

- The disproportionate cumulatively considerable impacts in all areas are SIGNIFICANT.

Comment  
21-41

**SUMMARY OF SIGNIFICANT IMPACTS AND MITIGATION MEASURES ARE LACKING:**

- Public Health and Safety should be added to the list of significant impacts.
- Increased electrical magnetic pollution through stray voltage, radiation, and ground currents should be included and analyzed.
- Increased waste and hazardous waste disposal needs and HazMat incidents related to electrical fires, battery failures, toxic emissions and fumes, thermal runaways and /or cascading failures, potential ground and surface water contamination—from increased number and scale of energy and transmission and storage projects—must be fully recognized and analyzed.
- The Material Data Safety Sheets for various lithium batteries<sup>11, 12, 13</sup> confirm the hazardous, volatile, and explosive nature of any battery /energy storage systems that also require special handling and fire suppression equipment and efforts.
- Environmental Justice Issues related to disproportionate impacts and long-term job losses triggered by the proposed increased conversion of productive agriculture lands and previously undisturbed desert soils, which sequester carbon and generate oxygen from growing crops, into industrial energy sacrifice zones meant to benefit urban areas, must be recognized and analyzed.

Comment  
21-42

Comment  
21-43

Comment  
21-44

Comment  
21-45

Comment  
21-46

**RELATIONSHIP TO THE DESERT RENEWABLE ENERGY CONSERVATION PLAN**

- The CEC grant funding for the RETE – EIR raises conflict and bias concerns
- We believe the deck was stacked against Imperial County for the DRECP as indicated by the DFAs and disproportionate impacts locally.
- DRECP, REAT and RETI Stakeholders from out of the area far outweighed Imperial County representatives during multiple review periods.
- While we appreciate the County's changes and reductions of the DFA's the disproportionate adverse impacts are still cumulatively considerable and must be further and carefully reduced.
- DRECP related streamlining of permits and transmission corridors do not actually conserve, protect or enhance critical County resources that support existing and future uses.

Comment  
21-47

Comment  
21-48

Comment  
21-49

**REGIONAL SETTING:**

- Significant and cumulatively significant RETE and DRECP cumulative impacts are in addition to the 20,000 or so acres of productive farmland that the Imperial County Board of Supervisors has already approved, and in addition to the industrial scale wind, solar and transmission projects approved on adjacent federal lands.

Comment  
21-50

**4.17 Utilities & Service Systems:**

<sup>11</sup> <http://www.sciencelab.com/msds.php?msdsid=9927559>;

<sup>12</sup> [http://images.quill.com/images/Products/catalog/Content/DataSheets/MSDS-Li-Ion\\_Datasheet.pdf](http://images.quill.com/images/Products/catalog/Content/DataSheets/MSDS-Li-Ion_Datasheet.pdf)

<sup>13</sup> <https://media.toro.com/Documents/safety/MSDS-Li%20BATTERY.pdf>

- This section includes inconsistent information on potable drinking water services available to small communities, like Ocotillo, through groundwater dependent water districts outside IID service boundaries. Comment 21-51
- **Figure 4.17-1** omits the private water district boundaries in Ocotillo. Comment 21-52
- It also fails to address SDG&E electrical utility services and significant transmission infrastructure and related renewable energy expansion plans and CPUC mandated Energy Storage Systems within Imperial County— all of which must be integrated into the grid in a manner that provides safe and reliable service. Comment 21-53
- Intermittent wind and solar generate harmonics and frequencies that have negative impacts on grid reliability and public health and safety. Comment 21-54
- Imperial County Hazardous Materials Plan and waste disposal and recycling plans appear to be inadequate to fully address the current, pending and proposed increase in industrial scale wind, solar, geothermal, and related projects. Comment 21-55
- It is not clear that there will be adequate disposal for at RCRA designated facilities to accommodate tens of thousands of acres of solar panels that will eventually need to be disposed of.
- Industrial wind turbine blades are generally non-recyclable composite fiberglass
- Infigen's Kumeyaay Wind located on the Campo Reservation (in Boulevard), demonstrates a failure on the part of the federal government to require proper handling or disposal.
- First-hand experience with the 2009 catastrophic failure of all 25 wind turbines at Kumeyaay Wind resulted in most of the 75 discarded blades remaining on the ground at the base of the wind turbines, while some have apparently been crushed and dumped on the ground surface at Jacumba Garage located on Old Hwy 80 just west of Jacumba Hot Springs. Comment 21-56

#### 4.17.5 Cumulative Impacts:

- This section inexplicably states that agricultural water consumption is projected to decrease over the next 40 years. Comment 21-57
- There is no evidence in the record to support this statement.
- All of this renewable energy madness is based on predicted climate change and reduced rainfall and flows in the Colorado River and other sources of potable water.
- Even if the number of agriculture acres is reduced that may not necessarily result in reduced water consumption.
- Equal or increased agriculture water consumption may be based on increased weather related heat levels, extended drought, increased heat island impacts and related increase in evapotranspiration rates<sup>14</sup> generated by large-scale ag-solar conversion projects. Comment 21-58
- Solar projects must dump excess heat resulting in reduced production and efficiency during high desert temperatures.
- Wind and solar projects consume energy for transformers/inverters, exhaust and cooling fans and HVAC units.
- Battery Energy Storage Systems (ESS) also consume energy for HVAC systems and transformers.
- This on-site project energy consumption must be accounted for and deducted from overall project generation. Comment 21-59

<sup>14</sup> <http://water.usgs.gov/edu/watercycleevapotranspiration.html>

**MISSING FROM DRAFT DRECP AND CEC FUNDED GENERAL PLAN UPDATE:**

- Where are the independent socio economic impact studies for the already built utility scale solar projects that document the real world impacts compared to promises made? Comment 21-60
- How many solar / wind workers have contracted Valley Fever<sup>15</sup>? Who is keeping track? Comment 21-61
- Where are the dedicated funds to help impacted /displaced families, farmers, and farm businesses and labor? Comment 21-62
- Have all funding and conservation promises been kept by existing solar / wind developers? Comment 21-63
- What is the comparison of local funding / benefits to profits exported and spent out of the area by wealthy developers like Google, Tenaska, Southern Company, First Solar and others who are reaping billions? Comment 21-64
- How many farm labor jobs have been displaced by temporary construction jobs? Comment 21-65
- How many farm support businesses have been negatively impacted or forced out of business? Comment 21-66
- How much good top soil has been moved off-site or lost to wind erosion? Comment 21-67
- How many air quality and dust calls / complaints have been logged for these massive projects? Comment 21-68
- What are the known impacts to adjacent farmers and residents? Comment 21-69
- How many homes have been purchased and residents displaced by solar developers? Comment 21-70
- What are the impacts to adjacent livestock operations? Comment 21-71
- How many solar inverters have caught fire or exploded and at what cost? Comment 21-72
- What long-term impacts do utility scale solar energy facilities and infrastructure have on the fertility of currently productive soils? Is the soil permanently sterilized? Comment 21-73
- How much base-load back up generation or energy storage will be needed to balance the grid and prevent disruption of service, and at what additional cost? Comment 21-74

**PLEASE TAKE NOTICE THAT WIND TURBINES WERE RECENTLY DECLARED A PUBLIC HEALTH HAZARD:**

- On October 14, 2014, the Brown County Board of Health (Wisconsin) passed a motion *"To declare the Industrial Wind Turbines at Shirley Wind Project in the Town of Glenmore, Brown County, WI. A Human Health Hazard for all people (residents, workers, visitors, and sensitive passersby) who are exposed to Infrasound/Low Frequency Noise and other emissions potentially harmful to human health."*<sup>16</sup> Comment 21-75
- The declaration followed a yearlong study linking the signature of inaudible low frequency noise (created by the passing of the massive turbine blades past their supporting towers) to the homes that have been abandoned and to the homes where people continue to suffer. The Board of Health looked at the study's raw data, the evidence linking the sound data to the wind turbines, peer-reviewed medical research and the complaints of the people living in the conditions around Duke's Shirley Wind project.
- Imperial County should show similar concerns and respect for the ongoing suffering, stress, adverse health impacts being reported by Ocotillo residents impacted by Pattern's Ocotillo Wind--instead of turning away Comment 21-76

