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Planning Division
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Dear Humboldt County Planning Commission,

I am writing to present testimony regarding the Humboldt County General Plan Update, and more specifically regarding the Preliminary Hearing Draft of Chapter 17, the Energy Element. I am a Senior Research Engineer at the Schatz Energy Research Center at Humboldt State University and was part of the local consulting team that helped draft a preliminary version of the Energy Element under the direction of the Redwood Coast Energy Authority (RCEA). In that capacity I was the principal author of the Humboldt County Energy Element Technical Background Report.

I begin my testimony with general, big picture comments, and then move to more detailed comments regarding specific sections of text in the Draft Energy Element.

General “Big Picture” Comments:

The Draft Energy Element presents a set of five goals that are aimed at increasing local control of our energy resources and use, increasing energy efficiency and conservation and the use of local renewable energy resources, and moving the county toward a more self-sufficient and sustainable energy future. These are laudable goals, and they are consistent with the 1984 Framework Plan. The difference between the four Energy Element plan alternatives is how ambitious they are at attaining the stated goals.

I recommend adopting Alternative A along with the Comprehensive Action Plan for Energy (CAPE). Alternative A and the CAPE include all of the goals, policies, implementation measures, and standards that were recommended by the RCEA and their consultants. This alternative is the most ambitious in seeking to encourage the development of energy efficiency and renewable energy resources, which is what is needed to secure a sustainable energy future for Humboldt County.

The energy industry is changing rapidly. Much greater emphasis is being placed on the development of energy efficiency and renewable energy resources. These changes are occurring statewide, nationwide, and worldwide. Humboldt County must adapt to this changing energy landscape or get left behind. We can't assume that the State or our local utility company will take care of us; we need to look out for our own interests. This is especially true because we are geographically isolated and at the “end of the line” in the gas and electric transmission systems, and yet we possess a rich array of local renewable energy

resources. The development of an Energy Element affords us a great opportunity to begin to shape our energy future. The time to act is now; we must seize the moment!

County staff recommends Alternative B. Staff's reason for choosing Alternative B is that they feel they can accomplish it with existing resources. I understand staff's desire to work within their means; however, I submit that we cannot and will not succeed in securing a sustainable energy future without enacting the ambitious policies and implementing the ambitious measures outlined in Alternative A. We must identify, secure, and commit the resources to accomplish this. The policies and measures outlined in Alternative A are an investment in our energy future that will pay dividends over time. If we do not make this investment now, we will pay far greater net costs in the future due to higher energy costs, lesser energy security, greater environmental degradation, and greater loss of energy dollars from our community.

Many of the policies and implementation measures that were recommended by the RCEA and their consultants have been redirected to a Comprehensive Action Plan for Energy (CAPE). In most cases, this is a reasonable approach. The RCEA is charged with administering the CAPE, which is also a reasonable approach as long as the RCEA receives the funding and resources it needs to carry out the plan. The County must develop a strategy for funding the RCEA to implement the CAPE. Potential funding ideas include the development of an energy or utility tax (a 1/2% tax could likely generate \$1 to \$2 million per year) or the issuance of revenue bonds.

Many of the policies and implementation measures that were recommended by the RCEA and their consultants have been referred to other elements in the General Plan. This is appropriate; however, these other elements have not yet been completed. It is very important that these energy related measures get implemented in the other referenced General Plan elements. In addition, these measures should be cross-referenced back to the energy element so that their origin is clear and it is easy to confirm their inclusion in the other General Plan elements.

Finally, the Draft Energy Element includes policies and standards for the development of oil and gas resources (E-P56, E-S7, E-S8). Analogous standards must be developed for renewable energy resources such as wind, wave, hydro, solar, and biomass. The Draft Energy Element also discusses a preliminary CEQA analysis (p. 17-34); however, this analysis only covers the potential loss of oil and gas production sites. This CEQA analysis must also address the potential loss of renewable energy production sites, including wind, wave, hydro, solar, and biomass.

