COMMENT LETTER 112 - BENJAMIN R. MARCHAND (NO DATE), RECEIVED OCTOBER 7, 1996

Response to Comment 112-1

Comment Summary: The comment pertains to the opportunity afforded to speak at the public hearing on September 24, 1996, and to express concerns.

Comments made by Mr. Marchand at the public hearing are addressed in Responses to Comments 260-243 through 260-348.

Response to Comment 112-2

Comment Summary: The comment makes a claim for a CD-ROM to be sent, free of charge, because Alternative 4 would impact the commentors' property.

The Draft EIR/EIS volumes and copies of the CD-ROM were (and continue to be) available for review by all interested members of the public at various public sources, listed on page 1-10 of the Introduction and Summary of the Draft EIR/EIS which is available free from the City of Santa Rosa. Refer to Master Response 3, located in Section 6.2 of this document, concerning cost and availability of the document.

Response to Comment 112-3

Comment Summary: The comment notes that the Project time-frame is through the year 2010 and expresses the opinion that the time-frame should be longer.

On pages 1-2 and 1-3 of the Draft EIR/EIS, the need for the Project is explained. The North Coast Regional Water Quality Control Board requires that, by 1999, the Santa Rosa Subregional Wastewater Reclamation System must put in place a reclaimed water disposal solution that meets the Board's reliability requirements and existing and future capacity needs. The volume of water the Project must accommodate is based, in part, on the buildout of the General Plans of the Subregional members through approximately the year 2010, which explains the time-frame. The Project will have a useful life far beyond the year 2010, but any future expansion of the Subregional System member entities will have to be addressed at such a time that the action takes place. Because the treatment and disposal technologies advance quickly, it is considered unwise to design and permit a system for needs beyond buildout of the General Plans of the member entities in effect as of April 1994.

Response to Comment 112-4

Comment Summary: The comment expresses the opinion that a quick fix was chosen to deal with the issue of future reclaimed water disposal rather than a long-term solution because of pressure from the federal government.

Because the Regional Water Quality Control Board is designated as the responsible party for enforcement of the federal Clean Water Act by the EPA, the regulatory requirement for this Project comes from both federal and state agencies. These agency requirements have not, however, led to "half- baked schemes". Rather, the agencies involved have required long-term plans and worked extensively with the City of Santa Rosa to produce long-term solutions. Refer to Response to Comment 112-3.

Response to Comment 112-5

Comment Summary: The comment states that the Draft EIR/EIS is so disjointed that if one were to read the report without plugging in the words "some place (or my place)" you could easily say this project is not so bad after all.

Please refer to Master Response 1, Document Organization.

Response to Comment 112-6

Comment Summary: The comment expresses concern about the potential for fault rupture of the Geysers pipeline to result in adverse impacts to groundwater and drinking water wells.

As indicated on page 4.3-64 of the Draft EIR/EIS, the potential for fault rupture is considered a significant, unavoidable impact of Alternative 4. The consequences of earthquake-induced rupture of a large pipeline are described in the second full paragraph on page 4.3-64. Regarding the most likely location for pipe rupture in the event of a large earthquake, refer to Response to Comment 112-9. Most of the water released in the event of pipe rupture will flow overland, following topography to a discharge point at the nearest surface water body, Little Sulphur Creek. It is possible that some reclaimed water could find its way into the groundwater. However, impacts to groundwater will be temporary, minor, and will not impair potability of drinking water from wells.

Response to Comment 112-7

Comment Summary: The comment is an introductory statement leading into the subsequent comments in letter 112.

Specific concerns were expressed in subsequent comments and these comments are addressed specifically in the Responses to Comments below.

Response to Comment 112-8

Comment Summary: The comment states that the description of pipelines as being buried and generally following public rights-of-way is incorrect, and that a pipeline will come above ground at a pump station on his property.

The Draft EIR/EIS is correct in stating on page 1-24 that pipelines will be buried and generally follow public rights-of-way. Even at pump stations, the transmission pipelines will be underground, and over 90% of the pipeline route length is along public rights-of-way. The commentor is correct in stating that an above ground pump station is proposed to be located on his property. This pump station is described on page 1-25 and page 3.3-35 of the Draft EIR/EIS.

