MOJAVE COMMUNITIES CONSERVATION COLLABORATIVE

Ph 760-985-8744 | **Fax** 760-247-0172
P.O. Box 2397, Apple Valley, CA 92307
www.MojaveC3.org

August 4, 2014

California Energy Commission
Dockets Office, MS-4
Re: Docket No. 14-IEP-1C
1516 Ninth Street
Sacramento, CA 95814-5512

Dear Workshop Participants:

The Mojave Communities Conservation Collaborative (MC^3) is opposed to the Southern California Edison's Coolwater Lugo Transmission Project (CLTP). There is strong opposition by the local citizens against this project, and there will be economic impacts from the resultant flood of renewable energy projects that have the potential to cripple businesses. Studies show that property values will decrease between 5 – 40% depending upon proximity to the transmission lines. The CLTP (formerly South of Kramer) project has been deemed prohibitively expensive [1] and is under protest by the CPUC's own Office of Ratepayers Advocates. Renewable energy achieved in this manner will cost hundreds of millions of dollars that California ratepayers will be forced to pay.

A myriad of industrial scale renewable energy projects are lurking, just waiting for CLTP to be built so they can execute their Interconnection Agreements, sign their Power Purchase Agreement , build their huge generation projects, and transmit that energy (primarily) to Los Angeles. There are currently over 40 projects in cue at various stages of the review/approval process intended for construction in our area alone. That is **before** any transmission project is built. There must be proper planning done to optimize the most efficient form of renewable energy and consideration made to foresee and prevent significant long term impacts. Currently there is a solar project in Lucerne Valley called Mojave Solar. It is a 200 acre disaster. This project has used approximately 13,000,000 gallons of construction water in the middle of a drought and it is not even finished yet. That is just ONE project. There are over 40 proposed for our desert. David Crane, President and CFO of NRG energy has said: The whole approach of covering vast swaths of desert in solar panels and piping the energy hundreds of miles through high-voltage transmission lines "was stupid in 2008 and its stupid today." Rather, the key advantage of solar is that it can cover houses and buildings and car parks and other urban structures enabling them to generate their own power.[2]

SCE purports CLTP is necessary to transmit the power from the Harper Lake Abengoa Solar Thermal project into the grid, but there is an alternative. That alternative is the AV Clearview Transmission Project proposed for the Lancaster area. This project has a shorter construction period, will optimize solar fields in fallow agricultural land and implement rooftop solar as well as provide transmission for the Abengoa Solar Project. The citizens and the city of Lancaster are working together for a mutual goal to achieve a successful renewable energy plan and to provide the area a much needed economic stimulus. Economically the AV Clearview Project is a much more ***cost effective solution* for the State of California**. We contend that a proper transparent analysis should include consideration of a less expensive viable alternative before a $950,000,000 transmission project is approved to be paid for by ratepayers over the next 30 years.

If we are to meet or exceed Governor Brown's energy goals, Distributed Generation (DG) is a sound answer. DG will enable us to build the generation solar projects on the rooftops in ***the location of the load base*** and effectively eliminate the costly process of expensive upgrades to the grid, along with the loss of power through that transmission as it is sent miles and miles away to be used in the urban cities. The City of Lancaster is setting the example of not **IF** it can be achieved, but **HOW.** Working with community input this City is setting the bar on how to achieve a successful renewable energy plan and will be among the first to achieve Net-Zero status.

Our deserts will take hundreds of years to recover, (if ever) from the impacts of these industrial scale renewable energy projects. The sheer existence of CLTP and the proximity of its 160 acre substation will pre-determine where future industrial scale renewable energy projects will be built, precluding any long-term planning or resource management. Let us not act in haste to embrace this new solution only to find that without thorough long-term resource management and proper proactive planning, the "*new solution*" only created more significant permanent impacts to our social, economic and environmental well-being than we could ever have imagined.

