

Letter
X20

From: Kazner, Gregory
To: Kelly, Beau
Cc: Rozalin, Rozalin; Amanda, Alekszulin
Subject: FW: CLMPG, formal comments, San Diego County Climate Action Plan
Date: Monday, October 2, 2017 10:39:32 AM
Attachments: CLP comment letter CLMPG.pdf

Can you please review this late letter and give me a call when you have a second? Thanks!

Greg Kazner, Land Use/Environmental Planner
County of San Diego | Planning & Development Services| Project Planning
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-----Original Message-----

From: De La Rosa, Michael
Sent: Monday, October 02, 2017 10:12 AM
To: Kazner, Gregory <Gregory.Kazner@sdcounty.ca.gov>
Cc: Kopaskie, Mary <Mary.Kopaskie@sdcounty.ca.gov>; Soffel, Maggie <Maggie.Soffel@sdcounty.ca.gov>; Talleh, Rami <Rami.Talleh@sdcounty.ca.gov>
Subject: FW: CLMPG, formal comments, San Diego County Climate Action Plan

Here you go

-----Original Message-----

From: BillieJo Jannen [<mailto:jannen@slashmail.org>]
Sent: Saturday, September 30, 2017 4:20 PM
To: De La Rosa, Michael
Subject: CLMPG, formal comments, San Diego County Climate Action Plan

Attached

X20-1

Response to Comment Letter X20

Campo Lake Morena Community Planning Group
Billie Jo Jannen, Chairman
October 2, 2017

X20-1 The comment provides introductory remarks and introduces the topics presented in subsequent comments within the body of the comment letter. No further response is required.

From: Billie Jo Jannen, Chairman,
 Campo Lake Morena Community Planning Group

To: Michael de la Rosa, Group Program Manage
 San Diego County Planning and Development Services

September 15, 2017

Re: Campo Lake Morena Planning Group comments Draft Climate Action Plan

Dear San Diego County Officials and Staff:

These are our formal comments on the current draft of the county's CAP project. To summarize the detailed comments below: While there are many good ideas in the draft, the collection of formal comments -- and public outreach in general -- are severely lacking. In addition, many of the suggested initiatives fail to account for limitations and general conditions in rural communities, and would create an unequal burden on rural residents struggling to comply.

Chapter 6: Public Outreach and Engagement

Planning groups received only a notification that the plan was released. When asked to attend a meeting and present/answer questions, staff refused, stating that **no planning group presentations were planned or would be provided**. The public meeting nearest to the backcountry was in Alpine, which would force backcountry residents to travel 40-plus miles one way to attend. And that's assuming they even know the meetings are taking place. How would they when staff has focused most of its efforts on moneyed special interests in town?

A later plan -- offered after I pointed this out -- is to present to the chairmen alone at a morning meeting many miles away from the affected communities. This forces chairmen to become the presenters in their communities, whether they know the material or not, and will likely result in very limited comment response from community groups. This entirely fails to honor the purpose and value of planning and sponsor groups, which were created to provide local input on important planning issues like this one.

I would direct your attention to **pages 9-13 of the county's Policy I-1**, which explains the role of staff and planning/sponsor groups when making amendments to community and regional plans. This plan proposes multiple amendments to community and regional plans. I posit that **the county is in violation of its own policy** in failing to properly consult planning/sponsor groups, as laid out in the I-1. This becomes even more important, when you consider that the county intends to force changes to a number of community plans to fit the CAP and CREP. It has already done so in Boulevard, setting the stage for catastrophic changes in the community.

None of the planned meetings provide anything beyond information. No formal comments were, or will be, gathered at any of the public meetings. Residents are on their own to figure out the comment process and try to wade through two massive documents in time for the comment deadline of a mere 45 days.

1 of 7

X20-1
 cont.

X20-2

X20-2

The comment expresses frustration with the outreach process that was employed to engage community planning groups and suggests that the 45-day public review period was too short to review both the CAP and Draft SEIR. The commenter also requests an extension to the comment period.