Response to Comment 112-9

Comment Summary: The comment asks what is the likely location for a break in a pipeline in the event of an earthquake.

As indicated in the Draft EIR/EIS in impact 3.4.2 (page 4.3-63) the most likely location for a major, catastrophic fault rupture will be where the pipeline crosses a known active fault. The locations where the proposed Geysers pipeline cross active faults is shown in Figure 4.3-13 on page 4.3-33 with the symbol "FLT". Pipelines may also break during earthquakes because of secondary slope failure or liquefaction, however, breaks in these areas will be less likely and generally of smaller magnitude than a rupture resulting from displacement along a fault. The locations where these hazards are present are also shown on Figure 4.3-13. Pipeline design features, such as sharp bends may also influence the location and/or mode of failure but geologic conditions will be the main factor in pipeline failure. Fault rupture of the Geysers pipeline and potential pipeline damage from unstable slopes are identified in the Draft EIR/EIS as significant impacts of the Project. The property discussed in the comment is within an area that may be significantly affected by fault rupture in the event of an earthquake. Potential impacts to groundwater as a result of pipeline rupture are addressed in Response to Comment 112-6.

Response to Comment 112-10

Comment Summary: The comment states that the Draft EIR/EIS does not address impacts of geysers pump stations and pipelines on prime agricultural land.

Section 1.6 of the Draft EIR/EIS is intended to summarize the description of the Project components, and is not intended to address impacts of those components. Impact 2.4.1 on pages 4.2-9 and 4.2-10 of the Draft EIR/EIS evaluates the impact of the Geysers pipeline on prime agricultural lands and finds no impact because the pipeline is restricted to public rights-of-way. Impact 2.6.1 on pages 4.2-17 through 4.2-20 finds a significant unavoidable impact of the Geysers pump stations on prime agricultural land because Pump Station G-2 at the bottom of Pine Flat Road will result in a loss of about 1 acre of prime farmland.

Response to Comment 112-11

Comment Summary: The comment states that the Draft EIR/EIS does not address impacts of geysers pump stations on noise.

Noise impacts of geysers pump stations are addressed in Impacts 13.6.1, 13.6.2, and 13.6.3 on pages 4.13-36 through 4.13-41 of the Draft EIR/EIS. Significant unavoidable noise impacts are identified regarding both construction and operation of these pump stations, despite mitigation (refer to Mitigation Measures 2.3.17 and 2.4.9 discussed on pages 2-93 and 2-109 respectively.

Response to Comment 112-12

Comment Summary: The comment states that the Draft EIR/EIS does not mention visual pollution.

Section 1.9 of the Introduction and Summary Chapter (page 1-39) clearly indicates that pump stations will also have significant visual impacts which will affect public viewpoints and private residences. This page also refers the reader to Section 4.14 of the Draft EIR/EIS, which specifically addresses the visual impact of pump stations. Section 4.14 (Impacts 14.6.1 through 14.6.6 discussed on pages 4.14-83 through 4.14-95) indicates that Pump Station G-2 under Alternative 4 (the Geysers alternative), which is proposed to be located on the commentors' property, has several significant visual impacts, which cannot be mitigated. This conclusion is also reflected in Table 1-13 on page 1-44 which lists visual impacts for pump stations under Alternative 4 as significant and unmitigable.

Response to Comment 112-13

Comment Summary: The comment states that the Draft EIR/EIS does not mention the loss of a 200-year old oak tree.

Pump stations will be placed to avoid sensitive biological resources such as 200-year old oak trees, as described in Measure 2.2.5: Avoid Sensitive Biological Resources (Pages 2-28 through 2-33 of the Draft EIR/EIS).

Response to Comment 112-14

Comment Summary: The comment states that the Draft EIR/EIS does not address impacts of geysers pump stations on serenity.

Regarding noise impacts of Geysers pump stations refer to Response to Comment 112-11. The EIR/EIS is not required to address intangible assets such as serenity.

Response to Comment 112-15

Comment Summary: The comment refers to Comments 112-11, 112-12, 112-13, and 112-14 as concerns that were not examined in the analyses for the Geysers Recharge Alternative, but will be brought up later in the Draft EIR/EIS where there will be no impacts.

