

DRAFT EIR/EIS COMMENT FORM

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DEPARTMENT OF
 COMMUNITY DEVELOPMENT

How to use:

Please fill out the above and provide your written comments about the Draft EIR/EIS in the space provided below. You may add additional pages if needed. Please write legibly. If you prefer to type your comments on a separate page, please attach to this form. Where possible, please reference the page to which the comment refers. When you have completed your comments, please fold the form so the City's address is showing, tape the edges together, (Do not use staples), and place in the mail.

C O M M E N T S

(in regard to, and as they may apply to, the Geysers Recharge Alternative - 4)

Chapter/Section Ref.**			
Ch. 4.13 Noise	The Geysers Recharge Alternative (GRA) pump houses on the uplands of the pipeline should be depressed, whether left free-standing or embanked, to significantly reduce the pump noise to the point of elimination the noise impact or reducing it to a level below significance.		001
Ch. 4.14 Visual & view corridors	By depressing the GRA pump houses, their visibility would be reduced or totally eliminated, thereby eliminating or significantly mitigating the visual as well as view-corridor impacts to become below significance.		002
Ch. 4.12 Air Quality & 4.7 Public Health	Atmospheric emissions by the power plants at the Geysers steamfield are currently taking place; therefore, GRA injections would not create additional emissions. The report is not correct when it states that the GRA would create odors and emissions. In fact, it can be anticipated that the use of clean, vs contaminated, injection water would create cleaner steam, thereby creating cleaner emissions and reducing the adverse air quality impact from what presently exists. And further, when the existing aging cooling towers become replaced by the more efficient heat exchanger (as proposed by the Geyser Alternative-Energy Development Corporation), all odors and emissions would then cease to exist.		003
Ch. 4.11 Ag Land Use	Indirect Impact Mitigations and Beneficial Impacts: 1. The GRA does not require reservoirs, and any land traversing (departures from existing road right-of-ways) pipelines would be below ground; therefore, the loss of of agricultural/farm land under the GRA would be nil-to-none; hence, with an impact level less than significant.		004
& Ch. 4.14 Visual	2. The absence of the need of reservoirs and the minimal amount of pipelines under the GRA constitutes a significant gain in environmental impact when compared to the irrigation Alternatives.		005

** per designations in Table 1-3 (page 1-28) of 7/96 EIR/EIS Summary.

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- Ch. 4.3 Seismicity No evidence has been presented to show that sustained injection at the steam-field would augment seismic activity. Injection is not experimental. Furthermore, heat transfer sciences have demonstrated over many years that sustained fluid emersions actually calm and/or subside expansion and contraction shock during hyper thermal transfers. Sustained injection is occurring right now at the Geysers without any evidence of such reaction. 006
- Ch. 4.3 Geology & Soils Significantly injurious soil and terrain disturbances by pipeline construction along existing road right-of-ways where undesirable slopes, shoulders, grades, and alignments exist can be avoided or significantly mitigated by voluntarily departing from said right-of-ways and traversing more favorable adjacent terrain away from such sites, where ever land owners would be agreeable to grant easements and/or sell or lease rights-of-ways, thus eliminating or mitigating those adverse impacts. 007
- Ch. 4.7 PublicHealth The California Division of Oil & Gas is mandated to protect the ground water at the Geysers from contamination. It has stated that the injection of "treated wastewater" would be in keeping, not causing contamination. 008
- Ch. 4.3 Geology & Ch.4.7 PublicHealth Averting a pipeline rupture is a matter of known engineering design of the pipeline configuration and of containments, and should not pose any deterrent to the adoption of the GRA. (E.g., the very long Alaska pipeline and the area's high seismic activity constitutes an example of practical feasibility through proper design.) 009
- Ch. 4.17 Energy Electric power generation by steam derived from water injection is not experimental. 010
- Ch. 4.17 Energy The estimated cost of operation and maintenance (O&M) of the GRA cannot be equated/compared with those of the other Alternatives, as presented in the Table 1-2 and Ch. 3.6 "(Project) Cost Estimates", without applying the anticipated value of the electric power production associated with this operation, as an offset to the O&M cost. The power production would far-exceed the O&M cost. (This has not been conducted or even eluded to anywhere in the Draft EIR.) 011
- Ch. 4.5 Drinking Water The generation of potable water from the reclaimed water as part of water conservation measures (as provided for by GA-ED and its patents) has not been made a beneficial impact component of the GRA in the Report. 012
- Ch. 4.18 Socio-Economics The EIR Report states that the GRA provides very little economic benefit to the region. This conclusion ignores the potential reduction in service charges, and demand fees to the local rate payers, the preservation of the otherwise declining jobs associated with the Geysers, plus the enormous economic benefit to an unlimited growth and development capacity/potential within this area following the creation of an unlimited sewer effluent disposal capacity derived from the GRA. 013
- Same The GRA has capital funding potential (as an energy producing, profit generating operation) from State, Federal, City governments and industry, not similarly available to any of the other Alternatives. 014
- Same The GRA is being classified in the Report as having a 20 year life, with the capital costs associated with its implementation being amortized over a 20 year period of time. This is not realistic. The earth's magma is not cooling nor withdrawing from accessibility at the steamfield; therefore, the operation of this Alternative could continue indefinitely. 015