<sup>15</sup> [http://coagoldengate.org/wilken\\_ggcoa\\_valley\\_fever\\_0.pdf](http://coagoldengate.org/wilken_ggcoa_valley_fever_0.pdf)

<sup>16</sup> <http://bccrwe.com/index.php/8-news/16-duke-energy-s-shirley-wind-declared-human-health-hazard>

**LACK OF NEED AND BETTER ALTERNATIVES:**

- |   |                  |
|---|------------------|
| • Imperial County can prioritize and incentivize point-of-use alternatives on new and existing structures, public and private facilities, contaminated brown fields, and solar covered parking lot shades that will provide more local benefits and jobs compared to industrial scale solar.                  | Comment<br>21-77 |
| • Recent Imperial County solar project CUP's were conditioned on a 10-year window to commence construction, which indicates there is no urgent need for those or similar projects.  | Comment<br>21-78 |
| • SDG&E's 40 or so RAMV (2014) conforming bids did not exceed 20 MW <sup>17</sup> and -0- contracts were signed due to costs higher than 2013 contracts—again showing a lack of need.   | Comment<br>21-79 |
| • Imperial County must control its own destiny rather than allow outside interests to drive Imperial County into an unsustainable future with increased health and financial risks and costs for local residents and business owners while the majority of any benefits flow to a few out of area interests.. | Comment<br>21-80 |
| • We urgently request that the decision makers / Board of Supervisors restart the RETE process with better transparency, disclosure, community outreach, and inclusion through a revised and re-circulated DEIR process.  | Comment<br>21-81 |

Thank you...

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<sup>17</sup> See pages 16-19 of SDG&E's Nov 19, 2014 filing with CPUC: <http://regarchive.sdge.com/tm2/pdf/2669-E.pdf>

## Response to Comment Letter #21: Donna Tisdale

Comment 21-1: Thank you for your comments on the Imperial County General Plan *Renewable Energy and Transmission Element* Update Draft PEIR. We have provided responses to the comment letters received from Carolyn Allen and Edie Harmon separately as comment letters 18 and 20, respectively. The Baseline Environmental Inventory Report was updated and finalized in January 2015 per comments received on the document. These updates to the Baseline Environmental Inventory Report were also presented in the “Regulatory Setting” and “Existing Environmental Setting” sections of the Draft PEIR. We have received your comments on the Draft DRECP EIR/EIS. However, the County did not author the Draft DRECP EIR/EIS, and therefore, cannot provide responses to your comments on that document. We have provided responses to your specific comments on the Draft PEIR for the proposed Project below.

Comment 21-2: Comment noted.

Comment 21-3: The Draft PEIR and Element update are adequate and not require re-circulation. As stated in response to comment 21-1 above, the County did not author the Draft DRECP EIR/EIS, and therefore, cannot provide responses to your comments on that document.

Comment 21-4: We have provided responses to the comment letter received from Comit  Civico De Valle separately as comment letter 14.

Comment 21-5: Future renewable energy facilities developed under the proposed Project would be limited to the agricultural areas to the Renewable Energy Overlay Zone. The proposed Project has a substantially smaller amount of agricultural land within the proposed overlay zone compared to the Development Focus Areas (DFAs) presented in the Desert Renewable Energy Conservation Plan (DRECP). Furthermore, as described in Section 4.2.4 of the Draft PEIR:

“...[t]he County of Imperial has developed mitigation strategies for impacts to agricultural resources based on guidance provided in a letter received from the Department of Conservation (DOC) Division of Land Resource Protection (Division) regarding the potential impacts of solar projects on agricultural land and resources. Although the letter was drafted based on potential impacts related to solar renewable energy facilities, the County has determined that the following mitigation strategies are ~~also applicable and appropriate for other~~ all types of renewable energy technology that may be developed under the proposed Project...”

It should be noted that agricultural resources converted to renewable energy resource uses would be temporary and would be restored to agricultural production per Mitigation Measure AG-1b: Reclamation/Decommissioning Plan and Security. Therefore, no farmland would be permanently lost due to renewable energy facilities developed under the proposed Project. Furthermore, temporary conversion of agricultural uses to renewable energy uses would free up irrigation water and allow fallowed farmland to be returned to agricultural production.

Furthermore, in accordance with Mitigation Measure AG-1c, future renewable energy facilities developed under the proposed Project would need to prepare an Economic Impact Analysis (EIA), Fiscal Impact Analysis (FIA), Employment (Jobs) Impact Analysis (JIA) analyzing potential impacts on agricultural resources pursuant to mitigation measure AG-1c. These benefits would also address possible or perceived socioeconomic impacts associated with future renewable energy projects, such as impacts



on agriculture-related businesses and/or loss of agricultural jobs. Future Development Agreements may require the County to grant the funds only to applicants with programs that can demonstrate they are likely to generate an equal number of agricultural jobs when combined with job creation from the future renewable energy facility and other recipients of the future renewable energy project's benefit fees.

Mitigation Measure AG-1a: Payment of Agricultural and Other Benefit Fees includes measures to reduce impacts on Prime Farmland from future renewable energy facilities based on the following four options:

- "...Option 1: The project proponent of a future renewable energy facility shall procure Agricultural Conservation Easements on a "two-to-one" basis on land of equal size, of equal quality farmland, outside of the development footprint. The Conservation Easement shall meet the State Department of Conservation's regulations and shall be recorded prior to issuance of any grading or building permits; or
- Option 2: The project proponent of a future renewable energy facility shall pay an "Agricultural In-Lieu Mitigation Fee" in the amount of 30 percent of the fair market value per acre for the total acres of the proposed site based on five comparable sales of land used for agricultural purposes as of the effective date of the permit, including program costs on a cost recovery/time and material basis. The Agricultural In-Lieu Mitigation Fee, will be placed in a trust account administered by the Imperial County Agricultural Commissioner's office and will be used for such purposes as the acquisition, stewardship, preservation, and enhancement of agricultural lands within Imperial County; or
- Option 3: The project proponent of a future renewable energy facility and County enter into an enforceable Public Benefit Agreement or Development Agreement that includes an Agricultural Benefit Fee payment that ~~is~~ is consistent with Board Resolution 2012-005; and (2) ~~the Agricultural Benefit Fee must be held by the County in a restricted account to be used by the County only for such purposes as the stewardship, preservation, and enhancement of agricultural lands within Imperial County, and to implement the goals and objectives of the Agricultural Benefit program, as specified in the Development Agreement, including addressing the mitigation of agricultural job loss on the local economy; the future renewable energy project and other recipients of the future renewable energy project's Agricultural Benefit Fee funds; or emphasis on creation of jobs in the agricultural sector of local economy for the purpose of off-setting jobs displaced by the future renewable energy project;~~ or
- Option 4: The project proponent of a future renewable energy facility must revise their ~~Renewable Energy~~ Conditional Use Permit Application/Site Plan to avoid Prime Farmland..."

The County of Imperial has also developed the "Funding Allocation Guidelines and the Proposed General Procedures/Guidelines for Allocation of Ag Benefit Funds" to ensure that these fees are to be used for the stewardship, protection, and enhancement of agricultural lands within the County (Resolution 2012-005). The Agricultural Business Development Category, such as funding for agricultural commodity processing plants and energy plants that use agricultural products, which was identified as the greatest job creator category, would receive 50 percent of the funds; the Research & Development Category, such as funding for development of new high-yield or water-efficient crops, new water conservation techniques, new technology to improve yields in existing crops, and partial funding for an endowment to support an agricultural research specialist, would receive 20 percent of the funds. Improved water conservation and efficient crop production keeps more farmland in production during drought cycles

and therefore supports job creation and maintenance. The Agricultural Stewardship Category, such as programs that bring fields back into production, implement soil reclamation, and improve existing fields to improve crop yields, would receive 20 percent. Increased production of crops again leads to more agricultural jobs to prepare and harvest the fields. The Education/Scholarship Category, such as matching funds for scholarships awarded by agricultural organizations for agricultural studies, student loans, Future Farmers of America and 4-H loans, would receive 10 percent. Training the next generation of farmers and farming operations also supports agricultural job creation.