The County values the feedback provided by community planning groups and as such held meetings open to any member of the public on September 7, 2017 at the Alpine Branch Library, on September 12, 2017 at the County Operations Center, and at the North Inland Live Well Center on September 13, 2017. The County respectfully disagrees that no planning group presentations were planned or would be provided. The County held a separate meeting for community planning group chairs on September 9, 2017 at the County Operations Center. This meeting was held on a Saturday morning to accommodate typical working schedules. In addition, the County answered questions from those in attendance to facilitate an understanding of the CAP and where information can be found within the documents released for public review. PDS staff also encouraged the chairs or vice-chairs present to have members within the community planning groups contact staff with any questions or comments on the Draft CAP or Draft SEIR.

The County respectfully disagrees that it did not comply with Policy I-1. PDS Staff contacted all planning group chairs via email and phone to inform of the meetings that were being held, made a detailed presentation, and answered questions as they were posited.

The comment also states that the County intends to force changes to a number of community plans to fit the CAP and CREP and that the County has already done so in the Boulevard community. It is not clear what the commenter is specifically referring to as the Boulevard community is within the Mountain Empire Subregional Plan. This plan was adopted in 2011 as part of the General Plan Update. The CAP does include GHG Reduction Measure T-1.3, Update Community Plans. This measure would update 19 community plans by 2030. The updates would incorporate a balanced approach to

housing, jobs/economic development, services, and infrastructure needs. They would also achieve mixed-use and transit-oriented development within existing village centers.

The comment also states that none of the planned meetings provide anything beyond information and that no formal comments were gathered at any of the public meetings. This is incorrect. While the County did not record verbal comments, the County accepted written comments at any of the aforementioned meetings, as they were held during the public review period and the County did not want to misrepresent any verbal comments received during the meetings.

Finally, the comment expresses frustration with the 45-day public review period for the Draft CAP and Draft SEIR. Section 21091(a) of the CEQA Statute sets forth the applicable public review period for Draft EIRs.

The public review period for a draft environmental impact report shall not be less than 30 days. If the draft environmental impact report is submitted to the State Clearinghouse for review, the review period shall be at least 45 days, and the lead agency shall provide a sufficient number of copies of the document, in either a hard-copy or electronic form as required by the Office of Planning and Research, to the State Clearinghouse for review and comment by state agencies.

The Draft EIR was circulated for review for 45 days, in compliance with CEQA. The comment will be included in the administrative record and provided to decision makers for consideration.

Unfortunately, this timeline gave our group only enough time to get through the CAP, with no time available for anyone to slog through the DEIR

Please extend the comment deadline on both the CAP and its DEIR and remedy the failure to seek formal input from planning groups, as outlined in county policy.

Chapter 2: Greenhouse Gas Emissions Inventory, Projections and Reduction Targets

Under-reported emissions from clearing

Electricity emissions exclude most of the releases from clearing for industrial-scale wind and solar, causing the electricity emissions portion of both the CAP and the DEIR to be grossly under-reported. This is overlooking many tons of CO2 being released in the name of reducing CO2 emissions. Researchers – many of them local to Southern California and San Diego County - have studied and quantified the amounts of carbon sequestered in soil and vegetation. The carbon sequestered in soil often far outweighs that found in surface vegetation and is permanently destroyed when heavy equipment is brought to bear.

Staff assigned to the CAP project has informed CLMPG that soil sequestration is too new a concept to allow it to be included in GHG calculations, so only surface vegetation is counted in the required assessment. **We reject this reasoning.** The fact that the ponderous state process has failed to provide a complete tool, is no reason for county staff to neglect consulting with the scientists who have been working for at least a decade on soil sequestration accounting (see “Supporting Information” below my signature).

