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BY E

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RE: Comments on draft DG report (*California's Transition to Local Renewable Energy: 12,000 MW by 2020*) dated 2/27/12

Dear Steve and Jeff:

We appreciate the opportunity to comment on this public draft. We also appreciate your careful attention to our previous informal inputs; the draft's agreement (or at least congruence) with many of our views; and your generous use of quotes or paraphrases from our prior communications, especially on pp. 47-49.

Due to time limits, other work, and delayed receipt of the draft by your separate e-mail March 12, we've only been able to review in detail the Exec Sum and Chap 3 ("Financing and Procurement"). Thus these comments are select and summary, and may not reflect other portions or the broader context of the complete report. They also reflect a commercial/small utility solar PV perspective, though they may apply to distributed renewable energy more generally.

We offer one general comment and several specific comments, the latter in rough order of importance.

General comment. This seems to us a very smart report. It pulls together numerous complex strands and not only makes them readily digestible, but teases out many of their interactions and reciprocal natures. Its comprehensiveness and detail independently should make it useful as a kind of handbook. For example, it highlights and documents several significant items that we were unaware of, though we're scarcely newcomers to this field. It's also succinct and well-written, qualities not prevalent among such reports. We hope its quality ups the odds for meaningful government follow-through and **urge the DG Conference conveners to get sensible "quick fixes" (some of which the draft calls "next steps") in motion as quickly as possible while they weigh longer-range initiatives.**

Summary substantive comments

1. Bilateral PPAs. The draft seems to have caught half but not all our thoughts on this point. The "generic rule" part (or some variant) may be critical in a structural sense. However, the threshold "quick fix" -- affirmative PUC endorsement of bilateral contracts as a check on and safety valve for competitive procurement, so IOUs have reason to pursue bilaterals with more than lip service -- is only hinted by the statement that "The [PUC's] position regarding bilateral contracts

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is, at best, unclear and in need of clarification” (p. 49 col 1). Affirmative PUC endorsement is a necessary predicate to balance the current heavy tilt towards “competitive only” and the barriers to market entry and sustainable-project power pricing which that approach threatens to create.¹ It also could provide a virtually costless platform for “generic approval” or similar PUC structural reforms. We think **“affirmative endorsement” merits more weight, should be expressly articulated as a recommendation on p. 49, and should be included as a separate highlighted item in the Chapter 3 “Next Steps.”**

On “generic approvals” themselves, we understand and **generally agree with the modifications the draft makes to the original** (largely orally conveyed) **concept** (p. 49 cols 1-2). *However*, we also note that beyond process expedition, **an important aspect of this approach is that neither the IOU nor the PPA counterparty is subject to late hits or second-guessing if generic approval criteria are in place and satisfied when a bilateral PPA is executed.** Gaps, omissions or flaws in the generic criteria or any specific PPA approved under them typically would be addressed *on a systemic basis that does not penalize the individual PPA developer/counterparty directly or indirectly* (e.g., by making the PPA-project unfinanceable or more costly to finance, due to retroactive risk concerns). For example, the IOU could bear the risk of addressing identified deficiencies, but only after generic rule revisions and only through subsequent competitive procurements and/or bilateral PPAs.²

2. Bilateral PPA “Next Step.” If the pertinent BARRIER is “Efficacy of the RAM” (p. 53), **the first “next step” should be the affirmative CPUC endorsement of bilateral PPAs and their significant place in the overall procurement/resource adequacy regime.** It serves no public interest for developers (especially smaller developers) repeatedly to be told that their IOU is open to discussing a bilateral PPA, pursue those discussions, and see the possibility evaporate after months or years due to asserted IOU concerns about securing CPUC approval. This issue applies to all price-competitive procurements (e.g., the SPVP programs), not just the RAM.³

¹ We agree in general with the stakeholder comment that one material RAM “danger . . . is the unintentional creation of a project developer oligarchy” that could result in “flat or even increased bids from oligarchs once competition was eliminated” by artificially low bids in initial auction rounds (p. 48 col 1). CPUC staff’s apparent tendency to make the lowest clearing price in one auction the ceiling price for the next ignores the long-term hedge value of financially-sustainable renewable energy, and (e.g., because projects built on very narrow margins are more likely to be abandoned after tax credits are used up) presents a similar risk.