Comment 21-6: The commenter asserts that proposed future reclamation of converted farmland will not be economically or technically feasible. The Reclamation and Decommissioning Plan is an appropriate mitigation for a temporary non-agricultural use, as it addresses the specific impact to the soil of the area taken out of agricultural use. If the applicant did not perform the restoration work, then the County would use the separate security instrument to perform the restoration work. This assures that the lands will actually be restored to the proper level for continued agricultural use and reduce impacts associated with temporary conversion of agricultural resources to a level less than significant.

Comment 21-7: The County Board of Supervisors authorized the Planning and Development Services Department to apply for the CEC grant to update the *Renewable Energy and Transmission Element*.

Comment 21-8: Renewable energy needs projected for the proposed Project were developed by the Renewable Energy Action Team (REAT), which included the California Energy Commission (CEC) and Bureau of Land Management (BLM), in conjunction with renewable energy developers. The CEC is the state's primary energy policy and planning agency. The CEC was established by the State Legislature in 1974 and sets California energy policy through the following seven core responsibilities:

- Forecasting future energy needs;
- Promoting energy efficiency and conservation by setting the state's appliance and building energy efficiency standards;
- Supporting energy research that advances energy science and technology through research, development and demonstration projects;
- Developing renewable energy resources;
- Advancing alternative and renewable transportation fuels and technologies;
- Certifying thermal power plants 50 megawatts and larger; and
- Planning for and directing state response to energy emergencies.

Adherence to the 0.5-mile buffer around all urban areas and implementation of mitigation measures presented in the Final PEIR and any additional mitigation measures that may be required based on site-specific characteristics identified during the environmental review phase of future renewable energy facilities would ensure that low-income and/or minority populations would not be disproportionately impacted.

Comment 21-9: The IID portion of the transmission system map presented in Figure 2.4-2 of the Draft PEIR was based on data provided to the County by IID. As described in Section 2.4.1 of the Draft PEIR,

“...[t]he transmission portion of the *Renewable Energy and Transmission Element* update presents existing and proposed transmission corridors and transmission lines developed by other agencies who hold the principal responsibility for these facilities...” The County will continue to work with IID to coordinate development of future renewable energy facilities with implementation of IID’s Strategic Transmission Expansion Plan.

Comment 21-10: The proposed transmission system presented in Appendix K of the Draft DRECP EIR/EIS was developed by the agencies who prepared the Draft DRECP EIR/EIS, and this proposed system is completely independent from the transmission system presented in the Draft PEIR.

Comment 21-11: Comment noted.

Comment 21-12: The goals and objectives of the proposed Project will benefit the residents of Imperial County. Development of future renewable energy facilities under the proposed Project would generate new jobs and tax revenues for the County, and would contribute to the restoration of the Salton Sea.

Comment 21-13: Please see response to comment 21-5 for a discussion of how the proposed Project would mitigate potential impacts on agriculture and agricultural-related businesses to a level less than significant.

Comment 21-14: This comment does not present any evidence that long-term Power Purchase Agreements would lock in high energy costs.

Comment 21-15: Please see response to comment 21-5 for a discussion of how the proposed Project would mitigate potential impacts on agriculture and agricultural-related businesses to a level less than significant.

The proposed Project has taken steps to avoid impacts to existing park facilities by developing a 0.5-mile buffer around all urban areas for the overlay zones, thereby preventing impacts to park facilities within urban areas. The overlay zones do include land within, or immediately adjacent to, several State and Federal recreational areas, including Ocotillo Wells State Vehicular Recreation Area, Plaster City Off-Highway vehicle area, and wildlife refuges providing passive recreation opportunities such as the Sonny Bono Salton Sea National Wildlife Refuge and Imperial National Wildlife Refuge. Future renewable energy facilities could avoid impacts to recreation facilities by incorporating adequate setbacks and other design features that would preserve recreational activities. Adequate setbacks and other design features would allow the proper protection necessary to ensure the safety of park or open space visitors and preserve views that are part of the recreational value of the park or open space area.

Comment 21-16: The Draft PEIR accurately states that the proposed Project would “...displace power currently produced by carbon-based fuels that would otherwise be used to meet regional demand for electricity...” First, it is important to clarify that the Draft PEIR does not rely on the ability of the proposed Project to shut down an existing fossil fuel power plant or displace the need to meet future energy demand to justify its GHG analysis. Instead, the Draft PEIR’s GHG analysis is based on its ability to demonstrate compliance with the applicable CEQA GHG significance thresholds.

Second, the proposed Project indirectly achieves these goals because renewable energy is a clean source of energy instead of the burning of finite fossil fuels that emit GHGs into the air. Without the development of renewable energy in order to meet California’s growing energy demands from a growing population, greater amounts of power would need to be produced by fossil fuel generation



sources to meet the same demand. However, renewable energy projects (e.g. solar and wind) provide intermittent energy and, without additional technologies, may need to be supplemented with either baseload plants or peaker power plants, some of which are fossil fuel burning plants. Opponents of renewable energy development sometimes view this as a failure to displace fossil fuel generation, but such views ignore the clean energy produced by renewable facilities. In this case, future renewable energy facilities to be developed under the proposed Project would be able to displace fossil fuel based systems and meet future energy demand that would otherwise be met with fossil fuel based generation because they would include an additional technology in the form of on-site energy electric energy storage systems. For example, the energy storage systems of future solar facilities would allow energy to provide energy to meet consumer demands for electrical power during the evening when the solar panels cannot generate power. Accordingly, the combined solar energy and energy storage features of the future solar facilities would meet the consumer demand that would otherwise be met with a baseload or peaker power plant operating on fossil fuel.

This response and rationale is also supported by energy experts at the California Public Utility Commission in a 2010 white paper entitled “Electric Energy Storage: An Assessment of Potential Barriers and Opportunities,” (CPUC 2010). The paper explains:

“...In the past, planners relied chiefly upon large dispatchable fossil fuel generators to provide electric energy. The energy from these facilities was transmitted over the bulk transmission system and ultimately consumed by end-use customers. However, this model is changing. California’s current energy policies mandate the development of new types of renewable and distributed generation resources, such as wind and solar. These resources by their nature are intermittent and cannot be directly dispatched by system operators to meet customer load. Thus, if the state wants to properly plan for these new types of resources, the historic model of electric system planning must be re-thought. Since operators of the electricity grid must constantly match electricity supply and demand, intermittent renewable resources are more challenging to incorporate into the electricity grid than traditional generation technologies. Intermittent renewable technologies cannot be scheduled to produce power in specific amounts at specific times, creating additional challenges and costs to resource procurement. Moreover, as more intermittent resources are deployed to meet increasing Renewable Portfolio Standards (‘RPS’) requirements, the operational challenges will become greater. Specifically, since planners cannot control when renewable generation will occur, the generation can often occur at times when there is little need for that power. However, a promising new set of Electric Energy Storage (‘EES’) technologies appear to provide an effective means for addressing the growing problem of reliance on an increasing percentage of intermittent renewable generation resources.

In the past, it was difficult, if not impossible, to store large amounts of electricity. There were two main barriers: economic (too expensive) and technological (inefficient, impractical). Recent advancements have been achieved and certain storage technologies have progressed through successful pilot and demonstration phases. As such, these technologies are poised to become commercially viable. EES offers California multiple economic and environmental benefits. By utilizing EES technologies to store intermittent renewable power, the state may reduce greenhouse gas emissions from carbon-based electricity production, avoid the need to build expensive new

transmission lines and power plants to meet peak energy demand, increase system reliability and generate economic activity through the manufacturing and operation of these EES technologies...(CEC White Paper at pp. 1-2)."