If retention of GHGs is substantial enough, natural sequestration may actually be a more economical route to achieve a solid reduction in atmospheric GHGs than sacrificing that capacity for the sake of hundreds or thousands of acres of expensive industrial-scale renewables. Ignoring this is inexcusable, especially when the county is considering a renewable energy overlay that would displace hundreds of acres and thousands of tons of sequestered carbon.

Sequestration information is valuable for decision makers and should be covered in detail in the CAP, the CREP and individual project EIRs.

No assessment of real carbon costs in either the CAP or the DEIR

The report attributes projected reductions over 30 years to “cleaner electricity generation, improved energy efficiency in buildings, and more fuel efficient vehicles,” essentially assuming these benefits, rather than quantifying them.

In fact, the GHG release for plug-in cars may be greater than if drivers continued to run high efficiency gasoline engines. (See “Supporting Information”) The carbon savings of electric cars depends on the source of the electricity used to charge them. If it comes from a fossil fuel generator, you have saved nothing.

In addition, the cradle-to-grave carbon costs of wind turbines are ignored. The report blithely adopts the politically correct assumption that electric cars and wind turbines will automatically be less carbon and pollution intensive, while scientists in the field are finding that this may not necessarily be so. (See “Supporting Information”) Ask the Chinese

X20-2 cont.

X20-3

X20-4

X20-5

X20-6

X20-3 The commenter expresses concern that the Final CAP and the Final SEIR exclude GHG emissions from vegetative and soil carbon losses from clearing because of industrial-scale wind and solar. Please refer to Master Response 11 regarding carbon sequestration lost from removed vegetation and disturbed soil because of development of large-scale renewable energy generation and why carbon storage and sequestration were excluded from the CAP inventory and forecasts. The comment will be included in the administrative record and provided to decision makers for consideration.

X20-4 The comment states that the projected GHG reductions are assumed rather than quantified. The County disagrees with this statement. As shown in Appendices A and C of the CAP, three different emissions projection scenarios are quantified: business-as-usual, legislative-adjusted, and legislative-adjusted with CAP measures. These projections are based on adopted state and federal regulations (e.g., Renewable Portfolio Standard, Senate Bill 350, Corporate Average Fuel Economy standards, and the Advance Clean Car regulations) as well as population growth trends from SANDAG and the County. Appendices A and C of the CAP explain the assumptions and calculations of the projections in detail. The comment will be included in the administrative record and provided to decision makers for consideration.

X20-5 The comment expresses concern that plug-in electric vehicles (EV) may generate more emissions than high efficiency gasoline engines especially when the source of electricity is based on fossil fuels. San Diego Gas and Electric (SDG&E), the utility that serves the San Diego Region, has a renewable mix of 43% as of 2016 (CEC 2016). That means that 43% of the electricity procured by SDG&E comes from eligible renewable sources, which include solar, wind, biomass, geothermal, and small hydroelectric sources. As part of SDG&E compliance with the State’s Renewable Portfolio Standard, SDG&E is on contract to reach a 46% renewable mix by 2020. Thus, nearly half of the electricity that would supply EVs in the San Diego region would be renewably sourced. Also, as shown in final Appendix C of the CAP under the quantification of GHG Reduction Measure T-3.5, a new measure added to the Final CAP, emissions from EVs are estimated to be four times less than emissions from their gasoline vehicle equivalents by 2030. Please refer to Appendix C of the CAP for the calculation

assumptions. GHG Reduction Measure E-2.1 proposes to achieve 90% renewable electricity for the unincorporated county by 2030, and an alternative evaluated in the Final SEIR would achieve 100% renewable electricity by 2030. Therefore, the CAP would ensure that the majority of electricity consumed in the unincorporated county would be from renewable sources. The comment will be included in the administrative record and provided to decision makers for consideration.