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Indirect Impact Mitigations and Beneficial Impacts:		016
Ch. 4.18 Socio-Econ. & Ch. 4.12 AirQual	1. The GRA does not simply provide for a disposal of the reclaimed water, it has an economic objective to re-generate the steamfield and to generate net electrical power, which constitutes a <u>gainful impact.</u>	
Ch. 4.18 Socio-Econ.	2. Unlike any other Alternative, the augmented power generation there at the Geysers eliminates the adverse impact associated with fossil fueled power generation elsewhere, thereby indirectly mitigating an existing adverse impact on the <u>environment.</u>	017
Ch. 4.18 Socio-Econ. & 18.1 (Tables 1-9 & -10)	The Report states that "no feasible mitigation has been identified" to avoid an anticipated significant increase in service charges and demand fees to the rate payers in regard to the GRA. Being that the GRA will generate electric power valued far in excess of its operating and maintenance (O&M) cost, a royalty (by what ever other term) could be imposed upon the steamfield users/operators to off-set the O&M cost, as well as the initial capital cost of construction, thereby sheltering the City's rate payors from any increase in service charges, and/or demand fees, and rendering the GRA the least expensive Alternative available.	018
The GRA has no accumulative adverse impacts on the economy		019
Ch. 4.18 Socio-Economic	Lake County is also confronted with a wastewater disposal problem and has elected to transport its much less treated wastewater to the Geysers steamfield for injection. This proposal cleared EIR processing and the project is now under construction; therefore, the environmental impact study of Santa Rosa's cleaner wastewater ("reclaimed water") can surely be expected to be less of an impact than that of Lake County; hence, environmentally superior.	020
Same	With the implementation of a return of the injected water from the steamfield as purified or distilled potable/drinking water, as proposed by GA-ED, the capacity of the steamfield to handle the City's reclaimed water (wastewater) becomes unlimited. The GRA would not only satisfy in full the need to dispose of all the effluent, its capacity to do so would be virtually unlimited and the same would be conserved to meet a major portion of the drinking water needs of the Santa Rosa population with no additional adverse environmental impact.	021
Conclusion	No other Alternative has the capacity to perform all of the following: 1. Dispose of an unlimited quantity of treatment plant discharge, of whatever purity. 2. Generate electric power and in a quantity many times in excess of the power consumed. 3. Provide growth inducement through-out the total region, for housing as well as for job creating industry. 4. Perform in full during all seasons. 5. Perform without break-down and/or interruptions during storms. 6. Perform for an unlimited duration. 7. Generate an equal amount of drinking water which, in aggregate, constitutes a gainful impact that no other Alternative can approach. In sharp contrast to the hours of oral rebuttals, comments, and commentaries presented to date in regard to each of the other Alternatives, which have been mainly critical in nature and have directed fault to those Alternatives, this Commentary on the GRA is positive in nature, is supportive, and with the sole intent to demonstrate that the GRA is far more feasible, more practical, less costly to construct, has less net cost potential to operate and maintain; is less invasive of property and property owner's rights, and is with no significant environmental impact, while having multiple, significant <u>beneficial impacts.</u>	022

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