² The full “generic rule” rationale and numerous examples are detailed in U.S. EPA’s final (and foundational) *Emissions Trading Policy Statement and Accompanying Technical Issues Document*, 51 Fed. Reg. 43813 (Dec. 4, 1986), at (e.g.) 43823-24, 43835-37, 43850-54. There the issue was a compelling need to preserve environmental integrity but avoid stifling market-based approaches by dual state and federal case-by-case reviews, rulemakings and “SIP revision” approvals. While the context differs, the rationale and its procedural implementation mechanisms would seem to apply with force to case-by-case CPUC reviews of individual PPAs. To the extent CPUC review is not limited entirely to “ministerial, non-discretionary [PPA]approval” (p. 49), it could be expedited by limiting Commission review to defined narrow issues, by authorizing only “substantial evidence” type review, or by a certiorari-type process in which executed PPAs are “deemed approved” if the Commission does not affirmatively review them within a fixed time.

³ Our bilateral PPA points were drafted before we spotted the last “Next Steps” bullet on p. 53, which suggests an initial CPUC “workshop focusing on role of and need for bilateral PPAs in the state’s renewable energy strategy,” after

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3. Expanded net metering. We unequivocally support the draft's recommendations that both the IOU-wide capacity caps (currently 5% of aggregate IOU load) and the 1 MW caps on individual net metering installations be raised or beneficially redefined, and that availability of virtual net metering or practical equivalents be expanded substantially (pp. iii, vi, 38, 42-44 *passim*). Beyond the rationales and specific steps in the draft report, we note that **behind-the-meter reasonably-eligible net-metered PV or other renewable installations can be low-hanging fruit to help achieve the Governor's goals**, particularly at energy-intensive well-over-1-MW industrial/commercial or large mixed-use sites where maximum PV production often will closely track costly ToU peak-retail rates. With appropriate incentives and financial structuring (e.g., commercial PACE), such facilities could be mobilized with relative ease. This seems especially true as the economy recovers, the natural gas market becomes globalized, and retail electric rates begin to rise. In these and other cases, **generally limiting net metering capacity eligibility to the site's recent historical load (as in NJ) could reap large short-term benefits. It also could provide a bridge to commercially-feasible energy storage**, since efficient net-metering can substitute and/or act as a precursor to storage for intermittent sources in several ways.

With respect to **virtual net metering**, we are well aware of the IOU objections (which parallel, with more decibels, utility objections to traditional net metering). We nevertheless believe **the final report should recommend that VNM be expanded well beyond multi-unit dwellings** (cf. pp. 42-45). We suggest that in the run-up to its final report **CLEE explore Massachusetts' most-flexible-in-the-nation VNM regime**, which largely has addressed the cross-subsidy issue and proven a boon to municipalities and other governmental entities as well as to developers, both of whose renewable-energy options might otherwise be severely constrained.⁴ In any event, it ill behooves IOUs to cry foul at cross-subsidies, from which they historically have secured numerous benefits.⁵

4. Solar RPS "carve-out." We do not repeat the arguments for and against this option, which the draft diplomatically alludes to given the emergent nature of even the baby-step T-REC market (see, e.g., pp. 51, 54). However, we think it important to note that **tradeable RECs without tradeable SRECs tend disproportionately to disadvantage solar PV**, which pound-for-pound cannot produce the MWh of wind or baseload renewable generation.⁶ The potential adverse effects will multiply when REC-compliance percentage caps are lifted after 2013 – at the same time that

which CPUC might "articulate its policy for bilateral PPAs." We apologize for the oversight and agree with this recommendation, but believe the final report should go further.

