

**COMMENT LETTER 26 - SCOR, PAULA BLAYDES (SEPTEMBER 24, 1996),
RECEIVED SEPTEMBER 24, 1996**

Response to Comment 26-1

Comment Summary: The comment suggests that the preferred alternative was selected on the basis of costs. The comment also states that the Draft EIR/EIS overemphasizes economics.

The City of Santa Rosa has not selected a preferred alternative, and will not do so until after the EIR is certified. The comment is most likely directed toward the Environmentally Superior Alternative, which is identified in the Draft EIR/EIS as required by CEQA.

The selection of the Environmentally Superior Alternative was not based on cost. Alternative 5B is identified as environmentally superior because it requires no construction, and because water quality impacts of the increased discharge to the Laguna will occur infrequently (less than 5% of the time) and will decrease further under the cumulative scenario as the Regional Water Quality Control Board implements their Waste Reduction Strategy. All of the other alternatives require extensive construction of Project facilities, including pipelines, pump stations, and tanks or reservoirs. It is not possible to build such extensive facilities without causing significant environmental impacts. Alternative 5B, which can be implemented with existing facilities, has fewer environmental impacts than any other alternative. Section 5.5 of the Draft EIR/EIS explains the selection of the Environmentally Superior Alternative.

Only one of the 18 primary sections of the Draft EIR/EIS deals with socio-economics, and at least half of this section discusses issues relative to population, environmental justice, and demography.

Response to Comment 26-2

Comment Summary: Regarding the November 1995 Cost Study performed for the Project, the comment suggests that the costs are misleading because they do not address costs for realistic Project designs, known as Value engineering.

Value engineering is not an opportunity to revise the basic concept of the selected Project. Value engineering, as formally practiced, is a procedure utilized during the design stage of a Project actually selected to be constructed. It is not appropriate at the Draft EIR/EIS stage, before the actual Project design engineers have considered in detail all significant Project features and have had an opportunity to employ their own "value engineering" judgments to the design details. Once, this stage is reached, an independent team can evaluate, through "value engineering" techniques, the preliminary design details in comparison with other specific detail alternatives to reach the final Project design.

The alternatives have been designed as realistic Projects. Lacking evidence to the contrary in this comment, the EIR/EIS authors re-affirm that each alternative Project has been designed in accordance with standard engineering practices to be a feasible and effective alternative.

Response to Comment 26-3

Comment Summary: Regarding the November 1995 Cost Study performed for the Project, the comment suggests the data used for the alternative Projects cost estimates are misleading because they include contingency and adders that are compounded to raise the estimated construction costs 55%, and they include 20 years of estimated operation and maintenance costs and 20 years of (6.5%) interest rates for financing.

All Project Alternatives are currently at a planning level and the final Project has not been selected. Until the selected Project is actually designed and bid for construction, the actual construction cost is uncertain. It is prudent to accommodate this uncertainty at this planning level by including a significant contingency factor in the cost estimate. This reduces the risk of under-estimating the final Project cost due to unforeseen Project design components and uncertainties in the construction industry climate at the time of actual construction. As the selected Project approaches completion of design, when the cost estimate is more refined and certain, the contingency cost factor will likely be reduced. Until that time, the cost estimate for all Projects includes a prudent 25% construction contingency.

In order to realistically compare the cost of alternative Projects, the cost estimate for all Projects also includes an estimate of the contractor's expenses and profit; the engineering, administrative, and legal costs typical associated with a major project; and the property purchase cost. These are not "adders", but necessary component costs of a real project, yielding its capital cost.

It is industry standard practice to compare the costs of projects based on their "present worth" value, not just their construction cost. This is because a project can have a low capital cost but a high annual operating cost, or vice versa. If the annual operating cost is large enough, it can result in that project actually costing more over the course of several years. It is industry standard practice to include, therefore, the annual operating cost over a 20-year period accrued at the current interest rate for borrowed money (the rate necessary to obtain, now, the equivalent value of money which would actually be spent annually over the 20 years). When this value is added to the Project capital cost, the present worth value or cost is obtained. This allows Project Alternatives to be compared on an equal basis. Present worth is just one of the ways that Project costs were presented in the Draft EIR/EIS to facilitate comparisons. Capital costs are a part of present worth values, and are available separately (refer to Table 3.4-1 on page 3.4-2).