Text Specific Comments:

Note: In the comments below where I suggest specific language, added text is shown in *italics* and deleted text is shown with a ~~strikethrough~~.

p. 17-2 – The Background section discusses the extractive energy production occurring in Humboldt County, but neglects to discuss the use of non-extractive, renewable energy resources, including wind, solar, hydro and biomass. Immediately before the Strategic

Energy Planning section add a brief paragraph that discusses the current use of renewable energy resources.

p. 17-3 – The second and third paragraphs on this page are redundant and should be combined.

p. 17-4 – Policy E-P8 should read “Provide incentives for energy conserving projects (such as expedited permit processing for zoning and permit request) *and* to encourage the generation of local renewable energy that could be offered for sale at competitive prices.”

p. 17-6 – Development Standards. Only covers oil and gas. Analogous standards need to be prepared for the development of renewable resources (wind, wave, hydro, solar, and biomass).

p. 17-7 and 17-8 – Implementation Measures. For clarity, the goals associated with each set of implementation measures should be listed. The first three implementation measures fall under the Strategic Energy Planning goal, the next two implementation measures fall under the Energy Conservation and Efficiency goal, and the final four implementation measures fall under the Renewable Energy, Distributed Generation, and Cogeneration goal.

p. 17-9 through 17-15 – Alternatives. For clarity, the policies, standards, and implementation measures should be grouped under their respective goals and the goals should be listed as a header for each section.

p. 17-12 and 17-13 - There is effectively no difference between Alternatives C & D. This is evident in the Plan Alternatives Comparison Chart where these two plan alternatives always appear together. The intended difference between these two alternatives should be clarified or they should be combined into one alternative.

p. 17-16 through 17-34 – Plan Alternatives Comparison Chart. For clarity, the goal associated with each set of policy alternatives, standards alternatives, and implementation alternatives should be clearly listed in the chart. It is useful to be able to link each action item back to its parent goal.

p. 17-17 – Policy E-P8 should read “Provide incentives for energy conserving projects (such as expedited permit processing for zoning and permit request) *and* to encourage the generation of local renewable energy that could be offered for sale at competitive prices.”

p. 17-19 – Policy E-P22 should be addressed in the CAPE and in the Infrastructure and Public Facilities section of the General Plan.

p. 17-20 – Policy E-P28 should be generalized to allow green building standards other than LEED. Add “*or other comparable green building standards*” to the end of this policy statement.

p. 17-20 – Policy E-P29. Follow staff remarks and reword to specify development of standards.

p. 17-20 – Policy E-P30 should read “Energy Efficiency Education and Training. ~~Support the Regional Energy Authority in its effort to~~ Provide community education on energy issues, including the benefits of reduced energy consumption, and increased energy efficiency.”

p. 17-21 – Policy E-P41. This policy should be implemented in the CAPE and also pursued by the County through the development of a time-of-sale ordinance. Include this in Alternative A.

p. 17-21 – Policy E-P42. This policy should be implemented in the CAPE and also pursued by the County through the development of a time-of-sale ordinance. Include this in Alternative A.

p. 17-22 – Policy E-P44. Follow staff remarks and reword to specify development of standards.

p. 17-22 – Policy E-P48. Staff states that this is addressed by existing policies. Drop this policy.

p. 17-22 – Policy E-P50. This policy should read “Resource Development and General Plan Consistency. ~~RCEA to~~ *Seek to remove barriers and* encourage energy generators to develop renewable energy and environmentally preferable distributed energy generation systems in the county, while ensuring that such development is done in a manner consistent with overall General Plan goals and policies.” This should be implemented as part of Alternative Plan A, not as part of the CAPE.

p. 17-23 – Policy E-P54. This policy should read “Public Utility Management. Identify or adapt to the best energy delivery mechanism for local energy management *as recommended by RCEA.*” This should be implemented as part of Alternative Plan A, not as part of the CAPE.

p. 17-23 – Policy E-P55. Drop this policy; it is redundant with E-P46, E-P49, and E-P50.

p. 17-23 – Standard E-S1. This standard should read “Site design standards and incentives. In accordance with LEED standards, site design for County buildings shall ~~maximize~~ *optimize* energy efficiency by considering natural factors such as ~~maximum~~ solar access, water availability, slope, and air flow and prevailing wind directions (for cooling breezes or wind protection) to reduce energy demand.

p. 17-24 – Standards E-S7 and E-S8. These type of standards need to be developed for renewable energy resources (wind, wave, solar, hydro, and biomass).

p. 17-25 – Implementation Measure E-IM5. This measure involves the development of a County ordinance. This should be carried out by the County as part of Alternative A, not as part of the CAPE.