Comment 21-17: While the County supports development of distributive generation facilities such as rooftop solar, a project alternative focused solely on distributive generation would not be capable of generating the amount of energy needed to meet project goals and objectives. Distributed generation involves the development of a large number of geographically distributed small solar PV systems within existing developed areas, typically on the rooftops of residential and other facilities. Distributed generation is generally available for use on-site and does not deliver electricity to the grid as a utility-scale solar facility does or contain an energy storage component. Because distributive generation does not deliver electricity to the grid and does not contain an energy storage component, a distributive generation alternative would not meet the goals and objectives of the Element update.

Comment 21-18: Implementation of mitigation measures presented in the Final PEIR would reduce all impacts associated with future wind facilities to a level less than significant with the exception of Aesthetics.

Comment 21-19: As described in response to comment 21-16 above, the proposed Project would "...displace power currently produced by carbon-based fuels that would otherwise be used to meet regional demand for electricity..." which would reduce greenhouse gas emissions. Therefore, the proposed Project would not impact Imperial County's regional or local "albedo."

Comment 21-20: Comment noted. Simbol Materials is not a part of the proposed Project and is beyond the scope of the Draft PEIR.

Comment 21-21: Comment noted. There is no industry that has a 100 percent success rate. Overall, renewable energy development in Imperial County has been successful and created numerous jobs within the County.

Comment 21-22: This comment seems incomplete. This comment may be referring to existing, approved, and/or constructed renewable energy facilities (solar, geothermal, wind, bio-mass, bio-fuel, etc.).

Comment 21-23: This comment does not provide any specific comments on which figures are inconsistent or why. We have provided responses to your comment on specific figures below (response to comments 21-35, 21-37 through 21-39, and 21-52).

Comment 21-24: The locations of existing and proposed renewable energy facilities are presented on Figure 3.2-1 – Cumulative Projects of the Draft of PEIR.

Comment 21-25: This comment does not present any evidence that Electrical Transmission and Joint Use Corridors would not increase system reliability.

Comment 21-26: This comment does not present any evidence that Electrical Transmission and Joint Use Corridors would not reduce potential conflicts between and among renewable energy developers, agriculture, environmental resources and local land owners. As described in the Draft PEIR, the proposed Project would be implemented on a "project-by-project" basis based on County approval of individual renewable energy projects. Future renewable energy facilities developed under the proposed

Project would have to evaluate potential impacts associated with the conflicts described in this comment during the project's required environmental review phase. Implementation of mitigation measures presented in the Final PEIR and any additional mitigation measures that may be required based on site-specific characteristics identified during the environmental review phase would reduce impacts related to the conflicts described in this comment letter to a level less than significant.

Comment 21-27: This comment does not present any evidence that Electrical Transmission and Joint Use Corridors would result in adverse impacts and uncertainty to non-participating property owners. As described in the Draft PEIR, the proposed Project would be implemented on a "project-by-project" basis based on County approval of individual renewable energy projects. Future renewable energy facilities developed under the proposed Project would have to evaluate the potential impacts described in this comment during the project's required environmental review phase. Implementation of mitigation measures presented in the Final PEIR and any additional mitigation measures that may be required based on site-specific characteristics identified during the environmental review phase would reduce the potential impacts described in this comment letter to a level less than significant.

Comment 21-28: All property sales associated with the future renewable energy facilities developed under the proposed Project would be done consistent with California law.

Comment 21-29: As described in the Draft PEIR, the proposed Project would be implemented on a "project-by-project" basis based on County approval of individual renewable energy projects. Future renewable energy facilities developed under the proposed Project would have to evaluate potential impacts associated with agricultural fields, drains, canals, ditch banks, and the Salton Sea during the project's required environmental review phase. Implementation of mitigation measures presented in the Final PEIR and any additional mitigation measures that may be required based on site-specific characteristics identified during the environmental review phase would reduce impacts related to the environmental resources described in this comment letter to a level less than significant.

Comment 21-30: As described in Section 2.2 of the Draft PEIR, "...the proposed Project would support the development of expanded renewable energy power production and exportation to accommodate future growth in California and improve overall system reliability..." Therefore, the proposed Project would meet future energy demand rather than create excess energy supply that would induce growth.

Comment 21-31: As described in response to comment 21-8, the goals and objectives of the proposed Project will benefit the residents of Imperial County. Development of future renewable energy facilities under the proposed Project would generate new jobs and tax revenues for the County, and would contribute to the restoration of the Salton Sea. As described in response to comment 21-17, a distributive generation alternative would not meet the goals and objectives of the Element update.

Comment 21-32: Please see response to comment 21-16 for a discussion of the reliability of renewable energy.

Comment 21-33: The CEC loading order does not preclude development of renewable energy technology.

Comment 21-34: Comment noted.

Comment 21-35: Figure 2 identifies wind potential within Imperial County. Please refer to Figure 2 to see locations that may be suitable for wind energy development.

Comment 21-36: The Ocotillo Wind Energy Facility is an existing project, and is beyond the scope of the Draft PEIR.

Comment 21-37: The proposed transmission system presented in Appendix K of the Draft DRECP EIR/EIS was developed by the agencies who prepared the Draft DRECP EIR/EIS, and this proposed system is completely independent from the transmission system presented in the Draft PEIR. The transmission system map presented in Figure 2.4-2 of the Draft PEIR was based on data provided to the County by agencies and independent research. As described in Section 2.4.1 of the Draft PEIR, "...[t]he transmission portion of the *Renewable Energy and Transmission Element* update presents existing and proposed transmission corridors and transmission lines developed by other agencies who hold the principal responsibility for these facilities..."

Comment 21-38: Figure 2.4-1 of the Draft PEIR accurately shows the location of the proposed overlay zones in relation to existing environmental resources within Imperial County. We have provided responses to specific comments regarding environmental resources listed in this comment.

Comment 21-39: As described in response to comment 21-37 above, the proposed transmission system presented in Appendix K of the Draft DRECP EIR/EIS was developed by the agencies who prepared the Draft DRECP EIR/EIS, and this proposed system is completely independent from the transmission system presented in the Draft PEIR.

Comment 21-40: Comment noted.

Comment 21-41: This comment does not present any evidence that the proposed Project would result in cumulatively significant impacts for all environmental issue areas. As described in the Draft PEIR, all environmental issue areas, with the exception of Aesthetics, would either be cumulatively less than significant or mitigated to a level less than cumulatively significant for the proposed Project.

Comment 21-42: "Public Health" is not a distinct environmental category on the CEQA Checklist, and therefore, does not have a separate section for analysis in the Draft PEIR. However, issues related to public health are analyzed in the Air Quality and Hazards and Hazardous Materials sections of the Draft PEIR. The impact analysis presented in the Draft PEIR determined that all impacts related to Air Quality and Hazards and Hazardous Materials would be reduced to a level less than significant.

Comment 21-43: The following discussion documenting that future renewable energy facilities developed under the proposed Project would not result in impacts related to electromagnetic fields has been added to Section 4.8.4 of the Final EIR:

"Electromagnetic Fields

Both electric and magnetic fields occur together whenever electricity flows. Consequently, future renewable energy facilities developed under the proposed Project would have the potential to result in electromagnetic field (EMF) exposure. However, the available evidence as evaluated by the California Public Utilities Commission (CPUC) and other regulatory agencies has not established that such fields pose a significant health hazard to exposed humans. To date, there are no health-based federal regulations or industry codes specifying environmental limits on the strengths of fields from power lines. Likewise, the State has not adopted any specific limits or regulation on EMF levels related to electric power facilities. In addition, the CPUC issued Decision

D.06-01-042 in 2006, which states: “...at this time we are unable to determine whether there is a significant scientifically verifiable relationship between EMF exposure and negative health consequences...however, this decision directs the Commission’s Energy Division to pursue and review all available studies regarding EMF, and to review scientific information and report on new findings. Should such studies indicate negative EMF health impacts, we will reconsider our EMF policies, and open a new rulemaking if necessary...” (CPUC 2006). No new rulemaking has been opened.