Response to Comment 26-4

Comment Summary: Regarding the November 1995 Cost Study performed for the Project, the comment questions the accuracy of the data, citing the Geysers pipeline route as an example and indicating that the Consultant's engineer preparing the piping cost estimates felt the costs were at least 10% high. The comment also indicates that any inaccuracies are magnified by the 55% adder and that the result is unrealistic pricing.

The cost estimates for all alternatives, including the Geysers Alternative, are based (necessarily) on several assumptions, which are documented. The estimates are considered to be sufficiently accurate at this early stage of Project development, to allow a fair comparison of the Projects. The estimates will, most likely, prove to be somewhat high or low depending on the eventual final design details and construction requirements. The specific cost element that the comment stated may be 10% high, was installation of the large pressurized pipe in Pine Flat Road. This construction is unusual (the highest lift, 3200 feet, of any pressurized pipeline we have knowledge of) and warrants a higher estimate than normal. The statement that "adders" magnify inaccuracies is true; however, that is insufficient reason to delete the adders, because they represent a specific portion of the final cost. Such inaccuracies are a necessary part of planning-level cost estimates.

Response to Comment 26-5

Comment Summary: The comment states that comments by the Geysers operators on preliminary cost estimates were not incorporated in the cost estimates presented in the Draft EIR/EIS. The comment also states that the consultants will receive another \$300,000 to come up with more accurate cost figures for the Geysers.

The cost of the Geysers pipeline was estimated by engineers experienced in pipeline design. The comments from Unocal were not incorporated because they required changes in the design of the alternative which were too speculative or were too small to warrant changes in the planning-level cost estimates.

The second sentence of the comment refers to a federal grant from the U.S. Department of Energy to the City of Santa Rosa. The City has chosen to use this grant to generate information for the Project selection process, which will occur after the EIR has been certified. The grant will fund a Cost Reduction Analysis for the Geysers Recharge Alternative. As part of this grant, the City issued a \$326,600 contract to the consultants for the Draft EIR/EIS to conduct a feasibility study of cost reduction opportunities for the Geysers Recharge Alternative. The information developed through this grant will allow the City to investigate several key factors in the Geysers Recharge Alternative: 1) what is the optimum pipe size? 2) can a feasible cross-country pipeline alignment be found? 3) what is a reasonable cost for power, given the status of deregulation? and 4) how would these factors change the socio-economic effects?

If the City selects a Geysers Project, and if the Geysers Project is different from that described in the Draft EIR/EIS due to analyses funded by this federal grant or any other

reason, further environmental documentation may be required. Determination of the type and extent of environmental review which might be required, and whether or not circulation of an additional document would be appropriate, can only occur after the City has made its decision regarding the selection of a Long-Term Project.

Response to Comment 26-6

Comment Summary: The comment states that the Draft EIR/EIS only considered a proposed Geysers pipeline route along Pine Flat Road, which would require \$8 million dollars to repave the road. The comment also suggests that other possible alignments would avoid this repave cost and would shorten the pipeline.

The comment is correct that other alignments could avoid the cost of road repavement and could shorten the pipeline route, assuming that such alignments were cross country. However, all such cross country routes would need to cross private property including conservation easements, and would require extensive legal research and negotiation. Therefore, the only feasible route to the Geysers that has been identified is along Pine Flat Road.

Response to Comment 26-7

Comment Summary: The comment urges consideration of more realistic Project cost estimates of alternatives.

For the reasons described above in Responses to Comments 26-2 through 26-6, the EIR/EIS authors re-affirm that the cost estimates are reasonable and appropriate for the Draft EIR/EIS.

Response to Comment 26-8

Comment Summary: The comment suggests consideration of Project phasing, public/private partnerships at the Geysers, and smaller irrigation projects.

Refer to Master Response 14, located in Section 6.2 of this document for a discussion of Project phasing and smaller irrigation projects. The Draft EIR/EIS neither precludes nor assumes public/private partnerships at the Geysers. It is too speculative to assume that such partnerships could be negotiated and under what financial arrangements they would be made, to include such information in the EIR/EIS.