X20-6 The comment expresses concern that the CAP ignores the life-cycle carbon emissions associated with wind turbines, especially with rare earth mining for turbine materials, and provides a list of links to websites, articles, and studies. As described in response to comment O5-7 an analysis of life-cycle emissions would be speculative under CEQA. The 2009 amendments to the CEQA Guidelines removed the term "life-cycle" because "no existing regulatory definition of life-cycle exists" (California Natural Resources Agency Final Statement of Reasons for Regulatory Action: Page 71). The California Natural Resources Agency acknowledged that even if a standard definition of the term "life-cycle" existed, requiring such an analysis may not be consistent with CEQA. As a general matter, the term could refer to emissions beyond those that could be considered "indirect effects" of a project as that term is defined in section 15358 of the State CEQA Guidelines. This comment will be included in the administrative record and provided to decision makers for consideration.

farmers whose land and communities were destroyed by rare earths mining for U.S. turbines how “clean” renewable energy is (See “Supporting Information”). While the plan acknowledges that emissions are a global impact – and not just a local one - it utterly ignores the nature and magnitude of those same global impacts.

Everything that staff has produced on construction of renewable energy fields has ignored and glossed over the real and permanent impacts of using wildlands in this manner. Programmatic EIRs for zoning overlays, the 2012 wind turbine policies, and now this one, float over the environmental issues with the promise that all projects will be thoroughly examined on an individual basis. The 2012 Wind Energy EIR, even goes so far as to claim that some large wind turbine projects would not violate any air quality standards or contribute substantially to an existing or projected air quality violation because of their size (CAP PEIR, page 2.3-29). At the same time, project review regulations continue to give wind turbine developers a pass on part of the impacts.

Please include cradle-to-grave pollution costs when assessing industrial-scale renewables, both in this project and in proposed private-sector projects. Please do more accurate accounting on the value of electric cars.

Incomplete information on small producers/distributed generation
 The report considered only usage under the records of a single supplier. Self-generation from non-industrial, privately owned systems (distributed generation) is not quantified. Without quantification, the GHG savings of renewables built into new and existing housing and commercial projects cannot be properly understood by planners. If it’s not properly understood by planners, then no one has any way of knowing what it will take to get to the goals outlined in the CAP.

The report should offer better analysis on local generation in areas where it will minimize both transmission losses and destruction of sequestration in currently undisturbed areas. The capacity for small-scale solar and wind generation in cities and suburban sites hasn’t even begun to be tapped. This has been largely ignored in favor of preserving a business model of energy generation and distribution that hasn’t changed since it was established in the late 1800s.

Please quantify past growth of small-generation capacity, project its expected growth over time, and design policy/regulations to take advantage of this asset.

Transmission losses from distant wind and solar fields are ignored. Excess generation required to replace long-distance transmission losses is not acknowledged or addressed. As industrialized energy generation in ever more far-flung locations increases, these transmission losses will also increase. How can these losses be mitigated when no one has even bothered to try to quantify them?

Please provide a realistic assessment of transmission losses.

Chapter 3: Greenhouse Gas Reduction Strategies and Measures

During the 2016 workshop conducted with planning and sponsor group chairmen when the new CAP was being started, staff received a great deal of detailed input from rural

X20-6
cont.

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X20-9

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X20-7

The comment expresses concern that the Draft SEIR did not address the impact of renewable energy projects on wildlands. Please refer to Master Response 11 which addresses lost carbon sequestration from removed vegetation and disturbed soil because of development of large-scale renewable energy generation projects pursuant to the CAP. The comment is correct in stating that a programmatic evaluation of large-scale renewable energy facilities cannot determine with certainty the outcomes of any individual project because of the uncertainty regarding location, topography, existing habitat, etc. Therefore, as stated throughout the Draft SEIR, future large-scale renewable energy projects would be required to obtain a Major Use Permit and would be required to undergo a thorough environmental review at the time of discretionary application which would examine the environmental impacts of individual projects. At any rate, the Draft SEIR appropriately disclosed the likelihood of significant and unavoidable impacts for most issue areas because of the inability to determine whether individual future projects could mitigate all significant impacts. Please see Master Response 10 which describes the use of a programmatic EIR.