In California's rush to embrace alternative/renewable energy these behemoth projects if approved will be permitted to impact our desert, our quality of life, our economic, environmental and social well-being and our ability to be able to pass that forward to our future generations. ***Please help us preserve one of the unmentioned endangered species: The Rural Living Community.***

Sincerely,
Lorrie L. Steely, Founder

1. P. 5 Jan 11, 2013 Comments on Proposed Renewable Resource Portfolios for the 2013-14 Transmission Process R.12/R.11-05-005, Submitted by City and County of San Francisco; attached
2. Compilation of comments from David Crane, distributed with permission.

Comments on the Proposed Renewable Resource Portfolios for the 2013-14 Transmission Planning Process (R.12-03-014 / R.11-05-005)

Submitted by
City and County of San Francisco
January 11, 2013

Consistent with the December 7, 2012 "Notice of Joint California Energy Commission [(CEC)] and California Public Utilities Commission [(Commission)] staff Workshop on renewable resource portfolios for the California ISO Transmission Planning Process", the City and County of San Francisco (City) respectfully submits these comments on the proposed renewable resource portfolios presented during the December 19, 2012, joint Commission and CEC workshop.

The City appreciates the efforts of Commission and CEC staff in holding the workshop, presenting the scenarios, and soliciting comments from stakeholders. The City is concerned that staff indicated there would likely be no changes to the proposed renewable resource portfolios as a result of these comments due to a tight schedule for submitting the portfolios to the California Independent System Operator (CAISO). The portfolios presented at the December 19 workshop need to be changed in order to correct flaws in the scenarios and ensure least-cost resource planning that meets the requirements of the Renewable Portfolio Standard (RPS). Moreover, if the transmission planning process is to have any credibility, the comments of stakeholders need to be reflected, even if that requires modifying the schedule.

The City participated actively during the track 2 phase of R.12-03-014, where the Commission developed standardized planning scenarios to be used for the purpose of analyzing system operational flexibility. In that context, the City emphasized four points, which are equally applicable to the portfolios presented at the December 19 workshop:

1. Transmission costs in California are growing at an unprecedented rate.

2. Scenarios developed for the purposes of planning must present clear transparent cost information so that any benefits of a particular scenario can be weighed against their costs; moreover, it is essential to include a cost constrained scenario in any analysis.

3. Lax criteria for including projects in the commercial interest scenario have the effect of indicating a need for expensive transmission facilities that are not, in fact, needed.

4. The process for development of planning scenarios and Commission input into the CAISO transmission planning processes must be more transparent and provide adequate opportunity for input by stakeholders, particularly consumer advocates.

The importance of these previously stated points is glaringly obvious in the scenarios presented at the December 19 workshop, which demonstrate that there is no need for additional expensive transmission capacity in the Kramer CREZ and the Imperial CREZ (such as the Coolwater-Lugo project—estimated to cost $542 million, and the West of Devers project—estimated to cost $650 million). No additional transmission capacity in the Kramer CREZ and the Imperial CREZ is shown to be needed in a cost-constrained scenario,[1] the environmental scenario and the high distributed generation (DG) scenario. Where both minimizing costs and minimizing environmental impacts lead to the same result, there is little justification to choose a different path. Moreover, there is ample transmission capacity available to achieve the State's 33% RPS goals without expensive new projects in the Kramer CREZ and the Imperial CREZ.

The City strongly supports the RPS, and recognizes that the State's ambitious environmental goals can only be achieved if the Commission, the key agency charged with assuring reasonable rates, aggressively ensures that the goals are achieved in a least-cost manner. Similarly, the CEC should remain attentive to the cost-consequences of alternatives. The Little Hoover Commission recently highlighted the lack of attention to minimizing costs in a December 2012 report (Rewiring California: Integrating Agendas for Energy Reform)**.** It is imperative that the Commission and CEC restore focus on costs, correct the flaws in the proposed scenarios and provide for planning transparency.