The EPA acknowledges public concern regarding potential adverse health effects associated with EMF from power lines; however, the EPA also states that: “...[m]uch of the research about power lines and potential health effects is inconclusive...The general scientific consensus is that, thus far, the evidence available is weak and is ‘not sufficient to establish a definitive cause-effect relationship...’” (EPA 2006). In addition, the “...[p]reliminary Opinion on Potential Health Effects of Exposure to Electromagnetic Fields (EMF)...” prepared by the Scientific Committee on Emerging and Newly Identified Health Risks (SCENIHR) stated that “...[t]he few available studies on combined exposure to EMF of different frequency ranges do not provide sufficient information to challenge existing risk assessment; in addition in most experiments an absence of effects has been reported...” Further, with regard to health effects from co-exposure of EMF and other stressors, SCENIHR concluded that “...[t]he available literature suggests that EMF exposure may modify the effects of chemicals or other physical agents. However, the reports on combined effects lack consistency and are not linked to specific experimental conditions. Therefore, further research is needed in order to clarify any relevance of combined exposures to human cancer risk under real life exposure conditions, and to explore the potentially beneficial (protective) effects of such exposures...” (SCENIHR 2013). Therefore, because the probability of EMF occurrence is low, and the evidence to support that EMFs are hazards that would be caused by future renewable energy facilities developed under the proposed Project is insufficient, the potential for EMF levels to cause a hazardous health condition would not occur.”

Comment 21-44: With respect to hazardous waste disposal, Mitigation Measure UTIL-6 is provided to reduce impacts regarding landfills and waste disposal to less than significant. Mitigation Measure UTIL-6 provides the following:

“...Future renewable energy facilities developed under the proposed Project would be required to develop a Waste Management Plan that shall identify the projected waste generated by the activity and feasible methods to divert a minimum of 75 percent of waste from landfills, such as sorting and recycling of materials, reuse of materials, and waste reduction measures...”

Therefore, future renewable energy facilities would not be approved by the County until they had developed a sustainable Waste Management Plan.

With respect to hazardous materials impacting water quality, Section 4.9.4 of the Draft PEIR addresses this issue by stating the following:

“...Hazardous materials associated with construction and operation of future renewable energy facilities described in Section 4.8.4 would have the potential to impact water

quality. If precautions are not taken to contain contaminants, accidental spills of these substances during construction and operations could produce contaminated stormwater runoff (nonpoint-source pollution), a major contributor to the degradation of water quality in surface waters. Without proper containment and incident response measures in place, the operation of construction equipment could result in significant direct and indirect impacts to water quality...”

“...Prior to construction and grading activities, each project applicant is required to file a Notice of Intent (NOI) with the SWRCB to comply with the General NPDES Construction Permit and prepare a SWPPP, which addresses the measures that would be included during project construction to minimize and control construction and postconstruction runoff to the “maximum extent practicable.” In addition, NPDES permits require the implementation of BMPs that achieve a level of pollution control to the maximum extent practical, which may not necessarily be completely protective of aquatic life or address water quality impairments for local waterways. This could represent a significant direct and indirect impact. For these reasons, the implementation of the prescribed mitigation would be required to ensure that each project’s SWPPPs and Grading Plan(s) include measures necessary to minimize water quality impacts as a result of project construction and postconstruction runoff. In addition, given that site decommissioning would result in similar activities as identified for construction, these impacts could also occur in the future during site restoration activities...”

As described in the Draft PEIR, the proposed Project would be implemented on a “project-by-project” basis based on County approval of individual renewable energy projects. Consequently, specific impacts related to water quality and corresponding mitigation measures cannot be evaluated at this time. However, future renewable energy facilities developed under the proposed Project would have to evaluate potential impacts related to water quality during the project’s required environmental review phase. Implementation of mitigation measures HYDRO-1a and HYDRO 1b and any additional mitigation measures that may be required based on site-specific characteristics identified during the environmental review phase would reduce impacts related to water quality to a level less than significant.

Specific impacts associated with electrical fires, battery failures, toxic emissions and fumes, thermal runaways and/or cascading failures cannot be evaluated at that time. However, future renewable energy facilities developed under the proposed Project would have to evaluate potential impacts associated with risks regarding these potential impacts during the project’s required environmental review phase. Future renewable energy facilities would be required to implement project design and mitigation measures that may be required based on site-specific characteristics identified during the environmental review phase to reduce impacts associated with these risks to a level less than significant.

Comment 21-45: Any lithium battery utilized in a future renewable energy facility developed under the proposed Project would be installed and operated consistent with all appropriate regulatory and safety standards.

Comment 21-46: As described in response to comment 21-5, Mitigation Measure AG-1a: Payment of Agricultural and Other Benefit Fees includes measures to reduce impacts on displaced agricultural workers to a level less than significant. Future renewable energy projects would also need to provide other benefits as identified in Resolution 2012-05 and detailed in the Economic Impact Analysis (EIA), Fiscal Impact Analysis (FIA), Employment (Jobs) Impact Analysis (JIA) prepared pursuant to mitigation



measure AG-1c. These benefits would also address possible or perceived socioeconomic impacts associated with future renewable energy projects, such as loss of agricultural jobs. Future Development Agreements may require the County to grant the funds only to applicants with programs that can demonstrate they are likely to generate an equal number of agricultural jobs when combined with job creation from the future renewable energy facility and other recipients of the future renewable energy project's benefit fees.

Vegetation displaced by future renewable energy facilities developed under the proposed Project would not result in a substantial increase in atmospheric greenhouse gas. Furthermore, Section 4.7.4 of the Draft PEIR describes how the proposed Project would reduce greenhouse gas emissions by stating the following:

“...Electricity generated by future renewable energy facilities developed under the proposed Project would displace GHG emissions currently produced by carbon-based fuels. Using the conservative estimate of GHG emissions for marginal power plants developed by the CPUC, future solar and wind facilities would eliminate a minimum of 830 pounds CO<sub>2</sub>e per MWh. Similarly, future geothermal energy facilities developed under the proposed Project would displace approximately 520 pounds CO<sub>2</sub>e per MWh. The displacement of CO<sub>2</sub>e for geothermal production would be reduced by 310 pounds CO<sub>2</sub>e per MWh due to the CO<sub>2</sub> that occurs naturally in geothermal steam released by operations at a geothermal plant (DRECP EIR/EIS 2014, IV.3-9). Consequently, displacement of power currently produced by carbon-based fuels by development of future renewable energy facilities would offset GHG emissions generated during construction, operation, and decommissioning of future renewable energy facilities and reduce impacts to a level less than significant. No mitigation measures would be required...”

Comment 21-47: The County has engaged the public regarding the proposed Project through a robust community outreach program. The County held seven (7) community meetings in Niland, Calipatria, Brawley, El Centro, Salton City, Ocotillo and Calexico to allow the public to provide their input on the proposed Project. The County also held four (4) stakeholder's meetings with the Technical Advisory Group (TAG) to allow those interested in the proposed Project to provide their input. Meetings were also held with local Native American Tribes, the NAVFAC staff and a citizen group focused on environmental justice. The County Planning & Development Services Department acting as the CEQA Lead Agency distributed the “Notice of Preparation (NOP)” for the preparation of the PEIR through the State Clearinghouse for review and comment. The NOP was publicly noticed in English in the IV Press on July 20, 2014 and in Spanish in the Adelante newspaper on July 18, 2014. The NOP was circulated by the State Clearinghouse from Monday, July 21 through August 22, 2014. The County also held an “Informational Item” at the Environmental Evaluation Committee meeting and a public “Scoping Meeting” on August 14, 2014. The purpose of the two public hearings was to allow the public to provide input on the proposed Project. The proposed draft Renewable Energy Overlay Zone Map was available for public review at these two meetings. Consequently, there has been ample opportunity for input for the public and there has been no bias towards “DRECP, REAT and Renewable Energy Transmission Initiative RETI stakeholders.” Furthermore, the County substantially reduced the footprint of the proposed overlay zone for the proposed Project compared to the DRECP Development Focus Areas (DFAs), which demonstrates the proposed Project's independence from the DRECP and how the proposed Project would limit future renewable energy development to a smaller footprint.