The comment also requests that a “cradle-to-grave” pollution cost be included for large-scale renewables. An analysis of life-cycle emissions would be speculative under CEQA. The 2009 amendments to the CEQA Guidelines removed the term “life-cycle” because “no existing regulatory definition of life-cycle exists” (California Natural Resources Agency Final Statement of Reasons for Regulatory Action: Page 71). The California Natural Resources Agency acknowledged that even if a standard definition of the term “life-cycle” existed, requiring such an analysis may not be consistent with CEQA. As a general matter, the term could refer to emissions beyond those that could be considered “indirect effects” of a project as that term is defined in section 15358 of the State CEQA Guidelines.

The comment also requests more accurate accounting on the value of electric cars but did not specify the type of value meant by the comment. Assuming that the commenter meant to request a life-cycle analysis of electric vehicles be included in

	<p>the CAP or Final SEIR, refer to the previous discussion regarding life-cycle analysis under CEQA. This comment will be included in the Final SEIR and provided to decision makers.</p> <p>X20-8 The comment requests that the County quantify the GHG savings associated with self-generation of renewables in new and existing housing and commercial projects. GHG reductions from private operation of renewables on new and existing housing and commercial projects are already included in the quantification of GHG Reduction Measures E-2.2 and E-2.3, and, starting in 2030, includes GHG Reduction Measure E-1.1. The quantification of these measures can be found in Appendix C of the CAP. Although, the quantification of these measures mentions solar electricity generation, the language of the measures does not limit renewable generation to be from solar generation only. For renewable generation in existing buildings as of 2014, the benefits from those operations are already included in the baseline electricity usage in the county, which would have been higher if not for those operations. The Final SEIR incorporates the Wind Energy Ordinance EIR throughout each topic, and recognizes that the County's Renewable Energy Ordinance provides streamlining benefits for installation of small solar systems which will continue to encourage the installation of such systems. See also Section 4.2.5 of the Final SEIR for a discussion on the distributed generation alternative which references and summarizes the best available data regarding the availability of rooftop space for privately-owned residential and commercial properties. This comment will be included in the Final SEIR and provided to decision makers.</p> <p>X20-9 The comment expresses concern that the Final SEIR does not address transmission losses from wind and solar fields and requests that the County provide an assessment of transmission losses. Transmission losses are accounted for in the quantification of electricity consumption and associated emissions, as discussed in Section 4.2.1 of Appendix A of the CAP. Also, according to a 2017 report by the California Public Utilities Commission, approximately 4.66% of SDG&E generated electricity is lost through transmission losses as of</p>
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2015. In California, the average percent loss in 2014 was 6.58% with an overall declining trend in losses as utilities continue to upgrade aging infrastructure and remedy system inefficiencies since 2009 (CPUC 2017a). This trend in transmission losses includes both typical natural gas power plants and renewable energy sources, the latter of which accounted for over 40% of SDG&E's power mix in 2016 (CPUC 2017b). Although only affecting a small percentage of total electricity generated, the effect of transmission losses on total electricity demand will be included in the Final SEIR. Because the electricity emissions factors already account for transmission losses, the inclusion of transmission losses in the Final SEIR will not change the quantification of the CAP's GHG estimates.

X20-10 The comment expresses frustration that the input that was provided by community planning groups at the outset of the CAP process was not included in the Final CAP. The commenter states that the CAP takes a one-size-fits-all approach to policy recommendations, but the comment does not provide specific recommendations regarding how any of the CAP's strategies or measures could be included. Therefore, a specific response cannot be provided. Please see Master Response 9 regarding measures selection. This comment will be included in the Final SEIR for decision makers.

chairmen, but little of it appears in the report. The report takes a one-size-fits-all approach in its policy recommendations and little effort was made to assess how they could be implemented in far-flung communities.

X20-10
cont.