1. Transmission costs are growing at an unprecedented rate.

The City's concerns stem from the unprecedented growth in transmission costs in the last ten years. Over this period, just the High Voltage (HV) portion of the CAISO-wide Transmission Access Charge (TAC) has gone up from $1.40/MWh in 2001 to $6.80/MWh in 2012, and it is expected to increase to nearly $17/MWh by 2020 based upon the CAISO's transmission plan to meet the requirement for a portfolio comprised of at least 33 percent renewable energy by 2020 under the RPS. The projected HV TAC increase is primarily

[1] City consultants modeled this scenario using the Commission's RPS Calculator since Commission and CEC staff declined to present such a scenario.

attributed to nearly $8 billion of transmission upgrades to accommodate renewables. The commercial interest scenario, presented at the workshop as the base case in lieu of a cost-constrained scenario, erroneously indicates the need for additional expensive transmission capacity in the Kramer CREZ and the Imperial CREZ, such as the Coolwater-Lugo and the West of Devers projects, which combined comprise $1.2 billion of the $8 billion noted above. (This assumes the current estimates will hold, whereas transmission projects have typically been significantly more expensive than originally estimated.)

The renewable resource portfolios are being developed to feed into the CAISO transmission planning process and are considered by the CAISO in identifying policy-driven transmission projects. See CAISO Tariff Section 24.4.6.6, CAISO Business Practice Manual for the Transmission Planning Process Section 4.8.1. To the extent that the scenarios fail to identify the lowest-cost resource options, and make unjustified assumptions that drive the need for additional transmission, the result could be the addition of more than a billion dollars of transmission related costs without appropriate cost-effectiveness review. This outcome is particularly troubling in a context where transmission costs are growing exponentially.

2. A cost-constrained scenario must be developed and made the base case.

Any responsible planning exercise must evaluate the cost of different alternatives. The best way for the costs of alternatives to be transparent is to include as the base case a cost constrained scenario. However, the scenarios presented at the workshop do not include a cost constrained scenario at all. This is true even though, in the past, and in fact until May 2012, a cost-constrained scenario was presented and used as the base-case. [2]

[2] In 2011, the Commission submitted a cost-constrained scenario for use as a base case for the CAISO's 2011-2012 Transmission Planning Process. See June 6, 2011 letter from Julie Fitch to Keith Casey. Similarly in 2012, Commission President Peevey, Commissioner Florio and CEC Chair Weisenmiller, sent to the CAISO a cost-constrained scenario to be used as a reasonable base case in the 2012-2013 planning process. See March 12, 2012, Letter from President Peevey, Commissioner Florio and Chair Weisenmiller to Steve Berberich. Then, in May, the same Commissioners wrote a further letter to the CAISO indicating that a commercial-interest scenario should be used instead as the base case. See May 16, 2012, Letter from President Peevey, Commissioner Florio and Chair Weisenmiller to Steve Berberich. In their letter, the Commissioners explained that this change was in response to comments by stakeholders during an April 2, 2012 CAISO 2012-2013 TPP stakeholder meeting, that the cost-constrained scenario does not "reflect the considerable steps developers and utilities have taken to pursue projects through power purchase agreements and licensing procedures." These commercial efforts do not obviate the need to ensure that cost is a key consideration in a least-cost planning proceeding. Moreover, a change of this significance should not be the result of comments from one market sector that were heard at one meeting, but should be

During the December 19, 2012, workshop, a City consultant asked the Commission and CEC staff why a cost-constrained scenario was not presented. Two responses were given: 1) the model does not accurately estimate costs; and 2) the cost-constrained scenario would not be significantly different from the commercial interest scenario. Both responses are highly unsatisfactory and potentially alarming. How can least-cost planning be undertaken if the models used for such planning do not accurately estimate costs? At a minimum, the Commission, the agency charged with assuring reasonable costs, should use models that allow it and stakeholders to assess and analyze the cost implications of different scenarios and choices. If staff is using a model to develop the RPS scenarios that does not accurately estimate costs, the model needs to be revised to do so or replaced.