Comment 21-48: Thank you for expressing your support regarding the reduced footprint of the proposed overlay zone compared to the DRECP DFAs. However, this comment does not present any evidence that the proposed Project would result in cumulatively significant impacts that were not identified in the Draft PEIR. As described in the Draft PEIR, all environmental issue areas, with the exception of Aesthetics, would either be cumulatively less than significant or mitigated to a level less than cumulatively significant.

Comment 21-49: This comment does not present any evidence that the DRECP-related streamlining of permits and transmission corridors would not actually conserve, protect or enhance critical County resources that support existing and future uses. Furthermore, the DRECP is a Federal and State independent plan beyond the scope of the County's Draft PEIR.

Comment 21-50: This comment does not present any evidence that the proposed Project or DRECP Alternative would result in cumulatively significant impacts for all environmental issue areas. As described in the Draft PEIR, all environmental issue areas, with the exception of Aesthetics, would either be cumulatively less than significant or mitigated to a level less than cumulatively significant for the proposed Project.

Comment 21-51: The Utilities and Service Systems section provides an overview of water utilities in the County, including acknowledging that "...Ocotillo/Nomirage is provided water service by private water companies and individual wells..." The commenter does not state explicitly what details in the section are "inconsistent."

Comment 21-52: Mapping data for the private water district boundaries in Ocotillo are not available, and therefore, cannot be added to Figure 4.17-1. However, the Draft PEIR acknowledged the presence of these private water districts on page 4.17-3 by stating that "Ocotillo/Nomirage is provided water service by private water companies and individual wells."

Comment 21-53: The existing conditions discussion presented in section 4.17 of the Draft PEIR presents the most recent data made available to the County regarding utilities and services. The County will continue to work with SDG&E and other providers in the future regarding future transmission facilities.

Comment 21-54: This comment does not present any evidence that wind and solar renewable energy facilities generate harmonics and frequencies that have negative impacts on grid reliability and public health and safety.

Comment 21-55: This comment does not present any evidence that Imperial County Hazardous Materials Plan and waste disposal and recycling plans appear to be inadequate to address the proposed Project.

Comment 21-56: The Kumeyaah Wind facility is an existing project within San Diego County and is beyond the scope of the Draft PEIR.

Comment 21-57: This information is based on the *Hudson Ranch Power II Geothermal Project and Simbol Calipatria Plant II, SB 610 Combined Water Supply Assessment* (March 15, 2012).

Comment 21-58: Increased weather related heat levels and extended drought are unknown events that may or may not occur. In the event that they would occur, IID has water conservation strategies that would ensure for the fair and equitable distribution of water resources during such events.

An empirical study entitled “Analysis of the Potential for Heat Island Effect in Large Solar Farms” (Fthenakis and Yu, n.d.) conducted by Columbia University concluded that there is no significant increase in ambient air temperature around solar farms. The Columbia University Study also indicated that solar panels store less heat than the natural earth surface and serve to cool temperatures below ambient levels based on their construction of lightweight glass surrounded by airflow. Accordingly, the study concluded that a PV solar farm does not induce an on-going increase in ambient air temperature. Therefore, future solar facilities developed under the proposed Project would not result in “heat island” effects that would necessitate additional irrigation on adjacent farmland while likely reducing efficiency and crop productivity.

Comment 21-59: The amount of energy developed by future renewable energy facilities that would be available for local and regional consumption would be far greater than the amount used to generate and store the energy.

Comment 21-60: Renewable energy development within Imperial County has resulted in economic benefits and high paying jobs (e.g., geothermal projects).

Comment 21-61: Cases of Valley Fever are tracked by the Imperial County Public Health Department. Potential impacts associated with asthma and valley fever were analyzed in Section 4.3.4 of the Draft PEIR. This section has been slightly revised to include allergies as well, and states the following:

“...Implementation of mitigation measure AQ-1a described above would minimize dust generated during project construction and reduce impacts related to asthma and allergies to a level less than significant. The incidence rate of Valley Fever in Imperial County is low (4.8 cases per 100,000 population in 2012), and the County’s average annual incidence rate is low as well (1.1 to 2.0 per 100,000 population). Furthermore, none of the documented cases of Valley Fever have been linked to construction of existing renewable energy facilities that were developed in Imperial County. Therefore, the potential for the proposed Project to result in new cases of Valley Fever is very low and would be reduced to a level less than significant through implementation of dust control measures described in mitigation measure AQ-1a. Implementation of mitigation measure AQ-1a combined with the 0.5-mile buffer around all urban areas for the overlay zones would also prevent disproportionate concentrations of low-income and/or minority populations from being exposed to pollutant concentrations or high levels of PM<sub>10</sub> and PM<sub>2.5</sub> during construction and operation of the proposed Project...”

Comment 21-62: Please see response to comment 21-46 for a discussion of funds helping farm workers impacted by the conversion of farmland.

Comment 21-63: Funding and conservation efforts by developers for existing solar and wind facilities are being monitored for compliance with County approved permit conditions.

Comment 21-64: Please see response to comment 21-60.

Comment 21-65: Although some farm jobs have been displaced, the County has mechanisms to provide assistance to displaced farm workers. Please see response to comment 21-46 for a discussion of how the County would provide assistance to displaced farm workers.

Comment 21-66: There is no evidence that renewable energy development within Imperial County has negatively impacted agricultural businesses to date.

Comment 21-67: There is no evidence that renewable energy development within Imperial County has resulted in impacts to “good top soil” to date.

Comment 21-68: Each existing renewable energy facility is being monitored by the ICAPCD to prevent air quality impacts through adherence to applicable mitigation measures and regulatory requirements.

Comment 21-69: Section 4.2.4 of the Draft PEIR analyzed potential impacts to adjacent farmlands and determined that implementation of mitigation measures AG-1a through AG-3, AQ-1a, HYDRO-1a, and HYDRO-1b would reduce impacts to a level less than significant. The comment does not inquire about any specific impacts on adjacent residents. Potential impacts to adjacent residents are analyzed throughout the Draft PEIR, which determined that all impacts would be mitigated to a level less than significant with the exception of Aesthetics.

Comment 21-70: The purchasing of homes by private parties is beyond the scope of the Draft PEIR.

Comment 21-71: There is no evidence that renewable energy projects have impacted adjacent livestock operations.

Comment 21-72: Existing solar energy facilities have an Emergency Response Plan to respond to and mitigate fires related to a solar inverter.

Comment 21-73: Please see response to comment 21-6 for a discussion of how farmland temporary converted to renewable energy uses would be restored.

Comment 21-74: Please see response to comment 21-16 for a discussion of renewable energy and system reliability.

Comment 21-75: Comment noted. It should be noted that Brown County, Wisconsin allows for wind turbines to be constructed within 1,250 feet of a residence (approximately 0.24 miles). The proposed Project on the other hand imposes a 0.5-mile buffer for all future wind facilities that would ensure that residences would have more than double the distance than what is required in Brown County, Wisconsin. Furthermore, *A Study of Low Frequency Noise and Infrasound from Wind Turbines* prepared by Epsilon Associates, Inc. determined that “...there should be no adverse public health effects from infrasound or low frequency noise at distances greater than 1000 feet from the wind turbine types measured by Epsilon: GE 1.5sle and Siemens SWT 2.3-93...” based on their research and an extensive literature search of scientific papers and reports (Epsilon Associates, Inc. 2009).

Comment 21-76: See response to comment 21-75 above.