For example, forcing clustered “village” style development on low-density rural communities can be expected to create MORE emissions, as communities that don’t have the population to support businesses will still shop down-mountain -- and so will the hundreds of new residents plopped down in homes that are 40 to 50 miles from stores and jobs. In these cases, slow growth is the better option for keeping GHG emissions down.

X20-11

Another example: mass transit is virtually non-existent in the backcountry, and the rural service is prohibitively expensive. Most backcountry people do not use bikes or foot travel to get to stores or work, due to distances. Assumed reductions in the report won’t come from rural communities and it is misleading to imply that they will.

X20-12

Please revise the report, proposed regulations and PEIR to account for the massive differences between regulatory affects in rural and urban communities.

Water and gas pressure for on-demand hot water

The report calls for new regulations that force people to switch to tankless water heating. This might work in town where water and natural gas are delivered at standardized pressures and volumes. Thousands of residents outside of the county water authority line do not receive water at a standardized pressure and do not have access to natural gas. Many use gravity feed systems, which may not achieve the pressure needed for on-demand systems to operate properly. This regulation could force thousands of people to install additional expensive pressure-boosting equipment in order to comply.

X20-13

Please rewrite this policy to clarify exceptions for people who are unable to comply with it due to water pressure and lack of natural gas. Please consult directly with affected communities to identify other areas where compliance would be a disproportionate burden.

The benefits of distributed generation are underemphasized in this plan’s regulatory changes, costing taxpayers/ratepayers millions every year

Poor choices in strategies benefit no one but the power industry, which will continue to have its obsolete business model shored up by local regulation. **The CAP delays implementation of electricity generation on new housing by two years, and that for commercial construction by 12 years.** Why? We could almost entirely offset usage due to population increases, providing a steady increase in renewable generation *without disturbing soil and vegetation to build industrial generation capacity.* Delaying this can only deprive us of thousands of kilowatt-hours of electricity per year. Onsite generation by new housing and commercial projects would reduce transmission losses drastically, since excess energy need be shipped no further than the neighbors’ homes and businesses.

X20-14

The county should immediately require that all new subdivisions must construct on-site renewable generation equal to the expected needs of the subdivision’s homes and cars. A similar requirement should be placed on commercial and industrial permits.

X20-15

X20-11 The comment expresses concern that forcing clustered “village” style development on low-density rural communities would result in greater GHG emissions because new residents would be forced to drive further to services. The County disagrees with the commenter on two points. First, clustered “village” development has demonstrated GHG emissions reductions in many cases because of co-locating residents, jobs, and commercial and civic services in close proximity. Please see Master Response 5 for additional information. Secondly, the CAP is not a land use plan, it is a greenhouse gas reduction plan, and therefore does not propose to directly increase density as the commenter suggests. The “villages” land use plan was adopted in August 2011 as a result of the completion of the County’s General Plan Update. The CAP itself will not directly change, increase, or result in additional density because of its adoption.

X20-12 The commenter asserts that the CAP misleadingly implies high GHG reductions related to mass transit, bicycle, and pedestrian travel in the backcountry. The County disagrees with the assertion that high reductions are assigned to the backcountry related to mass transit and other alternative modes of transportation. There are no reductions assigned related to mass transit in the backcountry. In fact, the County’s analysis is in-line with the commenter’s assertion. The County acknowledges in the CAP that the nature of the unincorporated county is low-density development that is not conducive to non-driving trips. Trip distances are longer in the unincorporated county because of this low-density nature and intervening distance between land uses. The County’s jurisdiction covers rural and semi-rural lands, along with suburban areas, many of which have limited transportation options and are served by limited transit. Thus, proposed transportation measures in the CAP focus on reducing VMT through improved design of development, infrastructure improvements, travel demand management programs, parking code revisions, and alternative fuel use. While the nature of trips will likely continue to be personal vehicle based, the fuel source and emissions factors of those trips can be modified by

