuss this item under the site analysis in the Property Data section of the appraisal report. It is a key item in the comparison analysis.

The appraiser must analyze the difference in access between the comparables and subject that are recognized and would be considered by typical buyers and sellers of the subject property. The preferred method of developing an access adjustment is by comparing sales with similar and dissimilar access. A "cost to cure" may also be an appropriate measure of the extent of the difference and should be used where there is a serious problem regarding legal access.

The appraiser for the subject parcel covered both physical and legal access in his report. However, his discussion on access to this section of land raised more questions than it answered on legal access. His discussion on access does not lead me to believe there exists legal access to this parcel. He specifically says there does not appear to be any available access whatsoever to parcel 7 (subject) nor did he document that there is legal access. He does say the status of legal access is not easily defined or documented. There may well be prescriptive rights to the subject parcel if so pursued in the courts by the owner, but the cost would be prohibitive, with little assurance of success.

Letter - C6
Page 2

My concern is that, without legal access and no physical access, what does an informed buyer really have? Any knowledgeable buyer of this one acre's knowing of a physical and legal access problem would insist that the appraised value would reflect the "cost to cure" of these problems and that it would be reflected in the comparative sales analysis.

Federal right-of-way regulations could also be a major factor in obtaining legal access to the subject parcel. This part of the Pah Rah range is checkerboard land and would require BLM to issue RLW's for access. The Southern Washoe County Urban Interface Plan which covers this parcel, indicates that ORV use in the Pah Rahs will be limited to existing roads and trails. This designation would not preclude BLM issuing RLW's through its lands, but it would be difficult and very expensive. Costs would include but not be limited to, preparation of EA's, cultural resource studies, mineral evaluations, engineering plans, etc.

Acceptance of this value by BLM without clarification and further analysis of the access problem could result in BLM's paying more for this land than a prudent typical buyer would pay.

The value approved for this parcel are too high if there is a physical and legal access problem on this property.

Shirley Blomack

BUREAU OF LAND MANAGEMENT
ELY, NEVADA
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Comments

July/August 2002

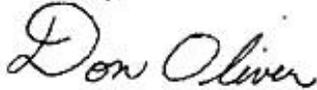
Bureau of Land Management
Ely Field Office
Gene A. Kolkman, Field Manager
HC 33, Box 33500
Ely, Nevada 89301-9408

To Whom It May Concern:

C7-1 [I would like to express my concerns over the Toquop Energy Project located approximately twelve
C7-2 [(12) miles northwest of Mesquite. I understand a cooling tower will be used, which will result in
a waste of our valuable water supply. The labor used will be out of state, therefore denying the
residents of Nevada, a chance for employment. Finally, after using and wasting our water supply,
denying our residents a chance of employment, the profits will be sent out of state.

C7-3 [My recommendation for a solution, would be to use an air cooled condenser and the labor issue
could be resolved by negotiating a one time Project Labor Agreement with Southern Nevada
Building and Construction Trades Council. I feel a Project Labor Agreement would benefit the
State of Nevada and the residents of Nevada in all aspects.

Sincerely,



Letter - C7. Signatory - Don Oliver.

Response to Comment C7-1

The *Proposed Toquop Land Disposal Amendment to the Caliente MFP and FEIS for the Toquop Energy Project* presents a detailed analysis of an air-cooled alternative (Alternative 3).

Response to Comment C7-2

Comment noted.

Response to Comment C7-3

The *Proposed Toquop Land Disposal Amendment to the Caliente MFP and FEIS for the Toquop Energy Project* presents a detailed analysis of an air-cooled alternative (Alternative 3).

NOTE:

The BLM received 141 copies of this letter sent by different parties. A list of the parties who sent this letter is provided in Chapter 5, *Consultation and Coordination*, of the FEIS.