Comment 21-77: Comment noted. While the County supports development of distributive generation facilities such as rooftop solar, a project alternative focused solely on distributive generation would not be capable of generating the amount of energy needed to meet the proposed Project goals and objectives. Distributed generation involves the development of a large number of geographically distributed small solar PV systems within existing developed areas, typically on the rooftops of residential and other facilities. Distributed generation is generally available for use on-site and does not deliver electricity to the grid as a utility-scale solar facility does or contain an energy storage component.

Because distributive generation does not deliver electricity to the grid and does not contain an energy storage component, a distributive generation alternative would not meet the goals and objectives of the Element update.

Comment 21-78: The proposed Project would establish overlay zones to identify suitable locations for the development of future renewable energy facilities. As described in the Draft PEIR, the proposed Project would be implemented on a “project-by-project” basis based on County approval of individual renewable energy projects. Future projects would only be developed if demand warranted their construction.

Comment 21-79: See response to comment 21-78 above.

Comment 21-80: The goals and objectives of the proposed Project will benefit the residents of Imperial County. Development of future renewable energy facilities under the proposed Project would generate new jobs and tax revenues for the County, and would contribute to the restoration of the Salton Sea.

Comment 21-81: Thank you for your comments on the Imperial County General Plan *Renewable Energy and Transmission Element* Update Draft PEIR. As described in the response to comments above, the Draft PEIR is consistent with CEQA and does not require re-circulation.

## 22 – Cal Energy



February 23, 2015

**RECEIVED**  
FEB 24 2015  
IMPERIAL COUNTY  
PLANNING & DEVELOPMENT SERVICES

Imperial County Planning and Development Services

801 Main Street

El Centro, CA 92243

Attn: Mr. Jim Minnick, Director

RE: Imperial County Renewable Energy Element, Ordinance and Draft PEIR

Dear Mr. Minnick,

CalEnergy commends Imperial County for its efforts to update the Renewable Energy Element and Ordinance. Both documents will be useful in providing guidance and approaches with respect to the future siting of renewable energy projects and electrical transmission lines in Imperial County. In addition, it is our hope that these documents will help to streamline the permitting process.

Comment  
22-1

After a comprehensive review, CalEnergy submits the enclosed stakeholder comments on the Renewable Energy Resources Ordinance, the Renewable Energy and Transmission Element County of Imperial General Plan, and the Draft Programmatic Environmental Impact Report. We ask that you give careful consideration to all of our comments and objections.

Sincerely,

A handwritten signature in blue ink that reads "Diane Cason".

Diane Cason

Vice President, Real Estate Assets



Stakeholder Comments

**Imperial County  
Title 9  
Division 17: Renewable Energy Resources Ordinance**

Submitted by	Company	Date Submitted
Alexander Schriener Jr. Director Geothermal Resource (760) 348-4044 <a href="mailto:alexander.schriener@calenergy.com">alexander.schriener@calenergy.com</a>	CalEnergy Operating Corp. 7030 Gentry Road Calipatria, CA 92233	February 23, 2015
Randy Keller Director of Development and Transmission (760) 348-4005 <a href="mailto:randy.keller@calenergy.com">randy.keller@calenergy.com</a>		
Diane Cason Vice President of Real Estate Assets and Community Relations (760) 348-4095 <a href="mailto:diane.cason@calenergy.com">diane.cason@calenergy.com</a>		
Anetha Lue Director, IPP Environmental Services (760) 348-4275 <a href="mailto:Anetha.Lue@calenergy.com">Anetha.Lue@calenergy.com</a>		

CalEnergy Operating Corporation (CalEnergy) comments on the Imperial County, Title 9, Division 17: Renewable Energy Resources Ordinance (Ordinance) prepared by Imperial County Planning and Development Services Department.

CalEnergy owns and operates ten existing geothermal electricity generating plants in the vicinity of the southern shore of the Salton Sea and provides 342 megawatts (MWs) of reliable low cost renewable power. CalEnergy also holds an active permit with the California Energy

Comment  
22-2

Commission for a 159 MW development of generating facilities which will help California meet its Renewable Portfolio Standards (RPS) goal of 33% by 2020.

Comment  
22-2  
(continued)

**Comments and Objections on Imperial County Title 9, Division 17: Renewable Energy Resources Ordinance**

CalEnergy finds the Ordinance to be useful in providing guidance and approaches with respect to the future siting of renewable energy projects and electrical transmission lines in Imperial County. However we do have specific comments and objections. These will be addressed below according to each specific section.

**CHAPTER 2: SPECIFIC STANDARDS FOR ALL RENEWABLE ENERGY PROJECTS**

**§91702.00 SPECIFIC STANDARDS FOR ALL RENEWABLE ENERGY PROJECTS**

**I. NOISE LIMITATION**

CalEnergy requests the use of the U. S. Geological Survey noise limitation of 65 decibels and using their boundary designation of one-half mile. CalEnergy requests the following changes to this section:

Comment  
22-3

The maximum permitted continuous sound level shall be CNEL 65 decibels measured at the nearest human receptor site outside the parcel boundary, or one-half mile from the sound, whichever is greater, using the "A" scale and measured with a sound level meter and associated octave band analyzer.

**N. DISMANTLING UPON CESSATION OF OPERATION**

Because there may be alternative industrial uses beyond the life of a facility and because CalEnergy has land covenants in place in some areas of our operations which will not permit the land to be returned to its original use, CalEnergy requests the following changes to this section:

Comment  
22-4

When the operation of the permitted Project has ceased, all facilities on the site shall be secured until an alternative use is found for the facilities, or dismantled and removed. All wells, not in use, should be capped or abandoned pursuant to the requirements of the California Division of Oil, and Geothermal Resources. The land involved shall be restored back to its original condition or to the condition that is consistent with its zoning and covenants in place at the time of the facility closure, the closure conditions should be compatible with the surrounding uses of the area, or as requested by the land owner and as agreed to by the Director of Planning and Development Services.

### CHAPTER 3: ADDITIONAL SPECIFIC STANDARDS FOR GEOTHERMAL PROJECTS

#### § 91703.00 SPECIFIC STANDARDS

D. CalEnergy requests further clarification on the 100' public road designation. Specifically, is the 100' distance measured from the centerline of the road or from the edge of the road?

Comment  
22-5

#### § 91703.01 DRILLING STANDARDS

B. CalEnergy requests the use of the U. S. Geological Survey noise limitation of 65 decibels and using their boundary designation of one-half mile, thus CalEnergy requests the following changes to this section:

Comment  
22-6

Each operator shall limit drilling noise to a sound level equivalent to CNEL 65 dB(A). The limited sound level may be exceeded by ten percent (10%) if the noise is intermittent and during daylight hours only. The noise levels shall be measured at the nearest human receptor site outside the parcel boundary, or one-half mile from the sound, whichever is greater.

E. CalEnergy, as a large quantity generator, is allowed 90 days for removal of "hazardous waste". Drilling waste may not be hazardous in nature but we request the substitution of "ninety" days in place of the sixty days currently designated in this section.

Comment  
22-7

J. As per California Division of Oil, and Geothermal Resources requirements, CalEnergy encloses all well "heads" with fencing. Well "pads" are not required to be fenced. CalEnergy requests this section be modified to designate well "heads" in place of well sites.

Comment  
22-8

K. CalEnergy objects to this section. All of our well pad areas are large enough to accommodate a drilling rig and associated parking of 5 or more personal vehicles. However, no well pad has "designated" parking locations. Parking locations will change from time to time according to the well work that is being performed. CalEnergy requests either clarification or deletion of this section.

Comment  
22-9

#### § 91703.02 PRODUCTION STANDARDS

E. CalEnergy objects to this sentence: "All pipelines shall be painted and/or landscaped to blend with the environment." CalEnergy's pipelines are constructed to protect the integrity of the pipe, to safely handle the geothermal brine, and to protect CalEnergy personnel and the public. Painting and/or landscaping the pipelines would jeopardize our operations. CalEnergy requests that this sentence be removed.