	<p>switching to renewable sources including electricity. GHG Reduction Measures in the CAP are applied countywide and disproportionately higher reductions are not expected from the backcountry.</p> <p>X20-13 The commenter expresses concern regarding the effect of the water heater requirement under GHG Reduction Measure E-1.2 on the water pressure in rural areas that receive water and below standardized pressure and do not have access to natural gas. GHG Reduction Measure E-1.2 has been revised to remove “natural” from the description of the gas-powered tankless water heaters, so that residents and businesses would not be forced to use natural gas where there is no natural gas connection. This allows the proposed tankless water heater replacements to be powered by propane or other natural gas alternative. With respect to the comment’s concern over the effect of the measure on water pressure, tankless water heaters need to be properly sized to the available water pressure to work properly. Because tankless water heaters work by heating water in line with existing plumbing, water heaters that are not sized for the existing flow rate and water pressure may result in decreased water pressure at the outlet and will not work properly. The current market of tankless water heaters can support a minimum pressure of two pounds per square inch, depending on the brand and application. In addition, the measure allows homeowners the option to choose from solar, electrically-powered or tankless gas water heaters. If a tankless system is not feasible for a location based on water pressure or other factors, homeowners have the option to install a solar- or electrically-powered system. Alternative allowable new water heaters can include solar water heaters, tankless and storage electric water heaters, electric heat pump systems, and tankless gas water heaters.</p> <p>X20-14 The comment expresses concern that the CAP does not include policies to support distributed generation. The County notes that the Draft SEIR evaluated a Distributed Generation Alternative that was subsequently rejected because of infeasibility. Please refer to Draft SEIR pages 4-9 through 4-10.</p>
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X20-15 The commenter suggests that the County should implement a policy that requires all new subdivisions to construct on-site renewable generation that is equal to the needs of both homes and cars, and should extend this requirement to commercial and industrial uses. The County acknowledges this comment. The CAP includes several GHG reduction measures that would improve the energy efficiency of new development, as well as increase access to renewable electricity throughout the unincorporated area. Please refer to GHG Reduction Measures E-1.1, E-2.1, and E-2.2. Please also refer to Master Response 9 regarding the selection of measures.

*Please rewrite proposed regulations to **immediately** require 100 percent on-site energy generation in all new subdivisions, commercial projects and industrial projects.*

Excess generation needed to replace long-distance transmission losses from renewable energy is not properly quantified or mitigated in either the CAP or DEIR.

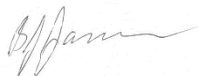
Measure E-2.1 in the supplemental EIR requires 90 percent renewable energy in the unincorporated area by 2030. In San Diego County, industrial scale renewable energy is generated in fields far from its users. The energy bypasses local users, and is transported to town. It is then transported back out to users many miles away -- some, ironically, located adjacent to wind and solar farms.

The report never even mentions transmission losses, which can be substantial – as much as 40 percent – and could render pointless the vast amounts of money, greenhouse gas releases, and relentless rate increases associated with industrial-scale renewables. When generation is located so many miles from the majority of end users, it adds millions annually to the cost of providing electricity. **Placing an energy generation overlay on distant sites guarantees that this waste will continue and increase, when we should be decreasing energy waste.**

Glossing over the substantial element of transport losses in the CAP and DEIR is a blot on the report's credibility and counters the benefit of the millions spent on energy-saving upgrades in thousands of homes. How can county staff claim that its plan reduces GHGs when it doesn't even know how much is being wasted in transport versus how much could be saved if generation were taking place in the neighborhoods where it is needed?

Please do a correct and full assessment of real carbon costs of wind, solar and natural gas generation and transmission and write regulations that fit the facts.

Sincerely



Billie Jo Jannen

CC:
District 2 Supervisor Dianne Jacob, Chairman, San Diego County Board of Supervisors
Leon Brooks, Chairman, San Diego County Planning Commission

X20-15
cont.