Refer to the responses to Comments 112-11, 112-12, 112-13, and 112-14.

Response to Comment 112-16, 112-17, 112-18

Comment Summary: The comment characterizes as incorrect, a reference in Section 1.9 of the Introduction and Summary Chapter of the Draft EIR/EIS that a pump station for the Geysers alternative impacts property for which the Sonoma County Agricultural Preservation and Open Space District holds a conservation easement and that this impact can be mitigated to a level below significance. The comment further states that the reference is incorrect, because the pump station is located on his property for which there are no easements, and that a pump station on his property cannot be mitigated to a level below significance.

The reference in Section 1.9 (page 1-31) of the Introduction and Summary Chapter of the Draft EIR/EIS is to another proposed pump station for the Geysers Alternative, Pump Station G-3, which is located several miles to the east on Pine Flat Road, and not to the pump station proposed for the commentors' property. Section 4.1, to which the reader of Section 1.9 is referred, describes the location and impacts associated with Pump Station G-3 (page 4.1-36 and Figure 4.1-6 on page 4.1-37). Also, refer to Response to Comment 112-12 concerning the visual impacts on the commentors' property and to Response to Comment 112-10 regarding impacts on prime agricultural land.

Response to Comment 112-19

Comment Summary: The comment quotes the Draft EIR/EIS conclusion that the loss of prime farmland and cancellation of Williamson Act contracts for pump stations would be a significant impacts.

The comment quotes the Draft EIR/EIS correctly.

Response to Comment 112-20

Comment Summary: The comment indicates that the Draft EIR/EIS identifies impacts from pump stations that can be mitigated to a level that is less than significant on one page, but then states that there is no mitigation that can reduce pump station impacts to below a level that is less than significant on the next page.

The comment does not indicate where such descriptions occur in the Draft EIR/EIS. However, given the context of other comments in the comment letter, it appears that the comment is associated with text on pages 1-31 and 1-32. Pump stations, and specifically

Pump Station G-2, are analyzed in Sections 4.1 through 4.17 of the Draft EIR/EIS, and in each of these sections, are evaluated relative to one or more criteria. The comment is inaccurate in its premise that the text is inconsistent. The text on page 1-31 states "Alternative 4, Geysers Recharge, will require conversion of public open space for a pump station located along Pine Flat Road on property for which the Sonoma County Agricultural Preservation and Open Space District holds conservation easements. This impact can be mitigated to a level below significance." This summary discussion in the Draft EIR/EIS is associated with land use impacts. Specifically, as identified on page 4.1-36 of the Draft EIR/EIS, this impact is associated with the loss of open space and conflict with an established conservation easement. Mitigation (i.e., Mitigation Measure 2.3.1: Replacement of Open Space Easements) is provided to reduce this impact to a level that is less than significant. The next page of the summary discussion states "Construction of pump stations will result in loss of prime farmland under Alternatives 2, 3, and 4. There is no mitigation available to reduce impacts from loss of prime farmland or cancellation of Williamson Act contracts to less than significant." This summary discussion in the Draft EIR/EIS is associated with impacts to agriculture. Specifically, as identified on pages 4.2-16 through 4.2-20 of the Draft EIR/EIS, this impact is associated with the loss of farmland for the siting of a pump station. This impact cannot be mitigated because replacement agricultural land of the same Farmland Mapping Program category status will already be in use. The two statements on pages 1-31 and 1-32 of the Draft EIR/EIS therefore are associated with different impacts and are not contradictory.

Response to Comment 112-21

Comment Summary: The comment expresses concern about potential impacts of pipeline and pump station failure during an earthquake.

The comment is correct to suggest that large pipelines that carry a large volume of water and that are located in seismically active areas must be well designed. The pipeline will be vulnerable to damage should water flow be suddenly stopped. For this reason, large diameter pipelines are built to be very strong. Special design engineering, such as anchoring, is employed where pipelines bend and flow directions change. In addition, shut off valves will be installed on either side of faults and on either side of each pump station, and about every 10,000 feet along the steep portion of the Geysers pipeline.