- p. 17-27 – Implementation Measure E-IM17. This measure should be addressed in the Circulation Element, not as part of the CAPE.
- p. 17-27 – Implementation Measure E-IM19 and E-IM20. These measures should allow green building standards other than LEED. They should specify “*LEED or other comparable green building standards.*”
- p. 17-27 – Implementation Measure E-IM21. The County should make sure that their Solar Access Ordinance is consistent with current State law. The California Solar Rights Act comprises the following California sections of law: California Civil Code Sections 714 and 714.1, California Civil Code Section 801, California Civil Code Section 801.5, California Government Code Section 65850.5, California Health and Safety Code Section 17959.1, California Government Code Section 66475.3 and California Government Code Section 66473.1.
- p. 17-27 – Implementation Measure E-IM23. This measure should read “Alternative Energy Use. Develop *or modify* regulations that eliminate obstacles to alternative energy use.”
- p. 17-28 – Implementation Measure E-IM30. This measure should be addressed in the Waste Management Element, not as part of the CAPE.
- p. 17-29 – Implementation Measure E-IM34. Combine this with E-IM37.
- p. 17-29 – Implementation Measure E-IM36. Eliminate reference to “LEED checklist” and instead specify “*a green building checklist.*”
- p. 17-29 – Implementation Measure E-IM37. This measure should be implemented jointly through the CAPE and through Alternative A. The County should develop and implement a time-of-sale ordinance that encourages or requires energy audits at the time-of-sale and encourages or requires subsequent energy efficiency upgrades.
- p. 17-29 – Implementation Measure E-IM38. This measure is analogous to E-IM36, only E-IM38 applies to new construction, where as E-IM36 applies to retrofits in existing buildings. These measures could be combined.
- p. 17-30 – Implementation Measure E-IM42. This measure should read “Conservation Management Plan. Promote the implementation a countywide water conservation management plan. ~~which is based on conservation of energy and water resources to maintain~~ and Promote water conservation and water recycling programs as a means of conserving energy.
- p. 17-31 – Implementation Measure E-IM56. This measure should also be addressed in the CAPE.

p. 17-32 – Implementation Measure E-IM58. This measure should read “Biodiesel Development from Waste. *Promote use of Utilize* waste oils and other biomass wastes for biodiesel production. Assess available waste resources for biodiesel production.”

p. 17-32 – Implementation Measure E-IM60. This measure should read “Vehicle-to-Grid Connection. *Promote and monitor the progress of the Evaluate long-term* integration of motor vehicles with the electric grid, including battery electric vehicles, fuel cell vehicles, and plug-in hybrid electric vehicles.”

p. 17-32 – Implementation Measure E-IM62. Drop this measure. It is unclear and seems inappropriate for the RCEA or the County.

p. 17-32 – Implementation Measure E-IM63. This measure should read “Municipal Utility Feasibility. *Consider conducting Conduct* a preliminary feasibility study to examine the viability of establishing a Municipal utility.”

p. 17-32 – Implementation Measure E-IM64. This measure should read “Community Choice Aggregation. Explore the feasibility of becoming community-choice aggregators ~~using funding from the CEC and the U.S. DoE, and with the technical assistance of Navigant Consulting, Inc.~~”

p. 17-32 – Implementation Measure E-IM66. This measure should read “~~Pursue Feasibility Studies for Utility Resource Portfolio Critique Proposals for New Local Electrical Power Generation Facilities. Conduct studies to Examine proposals for new local electrical power facilities, with a focus on fuel diversity, environmental concerns, and market uncertainties that are increasingly important in electric utility resource planning and to identify renewable energy technologies that are becoming significant components in utility resource portfolios. Make recommendations on preferred alternatives that are consistent with the County’s goals for energy security and sustainability.~~”

p. 17-34 – Preliminary CEQA Analysis – This discussion refers to Policy P-56 and Standards S7 and S8. These items only address oil and gas development. The County needs to also consider the potential loss of renewable energy production sites, including wind, wave, hydro, solar, and biomass.

Thank you for the opportunity to comment on the County’s General Plan update. I look forward to working together with the County and others in our community to help secure a sustainable energy future for Humboldt County.

Sincerely,

James I. Zoellick