Moreover, the claim that a cost-constrained scenario and the commercial interest scenario have similar costs is not true. The City's consultant analyzed a cost-constrained scenario and found that in addition to obviating the need for additional transmission in the Kramer CREZ and Imperial CREZ (such as the aforementioned Coolwater-Lugo and the West of Devers projects, that will cost at least $1.2 billion), a cost-constrained scenario would reduce total annual production costs by $350 million. These differences are significant.

In sum, the Commission and the CEC must reinstate a cost-constrained scenario. If the current model does not support this outcome, the model should be revised or replaced. The state agencies require an accurate cost-constrained scenario to undertake their respective responsibilities to ensure reasonable rates. Moreover, stakeholders are entitled to accurate and transparent information on the cost-consequences of different alternatives, which cannot be determined in the absence of a cost-constrained baseline.

3. No New Transmission is Needed in the Kramer CREZ and Imperial CREZ.

Since Commission staff declined to present a cost-constrained scenario, a City consultant prepared and analyzed one using the RPS Calculator made available by staff. The cost-constrained scenario shows that there is no need for additional transmission in the Kramer CREZ and Imperial CREZ, such as the Coolwater-Lugo and the West of Devers projects. This result is the same in two of the three scenarios run by staff; the environmental scenario, which minimizes

---

considered in a deliberate fashion and subjected to comment from all stakeholders. The exclusion of a cost-constrained scenario from this planning effort is arbitrary and inconsistent with the Commission's legal mandate.

environmental impacts, and the high DG scenario, which maximizes DG. Thus, scenarios that minimize costs and minimize environmental impacts, both show no need for new transmission in the Kramer CREZ and Imperial CREZ. Given that minimizing costs and minimizing environmental impacts are both among the highest priority state goals, there is no justification to proceed with the two projects. It is worth noting also that increasing DG is also a high priority state goal, and the high DG scenario also shows no need for the projects.

Nonetheless, Commission staff presented as the base case a "commercial interest" scenario that indicates a need for additional transmission in the Kramer CREZ and Imperial CREZ. The "commercial interest" scenario is highly suspect. It includes as certain, generation projects that do not yet have environmental permits or approved power purchase agreements (PPA). Such projects are in fact highly uncertain. Staff has provided no adequate justification for liberalizing the criteria for including uncertain projects in the commercial interest scenario. Moreover, the commercial interest scenario includes generation projects that likely should have been rejected as uneconomic, particularly if the costs of transmission were accurately considered in the approval process.

For example, the asserted need for the Coolwater-Lugo project is primarily driven by the Abengoa Solar's Mohave Solar project, a 250 MWs project. In approving the Mohave Solar power purchase agreement (PPA), the Commission recognized that considering the high cost of transmission associated with this project, its total cost would be prohibitively expensive.[3] The resolution approving the Mohave Solar PPA acknowledges this:[4]

---

[3] Resolution E-4433, approving cost recovery for the long-term renewable power purchase agreement between Pacific Gas and Electric Company and Mojave Solar, LLC, an affiliate of Abengoa Solar, Inc., November 10, 2011.

[4] Resolution E-4433 further highlights the flawed planning process that is employed here:

"It is important to highlight that the ability for Mojave Solar to interconnect and deliver its generation to PG&E does not require the Coolwater-Lugo transmission project. Mojave Solar is responsible for significant interconnection facilities and network reliability upgrades so that the project can interconnect to the transmission grid and deliver its energy. These facilities and upgrades are scheduled for completion prior to Mojave Solar's commercial operation date." (p. 13)

"The Coolwater-Lugo project was approved by the CAISO on the basis of an interconnection agreement(s), and was thus not subject to a cost effectiveness analysis. SCE has not filed a Certificate of Public Convenience and Necessity (CPCN) application with the Commission to request approval to construct the transmission line. Therefore, timing of when the Commission will decide on the Coolwater-Lugo project is unknown, but will certainly occur after the Mojave Solar project is under development. If SCE submits a CPCN application for the Coolwater-Lugo transmission project, the Commission will have to weigh many factors, including cost effectiveness and the environmental review required under the CEQA, when determining whether to approve the line." (pp. 12-13)