Response to Comment 112-22

Comment Summary: The comment inquires if soil analysis was conducted at Pump Station G-2 as part of this project and the date of the most recent soils information. The comment also inquires about liquefaction.

No new soil sampling was conducted at this site as part of this Draft EIR/EIS. The site is relatively level and soil conditions could be mitigated using standard engineering measures. The Draft EIR/EIS analysis relied in information contained in the Sonoma County Soil Survey, for which field data was collected between 1956 and 1964. Soil naming and descriptions were approved in 1968 (USDA 1972). Undoubtedly soil

sampling for the soil survey did not occur on the wettest day of the year. The soil survey did not evaluate the liquefaction potential of the soil. Preliminary geotechnical evaluation of the area conducted as part of this Draft EIR/EIS (refer to Impact 3.6.3 on page 4.3-76) does not indicate that liquefaction hazards are present. However, a site specific geotechnical investigation, including soil sampling and analysis will be required prior to pump station foundation and building design and construction.

Response to Comment 112-23

Comment Summary: The comment states that potential impacts of pump station failure during an earthquake render the pump stations "extremely hazardous".

Potential impacts from pump stations are addressed starting on page 4.3-75 of the Draft EIR/EIS and are discussed further in Response to Comment 112-21. Hazards of the Project are evaluated under Impacts 7.6.1 through 7.6.6 on pages 4.7-51 through 4.7-53. The analysis concludes that pump stations will not be hazardous.

Response to Comment 112-24

Comment Summary: The comment expresses concern about the potential for fault rupture of the Geysers pipeline to result in adverse impacts to groundwater.

Potential groundwater impacts associated with rupture of the Geysers pipeline are addressed in Response to Comment 112-6. The Draft EIR/EIS contains an analysis of discharge of reclaimed water in the Russian River above the drinking water intakes in Alternative 5A.

Response to Comment 112-25

Comment Summary: The comment recommends discharge of reclaimed water above the Santa Rosa drinking water intakes.

This proposal is Alternative 5A, which is evaluated in the Draft EIR/EIS. Mitigation for nitrate impacts is proposed. Also refer to Response to Comment 8-3 for a discussion of the advantages and disadvantages of nitrate removal.

Response to Comment 112-26

Comment Summary: The commented asks whether nitrogen oxide impacts associated with pipeline construction would affect his residence.

The generation of nitrogen oxide emissions during construction will not have a direct local impact on nearby residences. The reason that there is a finding of significance and required mitigation measures for nitrogen oxide is because nitrogen oxide is one of the ingredients that makes up regional ozone and smog.

Response to Comment 112-27

Comment Summary: The comment states that noise impacts from pump stations cannot be mitigated to a level less than significant.

The conclusions of the Draft EIR/EIS are in agreement with the comment. Pump station impacts will be significant, and while mitigation can reduce noise levels, the mitigation could not reduce noise impacts to a less than significant level because the existing environment is relatively quiet.

Response to Comment 112-28

Comment Summary: The comment quotes selectively from the summary of project impacts on Visual Resources contained in Section 1.9 of the Introduction and Summary Chapter of the Draft EIR/EIS, and restates opposition to the location of a proposed pump station.

In quoting from Section 1.9 of the Draft EIR/EIS (page 1-39) the comment has deleted a paragraph between the two paragraphs which he quotes. That paragraph makes it clear that the last paragraph quoted by the comment refers to mitigation for reservoir sites, and not for pump station sites. Response to Comment 112-12 addresses the impacts of the Project on visual resources in relation to the commentors' property. Refer to Responses to Comments 112-10 through 112-14 regarding loss of agricultural land, noise impacts, visual impacts, effects on oak trees and loss of serenity.

Response to Comment 112-29

Comment Summary: The comment questions whether the geysers project could generate more energy than it uses and requests that all costs of the geysers project be presented.