Comment  
22-10



Stakeholder Comments

**Renewable Energy and Transmission Element  
County of Imperial General Plan**

Submitted by	Company	Date Submitted
Alexander Schriener Jr. Director Geothermal Resource (760) 348-4044 <a href="mailto:alexander.schriener@calenergy.com">alexander.schriener@calenergy.com</a>	CalEnergy Operating Corp. 7030 Gentry Road Calipatria, CA 92233	February 23, 2015
Randy Keller Director of Development and Transmission (760) 348-4005 <a href="mailto:randy.keller@calenergy.com">randy.keller@calenergy.com</a>		
Diane Cason Vice President of Real Estate Assets and Community Relations (760) 348-4095 <a href="mailto:diane.cason@calenergy.com">diane.cason@calenergy.com</a>		
Anetha Lue Director, IPP Environmental Services (760) 348-4275 <a href="mailto:Anetha.Lue@calenergy.com">Anetha.Lue@calenergy.com</a>		

CalEnergy Operating Corporation (CalEnergy) comments on the Imperial County General Plan Renewable Energy and Transmission Element (Element) prepared by the Imperial County Planning and Development Services Department.

CalEnergy owns and operates ten existing geothermal electricity generating plants in the vicinity of the southern shore of the Salton Sea and provides 342 megawatts (MWs) of reliable low cost renewable power. CalEnergy also holds an active permit with the California Energy Commission for a 159 MW development of generating facilities which will help California meet its Renewable Portfolio Standards (RPS) goal of 33% by 2020.

Comment  
22-11



**Comments and Objections on Imperial County General Plan Renewable Energy and Transmission Element**

Comment  
22-11  
(continued)

CalEnergy finds the Element to be useful in providing guidance and approaches with respect to the future siting of renewable energy projects and electrical transmission lines in Imperial County. However we do have specific comments and objections. These will be addressed below according to each specific section.

**II. EXISTING CONDITIONS AND TRENDS**

**B. Geologic and Climate Conditions**

**Geologic Conditions**

Paragraph 1 (page 3): The basin definition in this paragraph is technically incorrect. The subsiding Salton Trough or Basin is bound to the east by the Chocolate Mountains and associated ranges. The area east of those mountains and continuing over to the Colorado River is technically part of the Basin and Range geomorphic province and not the subsiding Salton Trough. CalEnergy asks that this information be revised.

Comment  
22-12

Paragraph 2 (page 4): The percentage of dissolved salts information in this paragraph is technically incorrect. Hypersaline brines are not found everywhere at depth under the Salton Trough. The hypersaline brines are only found in the northern central 1/3<sup>rd</sup> of the basin where ancient salt and evaporate deposits were located. The southern 1/3<sup>rd</sup> of the basin extending to Mexico, and the northern 1/3<sup>rd</sup> extending into the Coachella Valley are not underlain by hypersaline brines. CalEnergy asks that this information be revised.

Comment  
22-13

Paragraph 5 (page 4): CalEnergy notes that the Imperial County Geothermal Overlay Zones do not include all identified KGRAs. For example, the East Brawley KGRA which is productive but not at economic rates, is not included whereas the Imperial County Geothermal Overlay Zones includes the Westmorland KGRA in which no well capable of production has ever been found. This information seems inconsistent and the section should be completely rewritten. .

Comment  
22-14

**C. Existing Renewable Energy Generation Facilities and Electrical Transmission Corridors**

**Renewable Energy Generation**

Paragraph 1 (page 9): CalEnergy suggests that the 1977 Geothermal Element estimation of 4,500 megawatts of electric generation from geothermal resources be updated to quote more recent estimates. This estimate is over-optimistic, given the data collected since 1977 and not currently accepted by most credible researchers.

Comment  
22-15

### Section III. Goals and Objectives

#### B. Goals and Objectives

##### **Goal 1 - Support the safe and orderly development of renewable energy while providing for the protection of environmental resources.**

Objective 1.3 (page 24): CalEnergy opposes “requiring” the use of directional geothermal drilling and use of drilling islands in irrigated agricultural soils and sensitive or unique biological areas. Geothermal drilling is a highly developed scientific process in which drilling sites, the drilling technology used and the drilling directions planned are determined by extensive research, experience and resource location. Directional drilling is only practical if you are drilling deep enough to make the offset meaningful. In a shallow resource (less than 2,000 feet), it is not functional to directionally drill the wells. CalEnergy would suggest rewording this objective to read as follows:

Comment  
22-16

“Encourage the use of directional geothermal drilling and “islands” when technically advisable in irrigated agricultural soils and sensitive or unique biological areas.”

Objective 1.5 (page 24): CalEnergy objects to the word “require” as it pertains to appropriate mitigation and monitoring for environmental issues associated with developing renewable energy facilities. Appropriate mitigation and monitoring are not defined in this objective, thus leaving the definitions subject to interpretation. Requiring energy developers to adopt undefined methods is counterproductive. CalEnergy would suggest the word “encourage” be substituted for the word “require”.

Comment  
22-17

##### **Goal 3 - Support development of renewable energy resources that will contribute to and enhance the economic vitality of Imperial County.**

Objective 3.1 (page 25): CalEnergy requests that this objective be removed from the Element. CalEnergy considers this is a political objective which had no place in a development plan.

Comment  
22-18

Objective 3.4 (page 25): CalEnergy requests that this objective be removed from the Element. CalEnergy’s bid pricing is proprietary and is not subject to discussion with Imperial County staff. In addition, Imperial County’s operational costs should not be a consideration in bid pricing.

Comment  
22-19

##### **Goal 4 - Support development of renewable energy resources that will contribute to the restoration efforts of the Salton Sea.**

Objective 4.1 (page 26): CalEnergy suggests Imperial County offer incentives, such as an economic development tax rate, for prioritizing the Salton Sea exposed playa for renewable energy development. In addition CalEnergy requests that the Objective be reworded as follows:

Comment  
22-20



"Encourage the development of the Salton Sea exposed seabed (playa) for renewable energy development."

Comment  
22-20  
(continued)

Objective 4.3 (page 26): CalEnergy requests this objective begin with the words "Encourage the development of...."

Comment  
22-21

**Goal 7 – The County will actively minimize the potential for land subsidence to occur as a result of renewable energy operations.**

Objective 7.1 (page 26): CalEnergy objects to "requiring" all renewable energy facilities to include design features that would prevent subsidence and other surface conditions from impacting existing land uses. "Design features" is an ambiguous and highly subjective term, as is the term "other surface conditions". Furthermore, CalEnergy understands that the County does not have significant jurisdictional authority on BLM or Tribal lands, thus the County cannot "require" such activity. CalEnergy suggests that this Objective be reworded as follows or eliminated:

Comment  
22-22

"Encourage all renewable energy facilities, where deemed appropriate, to include design features that would prevent subsidence and other surface conditions from impacting existing land uses."

Objective 7.2 (page 27): CalEnergy objects to the "establishment" of injection standards consistent with the requirements of CDOGGR. Safeguards and standards are already established and in use. Any additional establishment of standards should not be borne by the developers. In addition, any new standards established at the County jurisdictional level may contradict with the standards under which geothermal electric generation plants received their licenses under California Energy Commission jurisdiction. Furthermore, CalEnergy understands that the County does not have the technical in-house expertise to analyze, assess or police such injection standards. Thus, this should not be a requirement of the County. CalEnergy requests this Objective be removed from the Element.

Comment  
22-23

Objective 7.3 (page 27): CalEnergy disagrees with the wording of this Objective. Subsidence monitoring programs are already in place and do not need to be "established". CalEnergy suggests the following wording be substituted:

Comment  
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"Encourage renewable energy facility permittees to monitor subsidence detection in areas affected by permitted project activities in accordance with County requirements."

Objective 7.4 (page 27): CalEnergy disagrees with the wording of this Objective. Monitoring programs for subsidence are already in place and in use by the geothermal industry. This Objective is covered by Objective 7.3 and should therefore be eliminated.

Comment  
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