"Nothing in this resolution is meant to imply that the Commission has made a determination with regards to the merits of the Coolwater-Lugo project or SCE's larger South of Kramer transmission project." (p. 15)

> For all the strengths underlying the Mojave Solar project, it has one significant weakness – the cost. Information provided by PG&E shows that this contract is significantly more costly than other procurement opportunities available to PG&E, including projects from the 2009 and 2011 RPS solicitation. The Mojave Solar contract also exceeds the average price of RPS contract recently approved by this Commission. Lastly, the Mojave Solar contract ranks low on a net market value basis, a comparison of an RPS contract's total costs and benefits, relative to other contracts. The low net market value of the contract is further impacted by the significant transmission network upgrade costs required to make the project fully deliverable, which is necessary for the project to provide PG&E with resource adequacy credit pursuant to the PPA. It is important to note that these transmission network upgrades are not necessary for the project to interconnect and deliver its generation to PG&E. (page 2)
>
> …
>
> The transmission project necessary for Mojave Solar to be deemed fully deliverable by the CAISO is referred to as the Coolwater-Lugo project. Because of the high transmission adder, the $/MWh costs of the Coolwater-Lugo transmission project (necessary for Mojave Solar to provide RA) exceed the commensurate RA value, under some scenarios. For example, the transmission costs exceed the RA value if the Coolwater-Lugo transmission project is approved and constructed, but only Mojave Solar interconnects to the new transmission line. When comparing the costs of the deliverability upgrades relative to the RA value, the resulting conclusion is that using the Coolwater-Lugo transmission project as the means to procure RA from 2018 through 2039 may not be the most cost effective means for PG&E to comply with its RA requirements. (page 12)

The cost-constrained, environmental and high DG scenarios all demonstrate that the state can meet its RPS goals without additional transmission in the Kramer CREZ and Imperial CREZ. This conclusion is not surprising since there is ample transmission capacity available in most of the CREZ zones as reflected in the Commission's 33% RPS calculator.[5] Because transmission costs have not in the past been subject to a benefit cost assessment, renewable projects have had little disincentive to locate in areas that require expensive additional transmission capacity. It is time for the Commission, the CEC and the CAISO to signal to renewable energy developers that there is no transmission costs free ride. Responsible renewable developers will then make use of existing transmission capacity and improve the utilization of existing facilities. Conversely, proceeding with the Coolwater-Lugo and the West of Devers projects creates a strong risk that these facilities will be underutilized, while adding substantially to the unprecedented growth of transmission costs in California.

[5] Source: Available capacity on existing Transmission ("g-TxInputs" tab) in the 33% RPS calculator.

4. <u>A More Transparent Process is Needed for the Development of Planning Scenarios.</u>

Footnote 2 above describes the arbitrary process by which the Commission and the CEC in mid-2012 replaced a cost-constrained scenario with a highly flawed commercial interest scenario as the base case to be used for the CAISO 2012-2013 transmission planning process. The agencies appear poised again to forward to the CAISO a commercial interest scenario rather than a cost-constrained scenario to be used as the base case, after only one workshop during which staff intimated that given timing considerations there would be no substantive changes made in response to comments.

The lack of transparency with which the Commission and CEC have determined the scenarios to present to the CAISO for its transmission planning process is highly detrimental to California ratepayers and the credibility of the planning process overall. In the context of an unprecedented growth in transmission costs, this lack of transparency is all the more concerning. The Commission and CEC should provide for a real process to obtain <u>and consider</u> input by interested parties before forwarding proposed renewable resources portfolios to the CAISO.