As shown on page 4.17-12 of the Draft EIR/EIS, the Geysers Alternative is estimated to generate 368,000,000 kilowatt hours (kwh) of electricity per year, as compared to an annual energy consumption for pumping of 103,100,000 kwh. This results in a net gain of 265,000,000 kwh per year. The comment is correct that the net energy gain does not reflect all the costs. The complete estimate of construction and operations and maintenance costs of the Alternative is presented in Appendix D-30 (Alternative Projects Construction Cost Estimate). The costs are also presented in Table 4.18-10 on page 4.18-24, and summarized in Table 1-2 on page 1-26 of the Draft EIR/EIS.

Response to Comment 112-30

Comment Summary: The comment cites two sentences from page 1-59 of the Draft EIR/EIS about the reclamation alternatives and the Geysers.

The comment correctly quotes the Draft EIR/EIS.

Response to Comment 112-31

Comment Summary: The comment expresses concern about the potential for fault rupture of the Geysers pipeline.

Potential impacts of pipeline rupture are addressed in Response to Comment 112-6.

Response to Comment 112-32

Comment Summary: The comment expresses concern about the potential for fault rupture of the Geysers pipeline to result in adverse impacts to groundwater.

Potential groundwater impacts of pipeline rupture are addressed in Response to Comment 112-6.

Response to Comment 112-33

Comment Summary: The comment asks about farmland impacts.

Refer to Response to Comment 112-10. A pipeline rupture will not adversely affect farmland.

Response to Comment 112-34

Comment Summary: The comment is concerned about the potential for a proposed pipeline to rupture and destroy the adjacent 200-year old oak tree.

The probability that a pipeline will rupture directly adjacent to the identified 200-year old oak tree is extremely low. Any flooding associated with a potential pipeline rupture will be short-term and localized; it is unlikely that the tree will be destroyed. In addition, construction around or involving protected trees (including any 200-year old oak trees) will follow standards adopted within Sonoma County's Tree Protection and Replacement Ordinance. These standards are identified on pages 2-32 and 2-33 of the Draft EIR/EIS and will be implemented as part of the Mitigation and Monitoring Program that has been adopted and incorporated into the Project by the City of Santa Rosa.

Response to Comment 112-35

Comment Summary: The comment suggests that the pump station site is unacceptable.

The pump station has a significant noise and visual impacts that cannot be mitigated to a level below significant.

Response to Comment 112-36

Comment Summary: The comment expresses the opinion that the rights of individuals living outside Santa Rosa are being disregarded by the City of Santa Rosa.

The City of Santa Rosa prefers acquiring property for project facilities from willing landowners, but does have the power of condemnation. Refer to page 3.3-25 for a discussion of the possibility that condemnation may be needed for acquisition of pump stations sites. Also refer to Measure 2.2.27: Uniform Relocation Assistance on page 2-60, regarding compensation for property owners.

Response to Comment 112-37

Comment Summary: The comment states that the EIR fails to accurately identify "significant problems". By failing to include the problems (for each alternative) one after the other, it gives the false sense that they can individually be overcome. If the problems were listed one after another, the long term, deeply destructive, wholly unsuitable option (Geysers Alternative) would be apparent.

Table 1-13 on page 1-44 identifies the significant impacts associated with each alternative, providing the type of summation requested in the comment. Refer also to Master Response 1, Document Organization, located in Section 6.2 of this document.

Response to Comment 112-38

Comment Summary: The comment states that Alternative 4, the Geysers Recharge Alternative, should not be chosen because it is wasteful, destructive, and unsafe.

The comment expresses an opinion about Project selection. Refer to Master Response 2, located in section 6.2 of this document.

Response to Comment 112-39

Comment Summary: The comment consists of a claim against the City of Santa Rosa, listing several conditions if Alternative 4, the Geysers Recharge Alternative, is chosen and impacts occur to the commentator's property.

Property acquisition will be governed by the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970. Refer to Measure 2.2.27 on page 2-60 of the Draft EIR/EIS. Affected eligible property owners will be afforded various services and forms of compensation in accordance with the provisions of the Act. Other mitigation measures for noise and visual impacts are also discussed in Chapter 2 of the Draft EIR/EIS.

Response to Comment 112-40

Comment Summary: The comment states an opposition to Alternative 4, the Geysers Recharge Alternative.

The comment is an opinion regarding Project selection. Refer to Master Response 2, located in section 6.2 of this document.