X20-16

X20-16 The comment expresses concern that the CAP and EIR do not address excess generation needed to replace long-distance transmission losses from renewable energy. Please see the response to comment X20-9. The comment also requests that the County assess the “real” carbon costs of wind, solar and natural gas generation and transmission and write regulations that “fit the facts.” Assuming the commenter is referring to performing life-cycle assessments related to renewable energy, please see the response to comment X20-6. With respect to the regulations that would follow the CAP, the comment will be included in the Final EIR and made available to the decision makers prior to a final decision on the project.

Supporting Information

Every industrial renewable project we have seen in Southern California sports vast tracts of desertified soils that have lost their ability to hold carbon and nitrogen. Researchers have been reporting for over a decade on the long-misunderstood capacity of arid and semi-arid systems to hold on to nitrogen- and carbon-based gases. In fact, semi-arid soils can hold substantial carbon and nitrogen – often more than the surface vegetation.

www.californiachaparral.com/images/Luo_et_al_Chaparral_as_carbon_sink_2007.pdf
<http://ag.arizona.edu/oals/ALN/aln49/lal.html#desertification>

Soil microbes and vegetation substantially increase the amount of carbon that arid soil holds onto in response to increased amounts of carbon.

<http://phys.org/news/2014-04-arid-areas-absorb-unexpected-amounts.html>

Unimpaired natural systems will not only hold the carbon they have, but will hold even more in future, making them an irreplaceable GHG-buffering resource.

www.currentscience.ac.in/Volumes/106/10/1357.pdf

Once degraded, soil is unlikely to regain its ability to sequester GHGs. Surface landscaping does not replace the naturally evolved plants and microbes.

<http://onlinelibrary.wiley.com/doi/10.1111/geb.12957/abstract>

X20-17

Wind and water erosion on compacted and stripped off lands removes the finer particles needed for effective sequestration.

<http://citeseerx.ist.psu.edu/viewdoc/download;jsessionid=D4A41F4B3C9A972A5610DA CD64AECA27?doi=10.1.1.493.3931&rep=rep1&type=pdf>

Energy developments usually use rated (nameplate) capacity, rather than efficiency capacity, to describe their projects. However, projects will never produce to nameplate capacity. The public is given the impression that it's receiving (for example) 10 megawatts, when in reality, it's getting 3, and the other 7 are coming from a fossil fuel peaker plant:

<https://www.eia.gov/tools/faqs/faq.cfm?id=101&t=3>

www.eia.gov/totalenergy/data/annual/pdf/sec17.pdf

Explanation and calculations for transmission and distribution losses can be found on several websites. For example:

<http://electrical-engineering-portal.com/total-losses-in-power-distribution-and-transmission-lines-1>

<https://www.eia.gov/tools/faqs/faq.cfm?id=105&t=3>

The greenhouse gases and dirty pollutants released in mining, smelting, transport and casting the materials for turbines and solar panels measures in thousands of tons, while rare earths mining and processing is outright catastrophic:

<http://web.mit.edu/12.000/www/m2016/finalwebsite/problems/environment.html>

http://e360.yale.edu/feature/boom_in_mining_rare_earths_poses_mounting_toxic_risks/2614/

X20-17 The comment provides links to many online sources that support the commenter's views. The responses above adequately address the comments included.

Well-designed gasoline engines are producing fewer GHGs than electric cars.
<http://www.windtaskforce.org/profiles/blogs/comparison-of-energy-efficiency-and-co2-of-gasoline-and-electric>

Achieving the oft-stated goal of getting 20 percent of U.S. electricity needs from wind by 2030 would require a total expenditure of more than \$850 billion. Yet, the likely carbon-dioxide savings from that expenditure would be just 2 percent of global emissions in 2030.
www.manhattan-institute.org/pdf/ib_11.pdf

A collection of renewable energy reports by scientists and engineers who specialize in energy efficiency and greenhouse gas reduction methods:
http://www.coalitionforenergysolutions.org/research_and_reports.html

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cont.