⁴ See, e.g., 220 C.M.R §§ 18.00 et seq. as amended; MA DPU Order 11-10-A (Feb.17, 2012) at 24-25 & n. 21 *passim*.

⁵ For example, imposing system-upgrade costs on interconnect applicants for poles, wires and other equipment in which utilities should long ago have begun investing themselves.

⁶ This fact was why the solar industry decided in 2006 to forgo further extension of Code § 45 production tax credits for solar generation, in favor of an expanded 30% investment tax credit under Code § 48. Merely to compare the number of domestic installed wind farms over (say) 50 or 100 MW capacity with the number of installed solar generators over 50 or 100 MW capacity, is to establish the factual point.

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pressures to expand REC imports (threatening in-state jobs and solar job growth) likely will intensify, to “mitigate uncertainty” about meeting the 33% RPS.

No state tradeable SREC program has been perfect. All of them have suffered from certain design flaws, the volatility of emergent markets, and the stabilizing equilibrium that might be provided by (say) the greater volume and liquidity of a functional regional or national market. However, the same could be said of TRECs, with the added disadvantages that lack of a carve-out (whether current or prospective) entails. New Jersey’s SREC regime has indisputably demonstrated the power of tradeable SRECs as a solar accelerant and economic development regime. It currently suffers mostly from having succeeded in driving solar growth far beyond expectations. A wealth of lessons-learned can be gleaned from the development and restructuring of SREC programs in (e.g.) PA, DC, DE and MA. The systemic fixes being deployed there (as in NJ) are readily available for incorporation in the threshold design of a CA SREC regime.

Given (e.g.) the expiration and uncertain federal future of § 1603 Cash Grants and efforts to expand Master Limited Partnerships, **we urge that the final report go beyond current draft recommendations to propose a solar carve-out under the RPS and outline both key program elements and clear steps by which the Brown Administration could get there within the next 3 years.** As with bilateral PPA contracts, availability of tradeable SRECs could act as a cushion or safety valve to help assure that sound, reliably long-term projects get financed and built.⁷

5. Expanded FIT availability. We support rapid expansion of the FIT capacity limit from 1.5 MW (AC) to 3 MW (AC). Delayed CPUC implementation of this change since legislative mandates for expansion already has caused adverse effects to smaller solar developers dependent in part on sufficient scale to access components at costs that pencil out.

However, for reasons stated in the draft report (pp. 50-51 *passim*), **we have serious doubts about the logic and viability of Commission staff’s “value-based” approach to setting baseline FIT rates.** The MPR (based on the LCOE of a 500 MW gas peaker subject to natural gas price volatility) has made decreasing recent baseline sense for renewables given (e.g.) the long-term reliability of solar PV and the increasingly recognized need for short-term support of certain solar or other renewables at “above market” rates as a wedge to help the grid transition to a better fossil/renewables balance in which fuel-free renewables will set a more beneficial marginal price of power. Staff’s approach apparently would perpetuate and extend the RAM “race to the bottom” and appears to make even less sense. We **recommend that the final report take the logical next step from its analysis and express a clear policy preference for the more predictable (and financeable) “cost-plus” baseline approach** (p. 50 col 2). We believe that approach is reconcilable with the FERC’s rulings in this area.

⁷ We oppose granting (say) two-for-one REC credits to solar PV, rooftop PV, or other designated renewable technologies or deployments. Cf. p. 51 col 2. Such approaches tend to dilute overall REC value. Carve-outs tend to enhance such value.

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We hope these comments are helpful and would be pleased to discuss them further. Please feel free to post them on the electronic link to the extent that may be appropriate.

Best regards.

Mike

Managing Director & General Counsel

(Director, National Regulatory Reform Staff, US EPA, 1979-88)

Cc (e): Ken Alex, Wade Crowfoot, CFS principals