Respectfully submitted,

Michael Hyams
San Francisco Public Utilities Commission
mhyams@sfwater.org
(415) 554-1590

Pushkar Wagle
Flynn Resource Consultants
pushkarwagle@flynnrci.com
(888) 634-3339

Dennis J. Herrera
City Attorney
Theresa L. Mueller
Jeanne M. Solé
Deputy City Attorneys
jeanne.sole@sfgov.org
(415) 554-4619

David Crane
President and Chief Executive Officer

This compilation is distributed with consent from David Crane of NRG Energy.

David Crane became president and CEO of NRG Energy in 2003 and has led its transformation from a regional wholesale generation business to a Fortune 500 national energy company. NRG is the nation's largest competitive power generator and a major competitive energy retailer that serves nearly 3 million customers, primarily in Texas and in the Northeast. The company is among the top five US producers of renewable energy.

David is one of the leading voices in the power industry on the topic of climate change and the need for curbing carbon emissions. He was one of the first U.S. power industry CEO's to publicly call for mandatory climate change measures. (From the NRG Energy website)

Excerpts from David Crane's letter of 3/26/2014 to NRG Energy's stockholders:

Just a few years ago the prevailing wisdom was that the path to a clean energy economy depended on our collective willingness to build a nationwide, high voltage transmission system in order to transport electricity in vast quantities from the relentlessly windy and brutally sunny parts of the country, where people generally don't live, to the more moderate places where Americans tend to congregate. The folly of that idea thankfully was realized before anyone actually began to build such an expensive and pointless white elephant. Now we are headed for the same goal BUT in the opposite direction: down the path towards a distributed generation-centric, clean energy future featuring individual choice and the empowerment of the American energy consumer.

As lack of confidence in the grid coincides with the introduction of new technologies, businesses and homeowners will realize that there is a better way. And, for them, that means generating most of the electricity they consume on the premises, from their own resources. In this new reality, our 'mass' retail electricity franchise, consisting of Reliant, Green Mountain and NRG itself, becomes ever more important. Our retail focus is on ensuring that we remain a first mover in bringing technological innovation aimed at the home energy consumer to our customers, on terms that they find attractive. Our marketing relationship with Nest, and their award-winning learning thermostat, is a case in point. But it is only the beginning. We expect to be soon-to-market with a robust platform offering rooftop solar to homes and businesses and other forms of sustainable and clean generation that will offer our customers the ability to dramatically reduce their dependence on system power from the centralized grid.

And make no mistake about our children. They *will* hold all of us accountable – true believers and climate deniers alike. The day is coming when our children sit us down in our dotage, look us straight in the eye, with an acute sense of betrayal and disappointment in theirs, and whisper to us, "You *knew*… and you didn't do anything about it. *Why*?" And for a long time, our string of excuses has run something like this: "We didn't have the technology…it would have been ruinously expensive…the government didn't make us do it…"

But now we have the technology – actually, the suite of technologies – and they are safe, reliable and affordable as well as sustainable. They do not represent a compromise to our ability to enjoy a modern lifestyle. They represent an opportunity for us to do the right thing while multiplying shareholder value through greater value-added services. And these technological solutions are focused on the individual consumer - both businesses and individuals – so the shameful passivity and failure to act of government is irrelevant.

The time for action is now; we have run out of time for more excuses.

Ivanpah Solar Electric Generating System is a solar thermal power. The largest investor in the project is NRG Energy. David Crane follows the money and these are reports of his remarks from the 2013's Bloomberg New Energy Finance's Future of Energy Summit in New York:

> At the Bloomberg New Energy Finance's Future of Energy Summit in New York, Crane called the trend toward ever larger solar projects **"idiotic".** Peter Maloney 4/25/2013
>
> Crane is, unlike many utility types, a big believer in distributed energy. He said yesterday **the whole approach of covering vast swaths of desert in solar panels and piping the energy hundreds of miles through high-voltage transmission lines "was stupid in 2008 and it's stupid today.**" **Rather, the key advantage of solar is that it can cover houses and buildings and car parks and other urban structures, enabling them to generate their own power.** David Roberts 4/23/2013